Needham Board of Health

AGENDA

Friday September 13, 2019
9:00 – 11:00 a.m.

Charles River Room
Public Services Administration Building
500 Dedham Avenue, Needham MA 02492

- **9:00 to 9:05 – Welcome & Review of Minutes (July 19th)**
- **9:05 to 9:35 – Staff Reports (July & August)**
- **9:35 to 10:05 – Public Health Nursing Presentation**
- **10:05 to 10:15 – Continued Discussion of 57 Walker Lane Septic System**
- **10:15 to 10:40 – Prevention and Education about Mosquito-borne Illness**
- **10:40 to 11:00 – Pressing Public Health Issues**
  - **Pest Management Challenges**
  - **Medical and Recreational Cannabis, CBD Products**
  - **5G Small Cell Sites & Community Impact**
  - **Accessory Dwelling Units and Town Meeting**
  - **Survey about Electronic Vaping Products; Vaping Task Force**
- **Other Items**
- **Next Meetings**
  - **Friday** **October 11th** **9:00 to 11:00 a.m.**
  - **Friday** **November 8th** **9:00 to 11:00 a.m.** ***(possible conflicts)***
  - **Tuesday** **December 10th** **TBD p.m.**
- **Adjournment**

(Please note that all times are approximate)

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Needham Board of Health Minutes

July 19, 2019

Board of Health:	Edward Cosgrove, PhD, Chair (absent) Stephen Epstein, MD, MPP, Member Kathleen Ward Brown, ScD, Vice Chair Christina S. Mathews, MPH, Member Robert A. Partridge, MD, MPH, Member
Staff Present:	Timothy Muir McDonald, Director; Tara Gurge, Assistant Director; Maryanne Dinell; Carol Read; Diana Acosta; Tiffany Zike; Donna Carmichael; Dawn Stiller; Catherine Delano
Guests Present:	Tal Achituv, Barbara Thornton, Hiren Patel, Officer Adrienne Anderson
Convene:	Public Services Administration Building, Charles River Room 500 Dedham Avenue, Needham, MA 02492

Dr. Kathleen Ward Brown called the Board of Health meeting to order at 7:00 a.m.

Dr. Ward Brown asked for review and edits of the previous meeting minutes. Dr. Stephen Epstein made a motion to approve the minutes with no edits. Mr. Timothy McDonald noted that the spelling of one name needed to be changed. Dr. Epstein made a motion to approve the minutes with that one adjustment. The vote to approve the meeting minutes with the edits incorporated was unanimous.

STAFF REPORTS

Public Health Director, Mr. Timothy McDonald

Mr. Timothy McDonald reported an update on the Public Health Division accreditation process. He said that the Division does not have dedicated funding for accreditation but does have part-time staff working on the process. There has been a significant amount of work on policies and procedures as well as the completion of the orientation packet for Board of Health members and new staff members. The cost to pursue accreditation is a substantial investment of staff time and resources to prepare all materials and to complete the application process, as well as an initial application fee of $14,000 and an annual fee of $5,600.

Reporting on behalf of Ms. Rachael Cain, Mr. McDonald said that the Safety at Home program has been fairly successful. However, there is some resistance from some residents due to concerns that they will be taken out of their homes if staff members observe an unsafe situation. This is an issue that Ms. Cain and other staff are addressing.

Mr. McDonald also reported that the Needham Housing Authority survey results are being analyzed and Ms. Cain will complete the needs assessment by the end of the summer.

Dr. Kathleen Ward Brown asked about the smoking cessation program and the low attendance. Mr. McDonald said that there has been discussion about how to increase participation. He also said that a part-time nurse has been added to support smoking cessation programs in the future.

Dr. Stephen Epstein noted that it is important to discuss the Division's grant-funded program on extreme weather preparedness for seniors, especially given the extreme heat anticipated for this weekend. Mr. McDonald reported that the Needham Public Library and the Rosemary Recreation Center will be open.

Dr. Robert Partridge asked what mechanisms we have to check on people at risk and to notify people about the cooling centers. Mr. McDonald stated that we do not have a way to check on people at risk but that the Town does have reverse 911. However, despite the many efforts to promote the service, the sign-up for reverse 911 has been quite low. Ms. Donna Carmichael said that the social workers at the Center at the Heights check in with seniors who come to the center and help prepare them for the weekend. The nurses also reach out to the seniors' family members to make sure they are aware of the upcoming forecast. Ms. Maryanne Dinell said that when volunteers deliver meals they check to make sure that all participants have plenty of water.

Traveling Meals Coordinator Report, Ms. Maryanne Dinell
Having four people delivering meals this summer is working out well. The summer staff includes one college student, two women from last year, and a gentleman with previous experience delivering meals in other communities.

Substance Use Coordinator Report, Ms. Catherine Delano
Ms. Catherine Delano reported that the Parent Survey 2019 is now closed and that Mr. Scott Formica is analyzing the data. As in years past, Mr. Formica will present the results at the fall Substance Prevention Alliance of Needham (SPAN) coalition meeting. Ms. Delano also reported that Ms. Sara Shine, the Director of Youth and Family Services, agreed to be the leader of the Vaping Task Force. Ms. Delano is also working with other colleagues in Health and Human Services on the topics of accessory dwelling units and commercial marijuana regulations. Ms. Delano also reported that the students who participate in Students Advocating Live without Substance Abuse (SALSA) worked with Mr. Scott Formica to develop, disseminate, and analyze a vaping survey for high school students. The results of these are in the Board of Health packet.

Regional Substance Use Prevention Collaborative (SAPC), Ms. Carol Read
Ms. Carol Read reported that the focus last month was on TIPS (Training for Intervention Procedures), a program that trains alcohol servers on safe practices and preventing over-serving. The TIPS program can now be sustained in the four towns (Needham, Dedham, Westwood, and Norwood) after preparing nine volunteers to become certified TIPS trainers.

Ms. Read also reported that there were two TIPS trainings for licensees. The following Needham establishments participated: Homewood Suites, Fuji, Blue on Highland, Needham Center Fine Wines, and Hungry Coyote (a new licensee).

Mr. McDonald reported that the Select Board met with the first four establishments that had violations during the recent alcohol compliance check. The Select Board will also meet with three repeat

offenders. Ms. Read stated that one goal of SAPC is to enhance alcohol regulations to include defined penalties and consistent enforcement in each town.

Public Health Nursing Report, Ms. Tiffany Zike
Communicable diseases were reviewed by Ms. Donna Carmichael and Ms. Tiffany Zike. Ms. Carmichael stated that camps are moving along and there is one more that needs to open.

Environmental Health Report, Ms. Tara Gurge and Ms. Diana Acosta
Ms. Diana Acosta reported that a resident believed that they contracted MRSA from the YMCA pool. Ms. Acosta reviewed the CDC website fact sheet titled "Facts About MRSA and Swimming Pools" which states that it is highly unlikely to contract MRSA from a pool. When Ms. Acosta followed up with the YMCA and reviewed their logs, she noted that there were no pool closings and that chemicals were in range during the time period that the resident indicated she was using the facilities.

Ms. Acosta spoke about a recent report of bed bugs at the Sheraton. When Ms. Acosta contacted the Sheraton she was informed that the room in question, along with the adjacent rooms, had already been treated.

Ms. Acosta also reported that she and Ms. Tara Gurge have weekly meetings with three pest control companies in order to address a pest issue related to the dumpsters from Hearth and Farmhouse, which abuts a daycare. Different tactics and multiple treatments have been performed and as a result the rodent population has decreased.

Ms. Michelle Iovino and Ms. Stephanie McCulloch, graduate student interns, reported on the FDA standards project and the "Nourishing Needham" project respectively.

<u>Preliminary Discussion of 57 Walker Lane Septic System Enforceable Agreement</u>
Mr. Tal Achituv, a Needham resident, and his representative, Ms. Barbara Thornton, attended the meeting to discuss the septic system at 57 Walker Lane. Mr. Achituv presented the benefits of having sewer connections along with his neighbors rather than having an individual septic system for his house. Mr. Achituv has met with other departments in Needham, including the Town Engineer. Mr. Achituf was told that the Board of Health is required to vote and send a letter requesting that the Town assist Walker Lane residents with the cost and construction of a sewer system.

Mr. McDonald pointed out the map of Walker Lane on page 73 of the Board of Health packet. This map shows a pond and a ledge, which could potentially present a challenge to siting a septic system. Mr. McDonald also noted that Walker Pond has had significant nitrogen contamination and there is a need to determine how it would be cleaned.

Dr. Ward Brown asked to continue this discussion and extend the deadline for Mr. Achituv. The other Board members agreed to continue the discussion in the next few months. Dr. Ward Brown made a motion that Mr. McDonald continue to work with other Town Departments on this issue. Dr. Epstein seconded this motion. The Board voted unanimously and the motion passed.

Discussion of Verizon 5g Small Cell Sites and Community Impact

Dr. Epstein noted that the Select Board packet mentioned there was a radio frequency report and a radio frequency emissions report, however neither was included in the packet. The Board noted that they also need specifications for the equipment that is to be installed.

Mr. McDonald will ask for equipment specifications, the radio frequency report, and the radio frequency emissions report so that the Board may update their letter.

Underage Sale of Tobacco Products by 7-Eleven at 845 Highland Ave

Dr. Ward Brown made a motion to open the hearing on the underage sale of tobacco products. Dr. Epstein seconded this motion. The hearing was on an underage sale of tobacco at the 7-Eleven at 856 Highland Avenue during a routine tobacco compliance check. Officer Adrienne Anderson and Ms. Diana Acosta were both present at the compliance check as well as two volunteers. Ms. Acosta reviewed the process of the compliance check that occurred on July 9th, 2019 at 5:00 PM.

Mr. Hiren Patel, the owner of the 7-Eleven stated his case and spoke about the steps that he has taken to have safeguards in place to ensure that anyone working in his store does not sell to minors.

Dr. Epstein made a motion to impose a $300 fine and a one-week suspension. Dr. Partridge seconded the motion. The Board voted unanimously to impose the $300 fine and a one-week suspension.

Discussion of Accessory Dwelling Units and the Fall 2019 Town Meeting

Mr. McDonald asked the Board members if they approved the general concept of the draft letter, which is included in the Board packet. Once approved, he will approach the Needham papers for publishing. All Board members agreed to send comments to Mr. McDonald by email.

Ongoing Pest and Trash Management Challenges

The Board tabled this discussion until the next meeting due to time constraints.

Needham Survey about Electronic Vaping Products

The Board tabled this discussion until the next meeting due to time restraints.

Dr. Ward Brown made a motion to adjourn the meeting. Dr. Epstein seconded the motion. Upon motion duly made and seconded, the vote was unanimous. The meeting was adjourned at 9:00 a.m.

The next meeting is Friday September 13th, 2019 at 9:00 a.m.

Minutes Submitted by Catherine Delano, Senior Program Coordinator Public Health.

July Monthly Reports

Needham Public Health Division

July, 2019 Monthly Report

Maryanne Dinell- Traveling Meals Program Coordinator

Monthly

Description	*Reason*	*Notes/Follow-Up (ongoing, completed, etc.)*
Residents needing the Traveling Meals July, 2019	Unable to shop or prepare their own meal.	41 clients on the Traveling Meals Program for month of July 32 Springwell Elder Services of Waltham clients 11 private pay clients - Needham residents
22 delivery days in July 41 consumers enrolled in the Traveling Meals Program	29 Clients receive meals 5 days per week 11 Clients receive meals 3 days a week 1 Client receives meals for 7 days	695 meals delivered @ 5.62 per 2 meal package=cost of $3905.90 540 meals delivered to Springwell Clients 155 meals delivered to private pay residents
2 Clients no longer need Program	2 Private Pay	2 Clients -now able to care for self
2 new clients On Program	2- 1st time on Program	1-Dementia, Anxiety, depression 1- Age and health declining

Category		*Jul*	*Aug*	*Sept*	*Oct*	*Nov*	*Dec*	*Jan*	*Feb*	*Mar*	*Apr*	*May*	*Jun*	*FY '19 Total*	*FY '20 Total*	
Meal Delivery		695												6859	695	
General Telephone Calls-received		32												442	32	
Assistance Calls-to Springwell		7												51	7	
Not at home at delivery		3												38	3	
911		0												1	0	

Category		*Jul*	*Aug*	*Sept*	*Oct*	*Nov*	*Dec*	*Jan*	*Feb*	*Mar*	*Apr*	*May*	*Jun*	*FY '19 Total*	*FY '20 Total*	

Meetings, Events, and Trainings

BI	*Type*	*Description/Highlights/Votes/Etc.*	*Attendance*

Donations, Grants, and Other Funding [List any donations received, grants funded, etc. over the past month.]

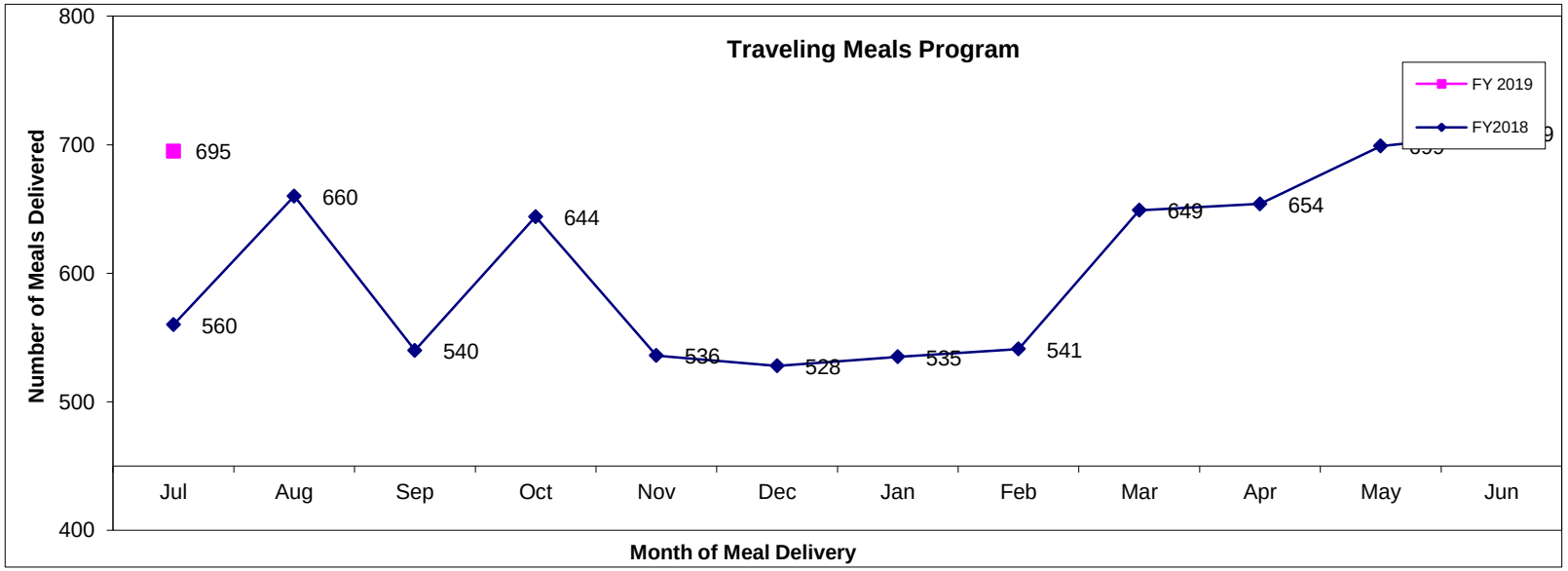
Description	*Type (D,G,O)*	*Amount Given*	*Source*	*Notes*

Traveling Meals Program

July, 2019

	Projected-12 Mo.
$	3,905.90
#	8,340.00

Month	# Meals FY2019	# Meals FY2020	FY20 Cost	% Change # Meals
Jul	560	695	$3,905.90	24%
Aug	660			-100%
Sep	540			-100%
Oct	644			-100%
Nov	536			-100%
Dec	528			-100%
Jan	535			-100%
Feb	541			-100%
Mar	649			-100%
Apr	654			-100%
May	699			-100%
Jun	709			-100%
Totals:	7,255			



Needham Public Health Division

Unit: Substance Use Prevention

Date: July 2019

Staff: Catherine Delano, Karen Shannon, Karen Mullen, and Monica DeWinter

Activities and Accomplishments

Activity	Notes
SPAN parent action team (Needham Parent Care)	Active planning for Family Dinner Project: event date: 11/7/19. Secured event space at CATH (Needham schools we checked were unavailable), development and distribution of community leader survey to assess interest in a professional workshop, development of event flyer for family dinner event. To date, 20 community leaders have responded to the FDP survey (over 100 emails were sent).
HHS Vaping Task Force	Karen S. met with Sara S. on 7/16 to ask for her leadership of the newly forming Vaping Task Force. Sara offered full support. Next steps: attend MW SAPA Vaping Task Force meeting (9/9), meet with Christina Mathews of BOH (9/12), meet with Katie Sugarman of Natick PHD to learn about their extensive vaping initiatives (9/25), assemble team of stakeholders to sit on task force(Sept).
Continued work on marijuana regulations	Working with Tara, Diana, and Karen Shannon
Opioid panel discussion	Met with Alyssa Kence at Beth Israel Needham to discuss a collaboration for an event in spring 2020.

Carol Read, M.Ed., CAGS, CPS **July 2019**

Substance Use Prevention and Education ~ Initiative Highlights

Needham NPHD, Needham SPAN and Substance Abuse Prevention Collaborative (SAPC) grant* collaboration with the towns of Dedham, Needham, Norwood and Westwood**.**

SAPC grant
Town coalition meetings:
Dedham DCDAA coalition: *No meeting scheduled*
Impact Norwood coalition: *No meeting scheduled*
Westwood Cares coalition: *No meeting scheduled*
Needham SPAN coalition: *No meeting scheduled*

SAPC program, capacity building and strategy implementation preparation:

(1) BSAS- SAPC grant program quarterly (Q4) programmatic report preparation (activities, capacity, and engagement-online submission (**2)** SAPC FY19 budget line item adjustment – final proposal by UFR code, BSAS submission **(3)** Alcohol access advocacy: Diane Riibe, Executive Director, U.S. Alcohol Policy Alliance, Uniform Law Commission (ULC) proposal direct-to-consumer (DTC) shipping of alcohol across the U.S. ULC to consider the public health harms associated with alcohol shipments direct-to-consumers. **(4)** Review Dedham DFC FY19 draft rollover request $37,000 and FY20 DFC budget narrative revision **(5)** EverFi- AlcoholEdu final report request (4 schools) data review and analysis with Sophie Buzzell) **(6)** EverFi- AlcoholEdu contract revision request, one year- FY19 BSAS line item amendment **(7)** SAPC updates: Norwood BOH tobacco regulation updates- YouTube segment, Bentley Vaping Forum PowerPoint presentations Monica Bharel, Dr. Chadi, Cheryl Sbarra, MAHB **(8)** Mass. Department of Agricultural Resources (MDAR) CBD food and health supplement product sale policy, M.G.L. c. 128 Section 117 (c) email distribution, phone follow-up, support D.J. Wilson, MMA.

SAMHSA- DFC application 2019: July 1st & 2nd Conference calls, Amanda Decker. Medfield and King Phillip 2019 DFC grant application review, narrative content guidance, stakeholder engagement agreement options and online submission options and requirements (SAMHSA grants.gov- NIH) Deadline July 8, 2019. DFC Support Program created by the Drug- Free Communities Act of 1997 (public Law 105-20)

Mass. Alcohol Beverage Control Commission (ABCC): July 2nd Conference Call. Ted Mahoney, Investigation & enforcement and Ralph Sacramone, ABCC Administrator. Review policies and protocols (1) compliance check advance notification parameters (timing, content and posting) (2) ABCC operative purchase protocols (3) licensee sales to minor violation appeal processes. M.G.L Chapter 138 enforcement authorized through the ABCC- Section 34 and Section 60. Re: SAPC town alcohol compliance programs- alcohol regulation enhancements.

BSAS – SAPC grant budget: July 11th Amal Marks, MDPH- BSAS Grant Manager. Review of FY19 line item amendment proposal by UFR code. *Preliminary approval.*

Dedham Public Health- Prevention: July 25th & 30th Conference calls. Kristina King, DFC grant Program Manager, Jessica Tracy, DFC grant supervisor. Review: (1) FY19 budget expenditures and rollover protocols SAMHSA Notice of Award (NOA) DFC grantee handbook (2) FY20 DFC budget narrative revision, pending approval 2019 Continuation application revision to reflect newly available funds ($37,000) Evidence- based programs youth engagement, Cultural Competency trainings and part time staff hour increase to build capacity.

Needham Public Health Division:
NPHD – SPAN initiatives:

NPHD programs meeting preparation outreach for research and resource gathering: (1)NPHD June monthly report (2) June BOH meeting minutes edit (3) CCIT core team meeting agenda review (4) Job Analysis Questionnaire (JAQ) submission Senior Program Coordinator, Substance Use Prevention & Education (5) NPHD Performance Evaluation 2019 submission (6) DMH grant data collection: police incident, EMS, hospital ED and treatment (MDPH resources) (7) Project abstract review and edit, Nourishing Needham, MDPH intern final project (7) Survey Monkey account review, portal access options.

Public Health Division intern meeting: July 2nd Stephanie McCulloch, Tufts MPH intern. Review: NPHD prevention initiative history, grant funded initiatives (federal SAMHSA-DFC and state MDPH- BSAS) targeting underage substance use prevention and overview of evidence based prevention strategies by domain (individual/peer- family- school- community) SAPC Strategic Plan and Needham Board of Health tobacco regulation history including NPHD licensee compliance checks and retailer trainings.

NPHD financial planning meeting: July 3rd Dawn Stiller and Tim McDonald. Review of SAPC FY19 spending by UFR code and proposed revisions for FY19 line item amendment. Next steps for BSAS final approval and Town of Needham Accounting compliance.

Needham Public Health Division staff meeting: July 9th Director and staff work activity and planned program updates. Review and discussion: Grant writing seminar, Lynn Schoeff and Rachel Cain August 7th MA Office of Disability RFP., monthly report proposed changes, updated HHS Department and Public Health Division polices.

Town of Needham Human Resources: July 11th Employee meeting, Needham Public Library**.** Joellen Cademartori, GovHR USA (GovHR) Job classification and compensation plan study initiative, introductory meeting. Initiative goals: *to develop uniform salary ranges based on the responsibilities and requirements of each job, assure that equal pay is provided for equal work, and develop a compensation plan that is both internally equitable and externally competitive.* Review of the Job Analysis Questionnaire (JAQ) requirement, submitted July 23, 2019.

Community Crisis Intervention Team (CCIT): July 10th Collaboration to support residents navigating acute and chronic substance use disorders and/or mental health conditions.
Core Team: Lt. Chris Baker, Sgt. John McGrath and Katie McCullough, Needham Police Department, Tiffany Zike, RN, MPH, Donald Anastasi, Deputy Fire Chief, Ed Sullivan, EMS Supervisor, Kristen Lindley, LICSW and Kerrie Cusack, LICSW Senior Services, Sara Shine, Director, Needham Youth & Family Services, Catherine Delano, MPH, NPHD and Evan Marcus, Riverside Mobile Crisis Supervisor.

Needham Police meeting: July 10th Lt. Chris Baker. Review and discussion of DMH Jail/Arrest Diversion grant: strategic planning progress, structure of grant application funding options and feedback from Karin Orr- Area Forensic Director, Northeast Suburban Area Northeast Division-DMH liaison, FY20 funding allocation and components for application consideration.

Town Accountant: July 12th Michelle Vaillancourt, Town Accountant. Virtual Gateway EIM system FY19 budget amendment (line item – UFR code) June 2019 invoice submission SAPC grant expense reimbursement.

Needham Public Health Division office support: July 12th Summer hour coverage 12:00pm-3:00pm.

Performance review meeting: July 12th Tim McDonald, Director Health and Human Services. Review and discussion of FY19 goals and objectives as Program Manager, BSAS- SAPC grant and Substance Use Prevention & Education Senior Program Coordinator Needham Public Health Division. Discussion of FY20 goals and objectives for Performance Evaluation.

NPHD financial planning meeting: July 16th Conference call. Dawn Stiller, Michelle Vaillancourt and Tim McDonald. Review of SAPC grant proposed FY20 budget expenditures including final Program Manager Salary. Timeline review: SAPC Leadership team review (August 12th meeting), MDPH- BSAS approval and Virtual Gateway EIM system upload.

Needham Board of Health meeting: July 19th Directors Report, staff reports of public health and prevention initiatives, resident education and support programs. Agenda review and discussion: FDA Risk Factor Survey: Summary Report, Nourishing Needham Program, Needham Farmers Market Food Safety Pocket Guide, 57 Walker Lane Septic System Enforceable Agreement, Discussion of Verizon 5G Small Cell Sites & Community Impact. and Accessory Dwelling Units, Fall 2019 Town Meeting. Board of Health Public Hearing: Underage Sale of Tobacco Products by 7-Eleven (845 Highland Avenue) Special Commission on Local and Regional Public Health, final report release: *Blueprint for Public Health Excellence: Recommendation for Improved Effectiveness and Efficiency of Local Public Health Protections*.

Needham Public Health- DMH grant: July 19th & 24th Conference Calls, Jessica Goldberg and Lt. Chris Baker. DMH Jail/Arrest Diversion grant program project. Review draft scope, narrative time line and ongoing communication with Needham Police Department leaders for content, data and supporting document resources. Update on grant structure, FY20 funding time frame and narrative, Karin Orr, LICSW, NE Area Forensic Director, DMH, CIT model. Initial draft: **On hold.**

SAPC grant Alcohol Policy team: July 17th Liz Parsons, SAPC Program Manager, Melrose Public Health Department. Review BSAS proposal letter content including attachments and team objectives for Alcohol Policy tool kit training event, October 2019.

Community Crisis Intervention Team (CCIT) operation: July 30th Tim McDonald. Review of CCIT protocol, Health and Human Services Department. Discussion with Lt. Baker, Police facilitation, goals of resident outreach and support.

DMH Jail/Arrest Diversion grant: July 31st Conference Call. Karin Orr- Area Forensic Director, Northeast Suburban Area Northeast Division- DMH liaison, Jail/Arrest Diversion grant. Review of *COMMBUYS* link, grant components, application funding options, DMH FY20 funding allocation and general guidance on application.

Resident Support: Respond to calls and/or meeting requests related to mental health conditions and/or substance use disorder. Referral to Riverside Emergency Services 24/7 support and counseling, assessment, treatment and recovery resources.

Town Holiday: July 4th
Vacation: July 5th, 26th 29th

Respectfully submitted by Carol Read September 7, 2019

*SAPC technical assistance calls, coordinator meetings, and compliance related to the SAPC grant program are extensively documented in the BSAS-SAPC online quarterly reports.

Needham Public Health Division

July 2019

Assist. Health Dir. - Tara Gurge
Health Agents - Diana Acosta and Monica Pancare

Activities

Activity	*Notes*
Animal Permit site inspection	**1 - Animal permit site inspection conducted at:** - #22 Stonehurst Rd. – For possible miniature horse permit application. (Permit plan review application still pending.)
Bodyworks	**1 – Bodyworks Establishment Application Pending** - Baan Thai Spa **2 – Bodyworks Practitioner Applications Pending** - Baan Thai Spa o Both applications have cleared doctor's notes and CORI/SORIs
Demo Reviews/ Approvals	**11 - Demolition sign-offs:** • 82 Henderson Street • 30 Longacre Road • 66 Rybury Hillway • 141 Edgewater Drive • 22 Rockwood Lane • 40 Kenney Street • 80 Arch Street • 222 Hillside Ave • 475 South Street • 80 Country Way • 109 Bradford Street
Farmer's Market	**28 – Farmers Market inspections conducted:** - Inspections have been conducted by Stephanie each Sunday. Stephanie also has been distributing info. about Nourishing Needham at the FM as well. (Will have a table in August.) **1 – Farmers Market Permit Issued** - Tiffany's Brownies and Treats
Food – Temporary Food Event Permits	**11 – Temporary Food Permits issued to:** - PMC - Blue Ribbon BBQ - Exchange Club – July 3rd Event @ Memorial - Lemonade Stand - Boston Foundation for Sight @ CATH - Fidelity Bank Ice Cream Truck - Cushing Entertainment/Carnival - Ice Cream - Cushing Entertainment/Carnival - Fried Dough - Cushing Entertainment/Carnival - Sweet Shop - Cushing Entertainment/Carnival - French Fry - Cushing Entertainment/Carnival - Sausage - Roxy's Grilled Cheese **9 – Temporary Food Event Permit Inspections:** - Memorial Park (2x) - Cushing Entertainment/Carnival (x6) - PMC event @ Olin College lot (x1)
Food – Food Permit Plan Reviews	**5 – Food Establishment looking to start their Pre-operation inspection process:** - Eat Well – Updated plans need to be submitted since they have recently informed us of a

(Updates)/Permits Issued	proposal to expand their seating area. Will submit a new plan for review. (Pending.) - Servente Bakery & Café – Permit packet and fees received. Pre-operation insp. pending. - Pancho's Taqueria – Pre-operation inspection pending. - Hungry Coyote –Additional food permit plan review items approved. Pre-operation inspection pending. - Latina Kitchen and Bar – Final plan review items approved. Pre-operation inspection pending. **1 – Food establishment annual permits issued:** - Chef Mike's
Food Pre-operation Inspections conducted	**7 – Pre-operation inspections conducted for:** - Chef Mike's (x4) - Latina Kitchen and Bar (x1) - Hungry Coyote (x1) - Memorial Park Building (First Floor only. Second floor still pending – to be completed in Aug.) Inspected facility for July 4th event.
Food - Mobile	**2 – Mobile Truck Inspections conducted:** - Roxy's Grilled Cheese – temp event - Fidelity Bank Ice Cream Truck– temp event
Food Complaints	**3/3 – Food Complaints/Follow-ups:** - Sudbury Farms – Customer reported raw chicken is not being held at correct temperature. The customer claims the product going bad before the expiration date and this has happened multiple times at this location. Diana conducted a follow up inspection on site. Diana took the temperature of the raw chicken items that were held in what would presumably be in the warmest part of the cooler (i.e. right where the door opens at the deli case and items at the top of stacked product). All items were at or below 40'F. - Dunkin Donuts Chestnut Street / McDonald's – Resident called on a Monday after a weekend heat wave to report the inside of Dunkin Donuts and McDonald's was excessively hot. They were the most concerned that the donuts "with cream" at Dunkin were compromised. Diana followed up with the owner and manager of both establishments. The owner of Dunkin followed up as he was unaware of any issues. The donuts at all Dunkin locations are shelf stable. The manager of McDonalds had already ordered an HVAC service to come in to repair the air conditioning in the restaurant by the time Diana was able to follow up. The air conditioning was repaired that Monday evening. - Comella's – After investigating a nuisance complaint (see below in Nuisance) and evidence seen on a routine inspection, it was revealed there was a rodent issue on site. The establishment implemented the suggestions that were required by the pest control company to reduce activity. Also reached out to landlord who came on site to repair some gaps. Will continue to require weekly pest control reports to be submitted.
Housing – Complaints/Follow-ups	**4/4– Housing Complaints/Follow-ups:** - **Briarwood -** Anonymous complainant left a voicemail the weekend of a heat wave. There was a report received of no air conditioning on over the weekend at the Briarwood Facility. Complainant estimated that there were about 28 rooms that were at an unbearable temperature. The weekend's temperatures were in high 90's – 100's. Diana emailed Briarwood and the manager called back. The facility was well aware of the situation. Manager reported that the air system is forced air, not central. The rooms are kept cool by the hallway air. The maximum temperature that was reached was 80 degrees. The A/C was running all weekend. There are 22 rooms on each floor and the rooms towards to the end of the hallway tend to be warmer. The residents are offered fans and individual A/C units upon request. If windows are left open and the door is shut, that could cause the room to get hotter. The filters in the vents were replaced on 7/22/2019 and the manager reported there was better air flow and that the building had cooled down by Monday. - **Charles River Landing** – Resident reported the toilet in the guest bedroom was clogged for over 24 hours and was unhappy that the maintenance staff did not consider it an emergency. Also reported rodents in the building. Diana spoke with the maintenance

	manager who explained that the resident had a second bathroom in unit which is why it was not categorized as an emergency. When his staff came to perform the work, the resident had the privacy lock engaged. Staff cannot open the privacy lock without destroying the door. Diana called the resident to make sure they were home and the door was opened to let staff into the unit to unclog the toilet. The issue was resolved. - **Charles River Landing** – A separate resident reported observing rodents in and outside of the buildings, trash cans overflowing, and the dog waste bins overflowing. Diana spoke to the maintenance manager to discuss the situation and he sent over the schedule for trash removal (all bins emptied in dumpster daily and dumpster picked up 3x/week; dog stations emptied 3x/week). Pest control is on a schedule and reported activity outside of the building. The manager directed the pest control company to ensure they are including notes about checking the exterior/interior bait stations throughout the common areas. - **Needham Housing Authority (NHA)** – Resident concerned about other residents smoking in units. Complainant was speaking on behalf of a group of residents. Did not specify exact units of smokers but was concerned that the NHA staff was not responding to the complaints. This complaint was forwarded to the Executive Director, Angie Medeiros. Angie told Diana to inform the residents to contact the NHA directly about any smoking issues. Additionally she stated the NHA staff cannot comment on actions being taken on individual residents as it is a private matter.
Housing – Routine Inspection	**7 – Routine Housing Inspections conducted:** - **Walker School** – Student housing units in all 4 buildings (top and bottom floors) inspected. o Minor violations like burnt out light bulbs and missing hand wash signage in the bathrooms. All were corrected and photos submitted by Walker School.
Nuisance – Complaints/ Follow-ups	**3/12 – Nuisance Complaints/Follow-ups conducted for:** - **Dumpsters near CVS/Farmhouse/Hearth/Masala Art (0/4) –** Pest elimination progress being made. Weekly on-site meetings continue to be conducted with Pest Control companies, along with establishment owners, to review progress. Daily dumpster checks are being alternatively conducted by Tara and Diana. EHS pest conducted a major dry ice treatment to eradicate population. Progress to continue to be monitored. (Shared dumpster enclosure to be built, along with rodent landscape exclusion of potential harborage areas, prior to the end of July.) **UPDATES** – All current identified active areas on site are in process of being excluded from rodents. EHS Pest in process of installing metal mesh in all these areas. New Dumpster enclosure area built. (Doors still pending.) - **St. Mary Street (0/3)** – Order letter sent out. Tara and Diana to follow up with resident on July 8th (Done.) Will continue to conduct weekly inspections to check on progress of item removal. (On-going) - **Yale Road (1/2) -** Neighbor complained about sitting water on tarp over unused pool and was concerned with mosquitos breeding in the standing water. Diana spoke with the homeowner who explained there is a safety cover over the pool. The pool has not been used in 8 years and cover is not easy to remove. Diana contacted Norfolk County Mosquito Control and they were able to coordinate with the resident to treat the pool and the cover. - **Nehoiden Street/GPA Mobil/Comella's (1/2) –** Resident witnessed rodents running across the driveway which is near GPA Mobil. Also reported witnessing Comella's dumpster as being over filled. Diana called manager at Mobil who reported they have monthly pest service. Diana and Michelle performed a site visit and saw there were bait boxes in the area. Comella's dumpster was not overflowing. The restaurant submitted their pest control reports which revealed there was an issue inside which they were in the process of addressing with their landlord. Will continue to monitor on-going pest reports. - **St. Mary Street (1/1)** – A separate concern was reported by a resident to the Select Boards office regarding some trash items and yard waste discarded in a vacant wooded area abutting his property. Site visit conducted. Contacted owner at Sun Life Financial in Wellesley. They will remove trash items and will be looking at installing some fencing and signage on site to deter illegal dumping. Also reached out to DPW re: what steps owner can take to install fencing in this area. (In process.)
Registered Medical Marijuana	Sira Naturals, Inc. is still interested in having a follow-up discussion with the BOH about the Vet/Senior discount option for their Needham dispensary. Will submit data for the board to

Dispensary –Follow-up on Discount discussion	review and attend an upcoming meeting. No data has been shared at this point. **UPDATE** – Still have not received requested data on discounts back from Sira to share with the BOH.
Septic – Enforceable Agreement Discussion	**1 - Enforceable Agreement Discussion held for #57 Walker Lane.** (Continue last month's discussion.)
Septic - Abandonment Form	**1 – Septic Abandonment form submitted for:** - **#745 Central Ave.**
Septic Title Five Conditional Pass letter	1 – Septic Title Five inspection conditional pass letter sent: - **#18 Brookside Rd.** – Sent new owner a letter to replace broken D-Box. Owner stated that house is currently vacant, and will have it repaired before occupying home.
Septic – Construction/Trench Permits	**2 – Septic Construction/Trench permits issued for:** - **#67 Pine St. – For a pipe repair.** - **#260 Cartwright Rd. – For septic system upgrade.**
Septic – Deed Restriction	**1 – Septic Deed Restriction submitted for:** - **#260 Cartwright Rd. – For no garbage grinder.**
Septic – Installation inspections	**5 – Septic installation inspections conducted at:** - **#67 Pine St. (x1)** - **#260 Cartwright Rd. (x4)**
Septic – Plan Reviews	**3 – Septic Plan Reviews conducted for:** - **RTS (New building) - Tight Tank for proposed new DPW storage building. (Additional tank specs submitted for review.)** - **#260 Cartwright Rd. – Initial as-built plan submitted. Some edits needed to be made. Final septic as-built plan still pending.** - **#745 Central Ave. - Initial as-built plan submitted. Some edits needed to be made. Final septic as-built plan still pending.**
Tobacco	**10 –Inspections conducted to spot check that no flavored items are on shelves.** **1 – Routine Inspection conducted:** - Roche Bros – passed.
Tobacco Complaints	**0 – Tobacco Complaints**
Tobacco	**1 – Tobacco Compliance Check Violation follow-up -** - **7-Eleven (Highland Ave.)** - Suspension letter sent to owner. Suspension scheduled to take place the week of August 30 - Sept. 6th.
Well - Approval to Drill letter	**1– Approval to Drill letter issued for the installation of 2 Closed-Loop Geothermal Wells to be located at:** - #21 Utica Road – By Derek Skillings (#943) with Skillings & Sons, Inc.
Planning Board Plan Reviews	**0 – Plan reviews conducted for Planning Board.**
Zoning Board of Appeals Plan Reviews	**0 - Plan Reviews conducted for Zoning Board of Appeals.**

Yearly

Category	*Jul*	*Au*	*S*	*O*	*N*	*D*	*J*	*F*	*M*	*A*	*Ma*	*Ju*	***FY '20***	FY' 19	*FY' 18*	FY' 17	*Notes/Follow-Up*
Biotech	0	0	0	0	0	0	0	0	0	0	0	0	**0**	1	1	2	Biotech registrations
Bodywork	0	0	0	0	0	0	0	0	0	0	0	0	**0**	14	11	6	Bodywork Estab. Insp.
Bodywork	0	0	0	0	0	0	0	0	0	0	0	0	**0**	9	6	4	Bodywork Estab. Permits
Bodywork	0	0	0	0	0	0	0	0	0	0	0	0	**0**	21	22	13	Bodywork Pract. Permits
Demo	11	0	0	0	0	0	0	0	0	0	0	0	**11**	104	105	112	Demo reviews
Domestic Animal Permits/Insp.	0	0	0	0	0	0	0	0	0	0	0	0	**0**	21	19	17	Animal permits/
	1	0	0	0	0	0	0	0	0	0	0	0	**1**	22	3	16	Inspections
Food Service	14	0	0	0	0	0	0	0	0	0	0	0	**14**	200	225	198	Routine insp.
Food Service	7	0	0	0	0	0	0	0	0	0	0	0	**7**	12	32	37	Pre-oper. Insp.
Retail	1	0	0	0	0	0	0	0	0	0	0	0	**1**	46	60	69	Routine insp.
Resid. kitchen	1	0	0	0	0	0	0	0	0	0	0	0	**1**	6	8	7	Routine insp.
Mobile	2	0	0	0	0	0	0	0	0	0	0	0	**2**	17	13	15	Routine insp.
Food Service	3	0	0	0	0	0	0	0	0	0	0	0	**3**	28	53	51	Re-insp.
Food Service/retail	1	0	0	0	0	0	0	0	0	0	0	0	**1**	140	171	177	Annual/Seasonal Permits
Food Service	11	0	0	0	0	0	0	0	0	0	0	0	**11**	134	163	158	Temp. food
	9	0	0	0	0	0	0	0	0	0	0	0	**9**	37	29	62	permits/Inspe
Food Service	1	0	0	0	0	0	0	0	0	0	0	0	**1**	14	14	7	Farmers Market permits
	28	0	0	0	0	0	0	0	0	0	0	0	**28**	229	127	33	Farmers Market insp.

Category	*Jul*	*Au*	*S*	*O*	*N*	*D*	*J*	*F*	*M*	*A*	*Ma*	*Ju*	***FY '20***	FY' 19	*FY' 18*	FY' 17	*Notes/Follow-Up*
Food Service	3	0	0	0	0	0	0	0	0	0	0	0	**3**	18	20	13	New Compl/
	3	0	0	0	0	0	0	0	0	0	0	0	**3**	21	21	17	Follow-ups
Food Service	5	0	0	0	0	0	0	0	0	0	0	0	**5**	20	42	33	Plan Reviews
Food Service	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	Admin. Hearings
Grease/ Septage Haulers	0	0	0	0	0	0	0	0	0	0	0	0	**0**	21	24	24	Grease/ Septage Hauler Permits
Housing (Chap II Housing)	7	0	0	0	0	0	0	0	0	0	0	0	**7**	0	14	14	Annual routine insp./
	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	5	4	Follow-up insp.
Housing	4	0	0	0	0	0	0	0	0	0	0	0	**4**	22	22	7	New Compl./
	4	0	0	0	0	0	0	0	0	0	0	0	**4**	28	24	11	Follow-ups
Hotel	0	0	0	0	0	0	0	0	0	0	0	0	**0**	3	3	3	Annual insp./
	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	Follow-ups
Nuisance	3	0	0	0	0	0	0	0	0	0	0	0	**3**	55	42	30	New Compl./
	12	0	0	0	0	0	0	0	0	0	0	0	**12**	69	42	45	Follow-ups
Pools	0	0	0	0	0	0	0	0	0	0	0	0	**0**	20	12	13	Pool insp./
	0	0	0	0	0	0	0	0	0	0	0	0	**0**	12	7	8	Follow up
Pools	0	0	0	0	0	0	0	0	0	0	0	0	**0**	19	12	9	Pool permits
Pools	0	0	0	0	0	0	0	0	0	0	0	0	**0**	3	44	19	Pool plan reviews
Pools	0	0	0	0	0	0	0	0	0	0	0	0	**0**	5	7	6	Pool variances
Septic	1	0	0	0	0	0	0	0	0	0	0	0	**1**	9	5	18	Septic Abandon
Septic	0	0	0	0	0	0	0	0	0	0	0	0	**0**	2	2	5	Addition to a home on a septic plan rev/approval
Septic	5	0	0	0	0	0	0	0	0	0	0	0	**5**	21	28	43	Install. Insp.
Septic	0	0	0	0	0	0	0	0	0	0	0	0	**0**	3	1	0	COC for repairs

Category	*Jul*	*Au*	*S*	*O*	*N*	*D*	*J*	*F*	*M*	*A*	*Ma*	*Ju*	***FY '19***	FY' 18	*FY' 17*	FY' 16	*Notes/Follow-Up*
Septic	0	0	0	0	0	0	0	0	0	0	0	0	**0**	4	4	3	COC for complete septic system
Septic	7	0	0	0	0	0	0	0	0	0	0	0	**7**	62	51	62	Info. requests
Septic	0	0	0	0	0	0	0	0	0	0	0	0	**0**	1	2	6	Soil/Perc Test.
Septic	2	0	0	0	0	0	0	0	0	0	0	0	**2**	6	5	8	Const. permits
Septic	0	0	0	0	0	0	0	0	0	0	0	0	**0**	8	9	11	Installer permits
Septic	0	0	0	0	0	0	0	0	0	0	0	0	**0**	5	3	6	Installer Tests
Septic	1	0	0	0	0	0	0	0	0	0	0	0	**1**	1	3	7	Deed Restrict.
Septic	3	0	0	0	0	0	0	0	0	0	0	0	**3**	9	23	14	Plan reviews
Sharps permits/Insp.	0	0	0	0	0	0	0	0	0	0	0	0	**0**	7	9	9	Disposal of Sharps permits/
	0	0	0	0	0	0	0	0	0	0	0	0	**0**	7	7		Inspections
Subdivision	0	0	0	0	0	0	0	0	0	0	0	0	**0**	1	1	0	Plan review-Insp. of lots /
	0	0	0	0	0	0	0	0	0	0	0	0	**0**	1	0	1	Bond Releases
Special Permit/ Zoning memos	0	0	0	0	0	0	0	0	0	0	0	0	**0**	34	15	12	Special Permit/Zoning
Tobacco	0	0	0	0	0	0	0	0	0	0	0	0	**0**	10	11	12	Tobacco permits
Tobacco	1	0	0	0	0	0	0	0	0	0	0	0	**1**	14	18	25	Routine insp./
	0	0	0	0	0	0	0	0	0	0	0	0	**0**	3	3	6	Follow-up
Tobacco	10	0	0	0	0	0	0	0	0	0	0	0	**10**	30	41	34	Compliance checks
Tobacco	0	0	0	0	0	0	0	0	0	0	0	0	**0**	3	4	2	New compl./
	0	0	0	0	0	0	0	0	0	0	0	0	**0**	3	4	2	Compl. follow-ups
Trash Haulers	0	0	0	0	0	0	0	0	0	0	0	0	**0**	17	14	26	Trash Hauler permits
Medical Waste Haulers	0	0	0	0	0	0	0	0	0	0	0	0	**0**	2	1	2	Medical Waste Hauler permits
Wells	1	0	0	0	0	0	0	0	0	0	0	0	**1**	6	2	7	Permission to drill letters/
	0	0	0	0	0	0	0	0	0	0	0	0	**0**	1	0	3	Well Permits

FY 20 Priority FBI Risk Violations Chart (By Date)

Restaurant	Insp. Date	Priority Violation	Description
Hearth Pizzeria	7/13/2019	**3-302.11 (A)(2) Raw Animal Foods Separated from each other -** *Except when combined as ingredients, separating types of raw animal foods from each other such as beef, fish, lamb, pork and poultry during storage, preparation, holding, and display by: (a) Using separate equipment for each type, or (b) Arranging each type of food in equipment so that cross contamination of one type with another is prevented and (c) preparing each type of food at different times or in separate areas.*	A cooked turkey breast was stored in same container as raw chub beef. PIC removed.
Briarwood Healthcare Center	7/13/2019	**4-501.114 (A)-(E) Chem.San. Temp./pH/Concentr./Hard.-** *A chemical sanitizer used in a sanitizing solution shall be used in accordance with the EPA-registered label use instructions. A chlorine solution shall have a temperature of 55°F-120°F, depending on water hardness, and concentration range of 25ppm to 100ppm. An iodine solution shall have a minimum temperature of 68°F with a concentration range of 12.5ppm to 25ppm. A quaternary ammonium compound solution shall have a minimum temperature of 75°F and be used according to the manufacturer's use directions.*	Sanitizer in the 3 compartment sink was not at 200 ppm. Trained PIC to test frequently and at least once every four hours.
Gari Japanese Fusion	7/27/2019	**3-501.19 (B)(1)(3)(4) Time as a Public Health Control - 4 Hours -** *If time rather than temperature is used as the public health control up to a maximum of 4 hours: the food shall have an initial temperature of 41°F or less when removed from cold holding temperature control, or 135°F or greater when removed from hot holding temperature control; the food shall be cooked and served, served at any temperature if RTE, or discarded, within 4 hours from the point in time when the food is removed from temperature control; and the food in unmarked containers or packages, or marked to exceed a 4-hour limit shall be discarded.*	Time as a public health control being practiced on site. No charts/temp. logs were available as required. Cooked product did not have time stamp and other information as required. The most recent date was July 14, 2019 it was observed that shrimp and other TCS foods were held at room temperature - products were discarded.
The Farmhouse Restaurant	7/27/2019	**3-501.14 (A) Cooling Cooked Foods -** *Cooling cooked TCS foods shall be done within 2 hours from 135ºF to 70ºF and then within 4 hours from 70ºF to 41ºF.*	Corrected on site - Stockpot of beef stock cooling improperly/2 large containers of chicken stock cooling improperly. Repeat offense. Train staff on proper cooling techniques to get product to 70 ºF within 2 hours and below 41 ºF within the next 4 hours.

Needham Public Health Division

July 22, 2019

Certified No: 7016 3010 0001 0234 2707
Return Receipt Requested

7-Eleven #32485C
845 Highland Ave
Needham, MA 02494
Attn: Hiren Patel

Re: Violations of Board of Health REGULATION AFFECTING SMOKING AND THE SALE AND DISTRIBUTION OF TOBACCO AND NICOTINE DELIVERY PRODUCTS IN NEEDHAM - specifically, Section D. Tobacco Sales to Persons Under the Minimum Legal Sales Age Prohibited AND Section E. Tobacco Product Sales Permit

Dear Mr. Patel:

At a public meeting of the Needham Board of Health on July 19, 2019 a hearing was held to discuss the suspension of your establishment's permit to sell tobacco products and nicotine delivery products. At that hearing you had the opportunity to be heard concerning your establishment's violation. The Board then voted to suspend your permit for 7 business days in accordance with the Board's Policy and Procedures for Suspension of Permit to Sell Tobacco and Nicotine Delivery Products and the above-cited Regulation. The $300.00 fine must be submitted via check made out to 'Town of Needham'. The check may be mailed to or dropped off at the Public Health Division located at 178 Rosemary Street.

The Needham Board of Health hereby notifies you of its decision to suspend your Permit to Sell Tobacco and Nicotine Delivery Products **for seven consecutive business days**. **The dates of the suspension are to be determined**. You as the owner will work with the Environmental Health Agent when the dates are decided and finalized. All tobacco products and nicotine delivery products must be removed from the shelves and from the sales area and either moved off-site, or securely kept in the back room in a locked space, for the duration of the suspension. This suspension is being imposed because your establishment sold a tobacco product to a minor during a routine Tobacco Compliance Check conducted on July 9, 2019.

I will meet with you the morning of the beginning of the suspension to verify that all tobacco products and all nicotine delivery products have been removed off site or securely kept in the back room in a locked space. You will be given two tobacco sale suspension signs that MUST be posted during the duration of the suspension (one by the register and one on the entrance door). We will conduct spot checks during the 1 week period to ensure compliance with this order to ensure that these signs are posted and to also ensure that no tobacco products have been restocked on the store shelves. If you have any questions, please contact the Needham Public Health Division at **(781) 455-7940, ext. 220.**

We appreciate your cooperation in this matter. We understand you will continue to educate your staff to ensure that proper carding procedures will be followed for all future tobacco sales.

Sincerely,

Diana Acosta

Diana C. Acosta, MPH
Environmental Health Agent

cc: Timothy McDonald, Director, Public Health Division
Tara Gurge, Assistant Public Health Director

Public Health Nurse Report - July FY2020
Donna Carmichael and Tiffany Zike

COMMUNICABLE DISEASES:	JUL	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	Apr	MAY	JUN	T20	T19	T18
Chickungunya	1												1		
BABESIOSIS	1												1	4	4
Borrelia Miyamota													0	0	0
CAMPYLOBACTER	2												2	6	14
CRYPTOSPORIDIUM													0	0	1
Cyclosporiasis	4												4	0	1
Dengue													0	0	0
E-Coli													0	0	0
EHRLICHIOSIS/ HGA	2												2	4	2
Enterovirus													0	0	1
GIARDIASIS	1												1	2	1
Haemophilus Influenza													0	0	1
HEPATITIS B													0	9	8
HEPATITIS C													0	11	14
Influenza													0	98	211
Legionellosis	1												1	0	2
Listeriosis													0	0	0
LYME	7												7	46	53
MEASLES													0	0	0
MENINGITIS													0	0	0
Meningitis(Aseptic)													0	0	1
Mumps	1												1	1	0
Noro Virus													0	5	3
PERTUSSIS	1												1	3	1
RMSF(Rocky Mt Spotted Fever)													0	0	
SALMONELLA													0	3	3
SHIGA TOXIN													0	1	0
SHIGELLOSIS													0	3	0
STREP Group B													0	0	1
STREP (GAS)													0	2	5
STREP PNEUMONIAE													0	3	3
TUBERCULOSIS													0	0	0
TULAREMIA													0	0	0
Latent TB													0	1	0
Varicella	1												1	6	12
Vibrio													0	1	0
West Nile virus													0	0	0
Zika													0	0	1
TOTAL DISEASES	22	0	0	0	0	0	0	0	0	0	0	0	22	209	343
Revoked/Suspect Diseases Investigated													0	5	6
Contact Investigation													0	5	0

Public Health Nurse Report - July FY2020
Donna Carmichael and Tiffany Zike

ANIMAL TO HUMAN BITES	JUL	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	Apr	MAY	JUN	T20	T19	T18
DOG	1												1	23	42
CAT													0	0	0
BAT													0	0	8
SKUNK													0	1	0
RACOON													0	0	0
other													0	0	1
TOTAL BITES	1	0	0	0	0	0	0	0	0	0	0	0	1	24	51

IMMUNIZATIONS	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	FY20	FY19	FY18
B12	2												2	24	24
Flu (Seasonal)													0	712	522
Hep B													0	2	0
Polio													0	4	0
TDap													0	6	0
Varicella													0	0	2
Consult													0	702	319
Fire/Police	4												4	157	59
Schools	2												2	172	42
Town Agencies	2												2	267	185
Community Agencies	1												1	103	32

ASSISTANCE PROGRAMS	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	FY20	FY19	FY18
Food Pantry	2												2	14	13
Food Stamps													0	1	0
Friends													2	0	0
Gift of Warmth														20($5817)	20($7250)
Good Neighbor													0	2	5 $425/fam
Park & Rec	1												1	2	1
Salvation Army													0	1	0
Self Help	1												1	26	34

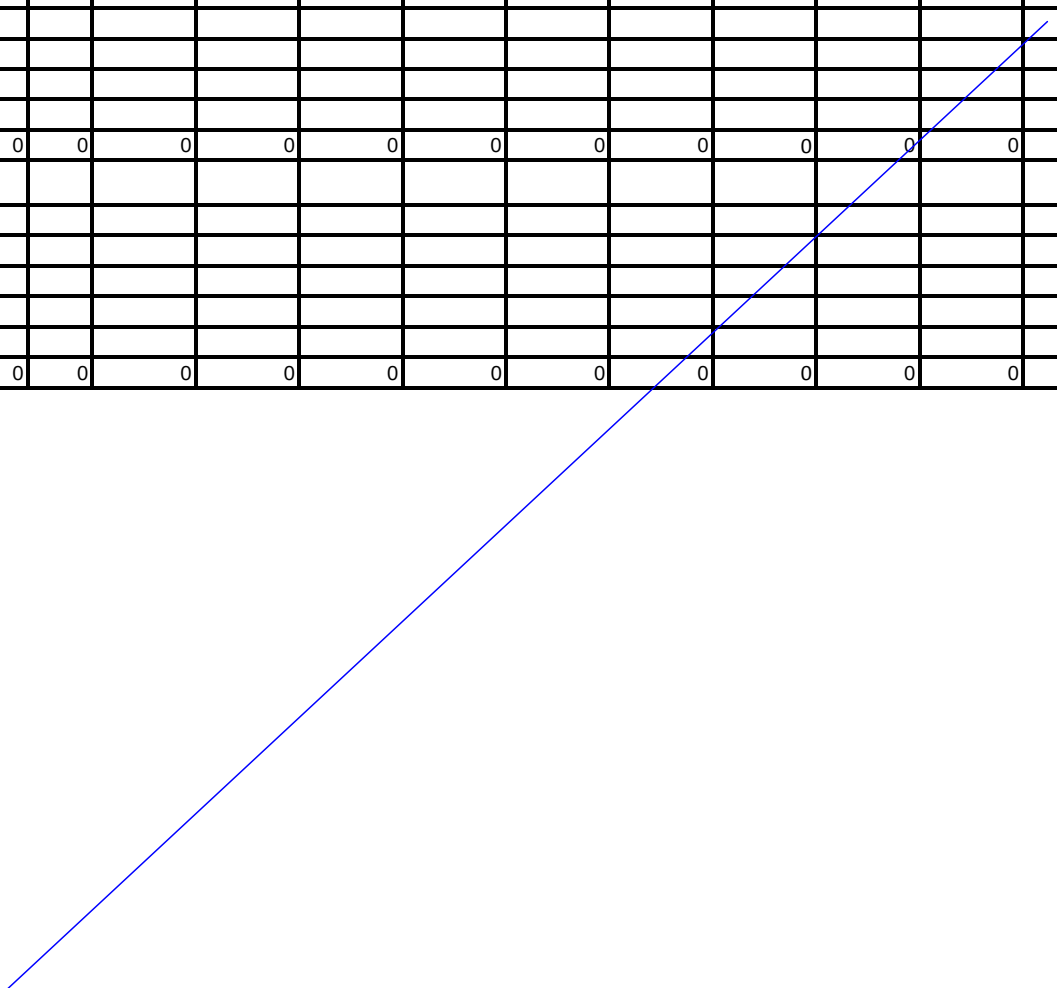
Gift Cards Distributed - 0

Donation to Gift of Warmth: Carter Methodist Chruch- $1,000.00

Public Health Nurse Report - July FY2020
Donna Carmichael and Tiffany Zike

WELLNESS PROGRAMS	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	FY20	FY19	FY18
Office Visits	36												36	368	467
Safte Visits	1												1	12	10
Clinics	9												9	52	0
Housing Visit	0												0	5	15
Housing Call	1												1	54	110
Camps-summer	8												8	42	60
Tanning Insp	0												0	0	0
Articles	1												1	6	3
Presentations	1												1	27	16
Cable	0												0	7	2

EMPLOYEE WELLNESS	July	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	FY20	FY19	FY18
BP/WELLNESS - DPW/RTS	0												0	114	148
CPR/AED INSTRUCTION	12												12	18	0
Stop the Bleed													0		
Narcan Training													0	13	
Police Weights													0	31	
First Aide													0	61	
Total People	12	0	0	0	0	0	0	0	0	0	0	0	12	237	
Community Education Hours															
HEALTH ED Tick Borne	2												2	126	132
HEALTH ED Mosquito Borne	2												2	122	135
HEALTH ED FLU	1												1	68	289
GENERAL HEALTH EDUCATION	1												1	147	186
HEALTH ED Measles	2												2	15	
Total Hours	8	0	0	0	0	0	0	0	0	0	0	0	8	478	1077



Public Health Nurse Report - July FY2020
Donna Carmichael and Tiffany Zike

MEETINGS, EVENTS, TRAININGS

Title	*Description/Highlights/Votes/Etc.*
Emergency Planning	NC8 - Conference Call
	EMPG Grant Turned in.
	After Action Reviews, LEPC Certification, CEMP planning
Infection Control Meeting	BID Needham
DVAC	
	Organizing Summer initiatives with Intern
Concussions	Working towards Roll-out
Healthy Aging	Home visit x 1
Trainings	Public Health and Transgender Inclusivity
	Public Health Grand Rounds-Emerging Tick Diseases
Summer Camps	Office Visits and paperwork review
	Managing Packet information
Managing	DVAC Intern and EP Program Coordinator
CPR	CPR training for some town employees
MAPC Grant	Lunch and Learn Presentation
Solutions Group	Meeting with Kate to Discuss Town Values
CCIT	Monthly Meeting

Needham Public Health Division

Date: July 2019

Staff: Rachael Cain (Greenberg)

Activities and Accomplishments

Safety at Home Program

Activity	Notes
Program roll-out	• Full program roll-out completed • **30 program visits (including five pilots) completed to date** • **Work specified under the MetroWest Health Foundation grant is complete as of June 30, 2019, with all funds spent and deliverables met** •
Evaluation	• Program outcomes evaluated • **Highlights of the evaluation**: o 11 of 30 participants had fallen in the year prior to the visit o No participant had a fear of falling (based on the Tinetti Falls Efficacy Scale) but not all were confident they had the resources to avoid falls and continue living independently (average answer 3.81, with 1 being most confident and 10 not at all confident) o 14 of 30 participants completed a mailed satisfaction survey and stated they agreed or strongly agreed that the information was easy to understand, they will use what they learned, and are satisfied with the program, among other items. ▪ 13 participants said they would recommend the program to a friend (one participant did not respond)
Next Steps and Sustainability	• Matter of Balance to be offered year-round by partnership with Newton-Wellesley Hospital and trained Needham Public Health Nurse. • Working with local physical therapists to offer fall screenings at CATH regularly • Home visits and education **will continue** on a slightly more limited basis while they are integrated into the services offered by Aging Services' Social Workers and the Public Health Nurses • Quarterly meetings held to continue quality improvement • Fall prevention lunch and learn being planned for Fall Prevention Awareness Day in September o Applied for a small grant from the Massachusetts Council on Aging to receive funding for event activities

Housing Authority Assessment

Activity	Notes
Survey Dissemination	• **Total of 119 surveys completed** (38% response rate), which is sufficient for analysis • Quantitative analysis by consultant is complete • Final report to be written in the coming months

Needham Public Health Division

Accreditation Support

Activity	Notes
Community Health Assessment	• No activities in July

Climate Change Project

Awarded $26,089 grant from the Metropolitan Area Planning Council to implement a one-year climate resiliency project for older adults. Activities will include creating and holding three workshops for older adults about extreme weather and how to prepare for it, as well as a related communications campaign.

Activity	Notes
Planning Activities	• Hired Program Coordinator, who began work in mid-July
Conduct Workshops	• Held first workshop on June 26th o 30 older adults attended o Presented on extreme heat and how to protect self and loved ones o Conducted interactive activity o Disseminated emergency kits o Signed interested participants (two) up for RAVE alerts
Communications	• Disseminated majority of 2,500 printed educational brochures
Reporting	• Submitted interim report and invoice to MAPC • Scheduled funder site visit for August 15th

Other Public Health Division activities this month:

- Co-authored op-ed for accessory dwelling unit support.
- Began co-creating grant writing workshop for HHS staff.

August Monthly Reports

Needham Public Health Division

August, 2019 Monthly Report

Maryanne Dinell- Traveling Meals Program Coordinator

Monthly

Description	*Reason*	*Notes/Follow-Up (ongoing, completed, etc.)*
Residents needing the Traveling Meals August, 2019	Unable to shop or prepare their own meal.	40 clients on the Traveling Meals Program 29 Springwell Elder Services, Waltham clients 11 private pay clients - Needham residents
22 delivery days in August 40 consumers enrolled in the Traveling Meals Program	26 Clients receive meals 5 days per week 13 Clients receive meals 3 days a week 1 Client receives meals for 7 days	603 meals delivered @ 5.62 per meal =cost of $3388.86 477 meals delivered to Springwell Clients 126 meals delivered to private pay residents
1 Clients no longer need Program	1 Springwell	Client in nursing home
5 new clients On Program	4- 1st time on Program 1-re-enrollment	3-Dementia, Anxiety, depression 2-Age and health declining

Category		*Jul*	*Aug*	*Sept*	*Oct*	*Nov*	*Dec*	*Jan*	*Feb*	*Mar*	*Apr*	*May*	*Jun*	*FY '19 Total*	*FY 20 Total*	
Meal Delivery		695	696											6859	1391	
General Telephone Calls-received		32	51											442	50	
Assistance Calls-to Springwell		7	5											43	12	
Not at home at delivery		3	4											40	7	
911		0	0											1	0	

Category		*Jul*	*Aug*	*Sept*	*Oct*	*Nov*	*Dec*	*Jan*	*Feb*	*Mar*	*Apr*	*May*	*Jun*	*FY '19 Total*	*FY 20 Total*	

Meetings, Events, and Trainings

BI	*Type*	*Description/Highlights/Votes/Etc.*	*Attendance*

Donations, Grants, and Other Funding [List any donations received, grants funded, etc. over the past month.]

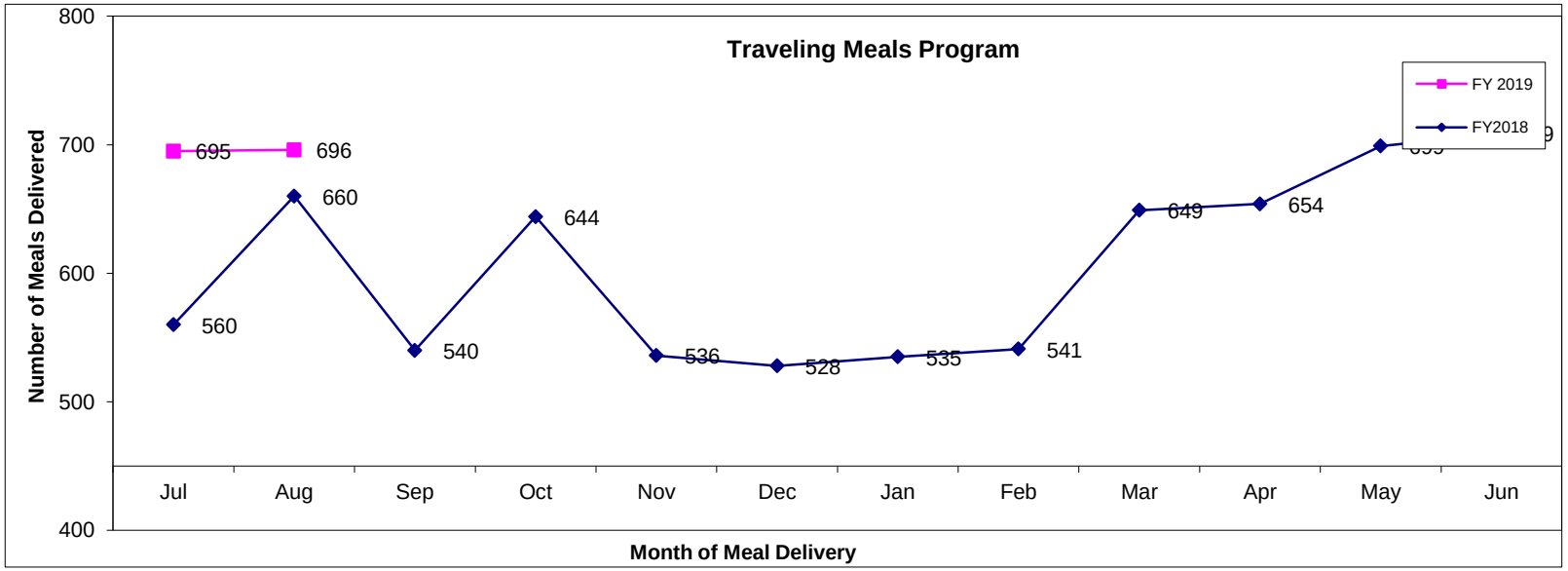
Description	*Type (D,G,O)*	*Amount Given*	*Source*	*Notes*

Traveling Meals Program

August, 2019

	Projected-12 Mo.
$	46,904.52
#	8,352.00

Month	# Meals FY2019	# Meals FY2020	FY20 Cost	% Change # Meals
Jul	560	695	$3,905.90	24%
Aug	660	696	$3,911.52	5%
Sep	540			
Oct	644			
Nov	536			
Dec	528			
Jan	535			
Feb	541			
Mar	649			
Apr	654			
May	699			
Jun	709			
Totals:	7,255	1,391	7,817.42	



Needham Public Health Division

Unit: Substance Use Prevention

Date: August 2019

Staff: Catherine Delano, Karen Shannon, Karen Mullen, and Monica DeWinter

Activities and Accomplishments

Activity	Notes
Parent Survey 2019	We anticipate having Scott Formica of EDC present the survey results at the 10/1/19 SPAN Quarterly meeting.
Madeleine Arthur, graduate intern from BU School of Public Health, begins work with Prevention Team.	Maddie received the raw data for the 2018 MWAHS on 8/2/19, 2 months into her internship. Consequently, she had to modify her deliverable for the BU MPH Summer Internship poster presentation event on 8/14/19 by developing a data analysis around existing MWAHS results for Needham high and middle school students. Since 8/14 Maddie has continued work on the 2018 MWAHS data and expects to have an info-graphic summary and presentation prepared for the SPAN Quarterly meeting on October 1.
Alcohol toolkits for Needham alcohol licensees	Karen S., Catherine D., Monica DW., and Maureen D. continue modifications to tool kit contents, particularly removal of "Under 30?" campaign and licensee management sign- off procedure for tool kit distribution.
Continued work on marijuana regulations	Working with Tara, Diana, and Karen Shannon
Meeting with Needham High School (NHS) Vice Principal	Met with Keith Ford, NHS Vice Principal, to discuss upcoming school initiatives and areas of collaboration with SPAN

Carol Read, M.Ed., CAGS, CPS **August 2019**

Substance Use Prevention and Education ~ Initiative Highlights

Needham NPHD, Needham SPAN and Substance Abuse Prevention Collaborative (SAPC) grant***** collaboration with the towns of Dedham, Needham, Norwood and Westwood**.**

SAPC grant
Town coalition meetings:
Dedham DCDAA coalition: *No meeting scheduled*- Leadership Elections August 28th
Impact Norwood coalition: August 8th Norwood High School - Sheriff J. McDermott*
Westwood Cares coalition: *No meeting scheduled*
Needham SPAN coalition: *No meeting scheduled*
**meeting conflict*

SAPC program, capacity building and strategy implementation preparation:

(1)BSAS- SAPC grant quarterly (Q4) programmatic report preparation (activities, capacity, and engagement-online submission August 15th **(2)** SAPC FY20 budget narrative, draft BSAS review submission **(3)** SAPC updates: AlcoholEdu final Impact Report (Dedham- Needham- Norwood – Westwood) **(4)** EverFi- AlcoholEdu non-contractual services clarification FY21 options- Needham High School addition cost **(5)** EverFi- AlcoholEdu- FY19 contract revision to one year **(6)** TIPs training, November 4th American Legion, Dedham- *confirmed* **(7)** SAPC Alcohol Policy team, training content planning (EDC, Waltham)

SAPC Leadership Team: August 12th Review and discussion: **(1)** 2019/2020 monthly meeting confirmation **(2)** MDPH Jail Arrest/Diversion grant program, application **(3)** BSAS grant compliance (financial/programmatic) quarterly reporting, BSAS procurement updates **(4)** SAPC strategy review, consensus (TIPs training- Alcohol Compliance Checks- AlcoholEdu student) **(5)** FY20 budget allocation discussion **(6)** Resource sharing: Alcohol- American Academy of Pediatrics: *Alcohol Use by Youth*, July 2019 Pediatrics | CBD DPH statement**:** D.J. Wilson, MMA and Attorney General release | HRiA webinars, Community Benefit funding**:** August 13th, *registration link provided* | Prevention Tweets: Alcohol, SAMHSA, NIDA Marijuana, Addiction Policy Forum/Prevention video | Vaping: FDA campaign "The Real Cost" MDPH "Get Outraged" campaign – Toolkit for schools **(7)** Data sharing: quantitative (survey response- youth 30 day use rates, alcohol, marijuana, e-cigarettes/crosstab 5 mental health indictors, AlcoholEdu and SAPC 2019 initiatives (TIPs training data- alcohol Compliance Checks)

Dedham Public Health- DCDAA August 12th Cassandra Bigness, Project Coordinator and Kristina King, Manager, DFC grant program. Dedham Parent Survey review, transfer to Survey Monkey account. Social Media Campaign launch and community awareness goals, *Science of Vaping,* presentation (College Bound Summer Camp- Regis College) Youth capacity building- new website.

Commission on Community Behavioral Health Promotion and Prevention: August 19th & 28th Conference Calls. Joan Mikula, Director. Kirsten Doherty, MPH MOAR. Commission member.. *Formerly: Promote-Prevent Commission, HB 3898.* Presentation planning September 23rd, Boston. Coalition leaders, public health and prevention specialists presentation including: foundations of primary prevention/prevention science, community coalition capcity, evidence-based strategies and policy and practice changes (local- state) to prevent and reduce underage substance use. Liz Parsons, SAPC Program Manager, Melrose Public Health, Kat Allen, Franklin County, FROG, Catie Sugarman, Natick Public Health and Penny Bruce, MA, Middlesex Community College, Gabe Cohen, Program Planning and Implementation, Executive Office of Health & Human Services.

Norfolk Prevention Partners: August 21st Lyn Frano, Braintree, Amanda Decker, Avon, Steph Patton, Stoughton. Review and discussion: (1) CBD edibles- retail sales parameters MDPH- MDAR (2) Alcohol policy: community level strategies to impact access and availability, licensees and alcohol Ice cream- (3) Youth engagement initiative- *Dover Youth to Youth* (4) Earmark funding FY20 (5) Bank of Canton event, strategic planning.

Frameworks Institute training: August 23rd. MDPH- BSAS. *Telling the Massachusetts Prevention Story* facilitators: Clara Gibbons & Mackenzie Price, PhD. Foundational training: Frameworks communications principals, cultural models theory (Individualism, Fatalism and Us vs. Them) integrating tested values into messages and communications strategies, evaluating unproductive framing strategies, evaluating the framing strength of prevention communications, applying explanatory tools – metaphors, examples and explanatory chains to fill in gaps in understanding. EDC, Waltham. Webinar modules scheduled (3) Strategic Framing- Positive Youth Development and Framing with Numbers.

BSAS – SAPC grant budget: August 23rd Amal Marks, MDPH- BSAS Grant Manager. Review of FY20 budget priorities, SAPC Leadership Team consensus. *Preliminary approval.*

Needham Public Health Division:
NPHD – SPAN initiatives:

NPHD programs meeting preparation outreach for research and resource gathering:
(1) BIDN data/content request *Implementation Strategy* (3 years) Needham CCIT engagement (2) DMH grant data collection: police, EMS, hospital ED and treatment (MDPH resources) (3) Final MDPH project presentation plan review- abstract review, Nourishing Needham, intern final project (4) Community resources request, Michael O'Neal. SUD- MH assessment and treatment resources request, DMH services application.

Needham Public Health- DMH grant: August 2nd Conference Call. Jessica Goldberg and Lt. Chris Baker. DMH Jail Arrest/Diversion grant program project. Review application options and DMH funding parameters; benefit package funding and potential collaboration with a neighboring town. Ongoing communication with Needham Police Department leaders to update on grant structure, FY20 funding time frame and narrative from Karin Orr, LICSW, NE Area Forensic Director, DMH, CIT model. *Initial draft- on hold*.

NPHD intern: August 6th Stephanie McCulloch, Tufts MPH intern. Request to review MDPH year end group oral presentation, August 14th. *Nourishing Needham* project abstract revisions to include SMART objectives, local data and references and fall part-time public health project opportunities.

Newton Wellesley Hospital: August 7th Emergency Department- Substance Use Services workgroup, quarterly public health department- social services partners meeting. Newton, Needham, Waltham. Dr. David Huckins, Emergency Medicine, Dr. Antje Barreveld, Director, Substance Use Services program, Kathy Reda, RN, Emergency Medicine and Dr. Elliot Martin, Psychiatrist. ED- SUS protocols for SUD screening, detox and treatment outreach, options for involuntary commitment (Section 12 & Section 34) MAT prescribing update. Resource sharing, Needham Public Health, Newton Health & Human Services, Deb Youngblood.

DMH Jail Arrest/Diversion grant: August 9th Conference Call. Karin Orr- Area Forensic Director, Northeast Suburban Area Northeast Division- DMH liaison, Jail Arrest/Diversion grant. Follow-up on DMH FY20 funding allocation timeline, review of application FAQs, *COMMBUYS* link grant components and feasibility of funding options regional (2-3 town) application.

Needham Public Health Division staff meeting: August 13th Director and staff work activities and planned program updates. Division staff changes: Prevention, Emergency Preparedness and FDA grant funded staff.

Community Crisis Intervention Team (CCIT): August 14th Community Partners – quarterly. Dr. Ilan Schwartz, Emergency Department, Pediatric Director, Newton Wellesley Hospital, Latanya Steel, COA Director, Paul Sawyer, LICSW, Jenna Malgeri, LICSW, Central Mass. Adult Case Manager DMH. Bryna Rogers, MS, Quincy Family Resource Center. Data sharing (incident- ED admission and treatment), support resource sharing, review of referral- transport protocols and enhanced opportunities for community partner collaboration to support Needham residents. **Core Team:** Lt. Chris Baker, Lt. John McGrath, Officer Carl Harmon, Needham Police Department, Tiffany Zike, RN, MPH, Donald Anastasi, Deputy Fire Chief, Ed Sullivan, EMS Supervisor, Kristen Lindley, LICSW and Kerrie Cusack, LICSW Senior Services, Sara Shine, Director, Needham Youth & Family Services, Catherine Delano, MPH, NPHD and Evan Marcus, Riverside Mobile Crisis Supervisor. Collaboration to support residents navigating acute and chronic substance use disorders and/or mental health conditions.

Needham Police meeting: August 14th Lt. Chris Baker. Review and discussion of DMH Jail Arrest /Diversion grant: strategic planning progress, structure of grant application funding options and feedback from Karin Orr- Area Forensic Director, Northeast Suburban Area Northeast Division-DMH liaison, FY20 funding allocation and components for application consideration.

DMH grant strategic planning: August 14th Conference Call Tim McDonald, Chief John Schlittler, and Lt. Chris Baker. Review DHM liaison feedback on funding parameters, options for individual and collaborative applications, discussion of the structure of a collaborative application and prioritization of social worker responsibilities as police department staff. Decision to submit a collaborative application for a full time social worker (co-response model) with Dedham Police Department pending review and approval.

Milton DFC coalition: August 21st Laurie Stillman, MPH DFC grant consultant. Request for Town of Needham alcohol by-law resource- Bring Your Own Bottle- referral from Jennifer Rowe, Assist. District Attorney, Norfolk County. Alcohol policy resources provided- M.G.L. 138 ABCC enforcement no state parameters. Northborough 9-44-040 Carry-In Wine & Malt Policy (BOS 12/17/2012) Milton "Bring Your Own Bottle" regulation, August 2019 pending BOS approval.

Town Accountant: August 26th Conference call. Michelle Vaillancourt, Town Accountant. FY20- July 2019 invoice submission, SAPC grant expense reimbursement. Virtual Gateway EIM system. Dawn Stiller, NPHD Office Manager.

NPHD financial planning meeting: August 27th Dawn Stiller and Tim McDonald. Review of SAPC FY20 spending by UFR code, including final Program Manager salary. Timeline: SAPC Leadership team review (August 12th meeting), MDPH- BSAS approval | Virtual Gateway EIM system upload. Next steps for BSAS final approval. Michelle Vaillancourt, call connection.

Resident Support: Respond to calls and/or meeting requests related to mental health conditions and/or substance use disorder. Referral to Riverside Emergency Services 24/7 support and counseling, assessment, treatment and recovery resources.
Adult SUD – Intervention support resources, detox and treatment options.
Adult MH, Family system support – Housing.

*SAPC technical assistance calls, coordinator meetings, and compliance related to the SAPC grant program are extensively documented in the BSAS-SAPC online quarterly reports.

Needham Public Health Division

August 2019

Assist. Health Dir. - Tara Gurge
Health Agents - Diana Acosta and Monica Pancare

Activities

Activity	*Notes*
Bodyworks	**1 – Bodyworks Establishment Application (Pending Approval)** - Baan Thai Spa (Inspection pending.) **2 – Bodyworks Practitioner Applications (Pending Approval)** - Baan Thai Spa o Both applications have cleared doctor's notes and CORI/SORIs
Demo Reviews/ Approvals	**10 - Demolition sign-offs:** • 189 Edgewater Drive • 20 Cleveland Road • 45 Woodlawn Ave • 274 Manning Street • 72 Pond Street • 134 Taylor Street • 56 Pershing Road • 141 Edgewater Drive • 21 Crescent Road • 183 Broad Meadow Road
Farmer's Market	**41 – Farmers Market inspections conducted:** - Inspections have been conducted by Stephanie. **1 – Farmers Market Permit Issued** - Le Petit Four
Food – Temporary Food Event Permits	**8 – Temporary Food Permits issued to:** - Broadmeadow PTC Welcome Party - Newman Popsicle Party - Eagle Scouts Troop 10 event - Ellie Bloom Special Olympics - Great Hall Performances - Harvest Fair Stands o Stacy's Juice Bar o Gari o Abbott's
Food – Food Permit Plan Reviews (Updates)/Permits Issued	**4 – Food Establishment looking to start their Pre-operation inspection process:** - <u>Thai Story Restaurant (formerly known as Eat Well)</u> – Updated plans. Will be attending Planning Board meeting in September (Pending.) - <u>Pancho's Taqueria</u> –Pre-operation inspection pending. **1 – Food establishment permit pending:** - <u>Servente Bakery & Café</u> **–** Final sign off from Building Dept. pending. Permit to be issued after Certificate of Occupancy is issued. **3 – Food establishment seasonal/annual permits issued:** - Hungry Coyote - Latina Kitchen and Bar - Suni William's School
Food – 6-Month Check ins	**5 – 6-month check in with Level 1 Food Establishments** - Only required to be physically inspected once a year. Check in requires an update on food operations and new manager name(s).

Food Pre-operation Inspections conducted	**13 – Pre-operation inspections conducted for:** - Latina Kitchen and Bar(x6) - Hungry Coyote(x2) - Servente Bakery (x3) - Suni Williams School (x2)
Food - Mobile	**0 – Mobile Truck Inspections conducted.**
Food Complaints	**2 / 3 – Food Complaints/Follow-ups:** - Bertucci's (1/1) – Customer reported seeing a mouse inside the establishment. Reported the manager was very apologetic. Diana followed up with the establishment manager. Required their pest control to be increased to weekly service until activity subsides. Manager reported walking through with the pest control company technician who then helped in sealing up existing gaps to prevent animals from re-entering the facility. - Hungry Coyote (1/2) – Customer reported they shared multiple dishes with spouse at this establishment and both woke up ill. Suspected food borne illness. A foodborne illness complaint form was filled out and submitted to the Massachusetts Department of Public Health by Diana. Diana conducted a follow up inspection and found food items to be out of a safe temperature range. A large container of cooked carnitas was discarded as it was improperly cooled from the night before. Diana conducted a second follow up inspection to ensure equipment was cold-holding food items at proper temperatures. No additional violations observed. (Owner will ensure large cuts of meat are cut up and properly cooled.)
Food – Interventions by Pamela Ross Kung	**3 – FDA one-on-one site visit Intervention reviews received:** - Fuji Steakhouse - Hazel's Bakery - The Rice Barn **1 – Intervention Follow Up:** - Hazel's Bakery- Instructed to clean up and add a mop sink and an additional hand sink. (In process.) Will conduct follow-up inspections to confirm.
FDA Grants	**Category 2 – Moderate Project** - Michelle Iovino, intern, has been preparing the Public Health Division for an audit of Standard 1, 3, 5, and 9. The audit needed to be rescheduled for a later date in the fall due to a last minute conflict that the auditor had.
Housing – Complaints/Follow-ups	**2/2 – Housing Complaints/Follow-ups -** - Charles River Center – A relative of a resident called to report bedbugs in one of the group home facilities. Tara and Diana contacted the management to alert them of the issue. They responded with the protocols they have in place when dealing with bed bugs and stated they followed through with them. Copies of pest reports received. - Residence Inn Pipe Burst – 18 rooms needed taken out of service and needed to be remediated due to flood. (Room re-inspections pending.) Hotel brought in portable toilets while burst pipe was being repaired. Kitchen/Bar areas were shut down. Awaiting inspection to re-open rooms once remediation is complete.
Nuisance – Complaints/ Follow-ups	**0/4 – Nuisance Complaints/Follow-ups conducted for:** - **Dumpsters near CVS/Farmhouse/Hearth/Masala Art (0/1) –UPDATE** – Pest elimination progress made. Weekly meetings have ceased to be conducted as of 8/7/2019. Continue to send out weekly email updates to group to review project updates. EHS pest control installed wire mesh on problem areas including the islands in parking lot and in conjunction with DPW, stone was laid over these areas. New dumpster enclosure area complete. Restaurants in process of relocating their trash and recycling dumpsters, along with compost and new grease barrels, into the new dumpster enclosure area. Will continue to have their pest control companies monitor these areas on a routine basis and to keep the new enclosure area clean and sanitary. - **St. Mary Street (0/2)** – Tara and Diana continuing to conduct weekly site visits to meet with owner to review progress with removing items off site. (On-going) - **St. Mary Street (0/1)** – A separate concern was reported by a resident to the Select Boards

	office regarding some trash items and yard waste discarded in a vacant wooded area abutting his property. Site visit conducted. Contacted owner at Sun Life Financial in Wellesley. They will remove trash items and will be looking at installing some fencing and signage on site to deter illegal dumping. Also reached out to DPW re: what steps owner can take to install fencing in this area. **UPDATE** – Owner in process of having his land surveyed to determine exact property lines. Will be setting up a follow-up meeting with owner and abutting complainant to review fencing and signage proposals, that owner would like to install in order to deter any future illegal dumping of trash items on to his property.
Registered Medical Marijuana Dispensary	Sira Naturals, Inc. is interested in having a follow-up discussion with the BOH about the Vet/Senior discount option for their Needham dispensary. Will submit data for the board to review and attend an upcoming meeting. (**UPDATE** - Still no data has been shared to date to present to the board.)
Septic – Addition to a Home on a Septic	**1 – Addition to a home on a septic plan review conducted for:** - **#20 Roscoe St.** – Approval letter sent to Building Dept.
Septic – COC	**1 – Septic Certificate of Compliance issued for:** - **#67 Pine St**. – For a septic repair.
Septic – Construction Permit	**1 – Septic Construction permit issued for:** - #**1407 Central Ave. (New RTS Storage Bldg.)** – For new tight tank install for new building.
Septic – Enforceable Agreement Discussion	**1 - Enforceable Agreement Discussion held for #57 Walker Lane.** (Continue discussion from last BOH meeting.)
Septic Installer Permit	**1 – Septic Installer permit issued to:** - Rene Pelchat - R.J. Pelchat Excavating, Inc.
Septic Installer Exam	**1 – Installer exam issued to:** - Rene Pelchat
Septic – Plan Review	**1 – Septic as-built plan review conducted for:** - #67 Pine St.
Tobacco vendor suspension follow-up	**1 – Tobacco Compliance Check Violation Follow-up -** - **7-Eleven (Highland Ave.)** – Suspension letter sent to owner along with fine that was issued. Suspension took place the week of August 30 - Sept. 6th. (Site visits made throughout the week to verify compliance (x2).
Planning/Zoning Board Plan Reviews	**0 – Plan reviews conducted for Planning or Zoning Boards.**
Well permit	**1 – Irrigation well permit issued for the property located at:** **- #403 Grove St.**

Yearly

Category	*Jul*	*Au*	*S*	*O*	*N*	*D*	*J*	*F*	*M*	*A*	*Ma*	*Ju*	***FY '20***	FY' 19	*FY' 18*	FY' 17	*Notes/Follow-Up*
Biotech	0	0	0	0	0	0	0	0	0	0	0	0	**0**	1	1	2	Biotech registrations
Bodywork	0	0	0	0	0	0	0	0	0	0	0	0	**0**	14	11	6	Bodywork Estab. Insp.
Bodywork	0	0	0	0	0	0	0	0	0	0	0	0	**0**	9	6	4	Bodywork Estab. Permits
Bodywork	0	0	0	0	0	0	0	0	0	0	0	0	**0**	21	22	13	Bodywork Pract. Permits
Demo	11	10	0	0	0	0	0	0	0	0	0	0	**21**	104	105	112	Demo reviews
Domestic Animal	0	0	0	0	0	0	0	0	0	0	0	0	**0**	21	19	17	Animal permits/
Permits/Insp.	1	0	0	0	0	0	0	0	0	0	0	0	**1**	22	3	16	Inspections
Food Service	14	11	0	0	0	0	0	0	0	0	0	0	**25**	200	225	198	Routine insp.
Food Service	7	13	0	0	0	0	0	0	0	0	0	0	**20**	12	32	37	Pre-oper. Insp.
Retail	1	5	0	0	0	0	0	0	0	0	0	0	**6**	46	60	69	Routine insp. Or 6 month check in
Resid. kitchen	1	0	0	0	0	0	0	0	0	0	0	0	**1**	6	8	7	Routine insp.
Mobile	2	0	0	0	0	0	0	0	0	0	0	0	**2**	17	13	15	Routine insp.
Food Service	3	2	0	0	0	0	0	0	0	0	0	0	**5**	28	53	51	Re-insp.
Food Service/retail	1	3	0	0	0	0	0	0	0	0	0	0	**4**	140	171	177	Annual/Seasonal Permits
Food Service	11	8	0	0	0	0	0	0	0	0	0	0	**19**	134	163	158	Temp. food
	9	0	0	0	0	0	0	0	0	0	0	0	**9**	37	29	62	permits/Inspe
Food Service	1	1	0	0	0	0	0	0	0	0	0	0	**2**	14	14	7	Farmers Market permits
	28	41	0	0	0	0	0	0	0	0	0	0	**69**	229	127	33	Farmers Market insp.

Category	*Jul*	*Au*	*S*	*O*	*N*	*D*	*J*	*F*	*M*	*A*	*Ma*	*Ju*	***FY '20***	FY' 19	*FY' 18*	FY' 17	*Notes/Follow-Up*
Food Service	3	2	0	0	0	0	0	0	0	0	0	0	**5**	18	20	13	New Compl/
	3	3	0	0	0	0	0	0	0	0	0	0	**6**	21	21	17	Follow-ups
Food Service	5	1	0	0	0	0	0	0	0	0	0	0	**6**	20	42	33	Plan Reviews
Food Service	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	Admin. Hearings
Grease/ Septage Haulers	0	0	0	0	0	0	0	0	0	0	0	0	**0**	21	24	24	Grease/ Septage Hauler Permits
Housing (Chap II Housing)	7	0	0	0	0	0	0	0	0	0	0	0	**7**	0	14	14	Annual routine insp./
	0	0	0	0	0	0	0	0	0	0	0	0	**0**	0	5	4	Follow-up insp.
Housing	4	2	0	0	0	0	0	0	0	0	0	0	**6**	22	22	7	New Compl./
	4	2	0	0	0	0	0	0	0	0	0	0	**6**	28	24	11	Follow-ups
Hotel	0	0	0	0	0	0	0	0	0	0	0	0	**0**	3	3	3	Annual insp./
	0	1	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	Follow-ups
Nuisance	3	0	0	0	0	0	0	0	0	0	0	0	**3**	55	42	30	New Compl./
	12	4	0	0	0	0	0	0	0	0	0	0	**16**	69	42	45	Follow-ups
Pools	0	0	0	0	0	0	0	0	0	0	0	0	**0**	20	12	13	Pool insp./
	0	0	0	0	0	0	0	0	0	0	0	0	**0**	12	7	8	Follow up
Pools	0	0	0	0	0	0	0	0	0	0	0	0	**0**	19	12	9	Pool permits
Pools	0	0	0	0	0	0	0	0	0	0	0	0	**0**	3	44	19	Pool plan reviews
Pools	0	0	0	0	0	0	0	0	0	0	0	0	**0**	5	7	6	Pool variances
Septic	1	1	0	0	0	0	0	0	0	0	0	0	**2**	9	5	18	Septic Abandon
Septic	0	1	0	0	0	0	0	0	0	0	0	0	**1**	2	2	5	Addition to a home on a septic plan rev/approval
Septic	5	0	0	0	0	0	0	0	0	0	0	0	**5**	21	28	43	Install. Insp.
Septic	0	1	0	0	0	0	0	0	0	0	0	0	**1**	3	1	0	COC for repairs

Septic	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	6	Soil/Perc Test.
Septic	2	1	0	0	0	0	0	0	0	0	0	0	3	6	5	8	Const. permits
Septic	0	1	0	0	0	0	0	0	0	0	0	0	1	8	9	11	Installer permits
Septic	0	1	0	0	0	0	0	0	0	0	0	0	1	5	3	6	Installer Tests
Septic	1	0	0	0	0	0	0	0	0	0	0	0	1	1	3	7	Deed Restrict.
Septic	3	1	0	0	0	0	0	0	0	0	0	0	4	9	23	14	Plan reviews
Sharps permits/Insp.	0	0	0	0	0	0	0	0	0	0	0	0	0	7	9	9	Disposal of Sharps permits/
	0	0	0	0	0	0	0	0	0	0	0	0	0	7	7		Inspections
Subdivision	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	Plan review-Insp. of lots /
	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	Bond Releases
Special Permit/ Zoning memos	0	0	0	0	0	0	0	0	0	0	0	0	0	34	15	12	Special Permit/Zoning
Tobacco	0	0	0	0	0	0	0	0	0	0	0	0	0	10	11	12	Tobacco permits
Tobacco	1	0	0	0	0	0	0	0	0	0	0	0	1	14	18	25	Routine insp./
	0	2	0	0	0	0	0	0	0	0	0	0	2	3	3	6	Follow-up
Tobacco	10	0	0	0	0	0	0	0	0	0	0	0	10	30	41	34	Compliance checks
Tobacco	0	0	0	0	0	0	0	0	0	0	0	0	0	3	4	2	New compl./
	0	0	0	0	0	0	0	0	0	0	0	0	0	3	4	2	Compl. follow-ups
Trash Haulers	0	0	0	0	0	0	0	0	0	0	0	0	0	17	14	26	Trash Hauler permits
Medical Waste Haulers	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	2	Medical Waste Hauler permits
Wells	1	0	0	0	0	0	0	0	0	0	0	0	1	6	2	7	Permission to drill letters/
	0	1	0	0	0	0	0	0	0	0	0	0	1	1	0	3	Well Permits

FY 20 Priority FBI Risk Violations Chart (By Date)

Restaurant	Insp. Date	Priority Violation	Description
Hearth Pizzeria	7/13/2019	**3-302.11 (A)(2) Raw Animal Foods Separated from each other -** *Except when combined as ingredients, separating types of raw animal foods from each other such as beef, fish, lamb, pork and poultry during storage, preparation, holding, and display by: (a) Using separate equipment for each type, or (b) Arranging each type of food in equipment so that cross contamination of one type with another is prevented and (c) preparing each type of food at different times or in separate areas.*	A cooked turkey breast was stored in Same container as raw chub beef. PIC removed and stored properly
Briarwood Healthcare Center	7/13/2019	**4-501.114 (A)-(E) Chem.San. Temp./pH/Concentr./Hard.-** *A chemical sanitizer used in a sanitizing solution shall be used in accordance with the EPA-registered label use instructions. A chlorine solution shall have a temperature of 55°F-120°F, depending on water hardness, and concentration range of 25ppm to 100ppm. An iodine solution shall have a minimum temperature of 68°F with a concentration range of 12.5ppm to 25ppm. A quaternary ammonium compound solution shall have a minimum temperature of 75°F and be used according to the manufacturer's use directions.*	Sanitizer in the 3 compartment sink was not at 200 ppm. Test Frequently and at least once every four hours
Gari Japanese Fusion	7/27/2019	**3-501.19 (B)(1)(3)(4) Time as a Public Health Control - 4 Hours -** *If time rather than temperature is used as the public health control up to a maximum of 4 hours: the food shall have an initial temperature of 41°F or less when removed from cold holding temperature control, or 135°F or greater when removed from hot holding temperature control; the food shall be cooked and served, served at any temperature if RTE, or discarded, within 4 hours from the point in time when the food is removed from temperature control; and the food in unmarked containers or packages, or marked to exceed a 4-hour limit shall be discarded.*	Time as a public health control as required no charts were available as required. Cooked product did not have time stamp and other information as required. The most recent date was July 14 2019 it was observed that shrimp and other TCS foods were held at room temperature products were discarded
The Farmhouse	7/27/2019	**3-501.14 (A) Cooling Cooked Foods -** *Cooling cooked TCS foods shall be done within 2 hours from 135ºF to 70ºF and then within 4 hours from 70ºF to 41ºF.*	Corrected on site - Stockpot of beef stock cooling improperly 2 large containers of chicken stock cooling improperly. Repeat offense. Train staff on proper cooling techniques to get product to 70f within 2 hours and below 41f within the next 4 hours.
Fuji Steakhouse	8/9/2019	**3-304.11 Food Contact with Soiled Items** - *Food shall only contact surfaces of: equipment and utensils that are cleaned and sanitized; single-service and single-use articles; or linens, such as cloth napkins that are used to line a container for the service of foods AND are replaced each time the container is refilled for a new consumer.*	Side towel used to store cut vegetables in rolltop on service line. Paper towel used layering products.

Fuji Steakhouse (cont.)	8/9/2019	**3-302.11 (A)(2) Raw Animal Foods Separated from each other** - *Except when combined as ingredients, separating types of raw animal foods from each other such as beef, fish, lamb, pork and poultry during storage, preparation, holding, and display by: (a) Using separate equipment for each type, or (b) Arranging each type of food in equipment so that cross contamination of one type with another is prevented and (c) preparing each type of food at different times or in separate areas..* **3-501.14 (D) Cooling When Receiving Raw Eggs** - *Raw eggs shall be received as specified under 3-202.11(C) and immediately placed in refrigerated equipment that maintains an ambient air temperature of 41ºF or less.*	Raw cut beef was stored on top shelves in walk-in above RTE Raw shell eggs 84F stored at room temp in kitchen. Discarded.
Beth Israel Deac. Hospital Kitchen	8/10/2019	**2-301.14 When to Wash** - *Employees shall clean their hands and exposed portions of their arms immediately before engaging in food preparation including handling utensils and equipment and: after touching bare human body parts other than clean hands and clean, exposed portions of arms; after using the toilet; after handling animals; after coughing, sneezing, using a tissue, using tobacco, eating, or drinking; after handling soiled equipment or utensils; after any type of contamination; when switching between working with raw food and working with RTE food; and before donning gloves to initiate a task that involves working with food.*	During inspection two cooks present did not wash hands. Frequent handwashing is critical in between change of tasks. This inspector directed the chef to provide paper towels in the empty dispenser.
Brother's Pizza	8/15/2019	**3-501.16 (A)(2) (B) Proper Cold Holding Temps.** - *All cold TCS foods shall be held at 41ºF or below. Eggs that have not been treated to destroy all viable Salmonellae shall be stored in refrigerated equipment that maintains an ambient air temperature of 45ºF or less.*	Deli prep unit was on the warmer side. Tuna salad in top well was at 46°F. To be discarded at end of service. Will keep top lid shut as often as possible. Adjust all front of house cooling units to be cooler.
Hungry Coyote	8/22/2019	**3-501.16 (A)(2) (B) Proper Cold Holding Temps.** - *All cold TCS foods shall be held at 41ºF or below. Eggs that have not been treated to destroy all viable Salmonellae shall be stored in refrigerated equipment that maintains an ambient air temperature of 45ºF or less.*	Front of House - Front holding burrito units need to be cooler. Both units were in the mid 40's. Kitchen - Pork was cooked last night. Did not cool down properly. Temperature at 76'F. Discarded by PIC.
Founder's Café / Shark Ninja	8/22/2019	**3-501.16 (A)(2) (B) Proper Cold Holding Temps.** - *All cold TCS foods shall be held at 41ºF or below. Eggs that have not been treated to destroy all viable Salmonellae shall be stored in refrigerated equipment that maintains an ambient air temperature of 45ºF or less.*	Deli prep unit and the salad bar in the front was running warm. Tuna salad observed at 45°F. See other temps in log. Manager to get facilities to adjust temperature of units. Staff instructed to set up deli area later the day right before start of service.
Dragon Chef	8/22/2019	**3-501.16 (A)(2) (B) Proper Cold Holding Temps.** -*All cold TCS foods shall be held at 41ºF or below. Eggs that have not been treated to destroy all viable Salmonellae shall be stored in refrigerated equipment that maintains an ambient air temperature of 45ºF or less.*	Cooked chicken in cold holding unit had a prep date of 8/15. Checked temperature of center of bowl and was at 60°F. Manager instructed to dispose of food. Disposed of compromised item. Directed PIC to lower temperature of walk-in.

New Garden	8/24/2019	**2-301.14 When to Wash -** *Employees shall clean their hands and exposed portions of their arms immediately before engaging in food preparation including handling utensils and equipment and: after touching bare human body parts other than clean hands and clean, exposed portions of arms; after using the toilet; after handling animals; after coughing, sneezing, using a tissue, using tobacco, eating, or drinking; after handling soiled equipment or utensils; after any type of contamination; when switching between working with raw food and working with RTE food; and before donning gloves to initiate a task that involves working with food.* **3-304.11 Food Contact with Soiled Items -** *Food shall only contact surfaces of: equipment and utensils that are cleaned and sanitized; single-service and single-use articles; or linens, such as cloth napkins that are used to line a container for the service of foods AND are replaced each time the container is refilled for a new consumer.* **3-302.11 (A)(2) Raw Animal Foods Separated from each other -** *Except when combined as ingredients, separating types of raw animal foods from each other such as beef, fish, lamb, pork and poultry during storage, preparation, holding, and display by: (a) Using separate equipment for each type, or (b) Arranging each type of food in equipment so that cross contamination of one type with another is prevented and (c) preparing each type of food at different times or in separate areas.* **4-702.11 Frequency-Before Use After Cleaning -** *Code: Utensils and food contact surfaces of equipment shall be sanitized before use and after cleaning.*	During the inspection many of the staff members went outside in parking lot to take a break. Some were observed eating/drinking, touching arms and face. Upon entering the kitchen from taking their break several staff members did not wash hands as required. This inspector required and observed each staff member to wash their hands again, as required. Ice machine underside has slime on rim. PIC directed to clean ASAP. Knives stored improperly on prep line. Do not store directly on soiled equipment prep top area. Improper storage of raw TCS foods in walk-in. Food uncovered. It was observed that a cook was “washing” a pail and beverage container in the middle of the 3-comp. sink without proper washing or sanitizing. The sinks were not set up yet or ready for warewashing tasks.

Public Health Nurse Report -August FY2020
Donna Carmichael and Tiffany Zike

COMMUNICABLE DISEASES:	JUL	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	Apr	MAY	JUN	T20	T19	T18
Amebiosis	0	1											1	0	0
Chickungunya	1												1	0	0
BABESIOSIS	1	1											2	4	4
Borrelia Miyamota													0	0	0
CAMPYLOBACTER	2	2											4	6	14
CRYPTOSPORIDIUM													0	0	1
Cyclosporiasis	4	1											5	0	1
EHRLICHIOSIS/ HGA	2												2	4	2
Enterovirus		1											1	0	1
GIARDIASIS	1	1											2	2	1
Haemophilus Influenza													0	0	1
HEPATITIS B													0	9	8
HEPATITIS C		1											1	11	14
Influenza													0	98	211
Invasive Bacterial Infection		1											1	0	0
Legionellosis	1												1	0	2
Listeriosis													0	0	0
LYME	7	13											20	46	53
MEASLES													0	0	0
MENINGITIS													0	0	0
Meningitis(Aseptic)													0	0	1
Mumps	1												1	1	0
Noro Virus													0	5	3
PERTUSSIS	1	1											2	3	1
RMSF(Rocky Mt Spotted Fever)													0	0	
SALMONELLA													0	3	3
SHIGA TOXIN													0	1	0
SHIGELLOSIS													0	3	0
STREP Group B		1											1	0	1
STREP (GAS)													0	2	5
STREP PNEUMONIAE													0	3	3
TUBERCULOSIS													0	0	0
TULAREMIA													0	0	0
Latent TB													0	1	0
Varicella	1	1											2	6	12
Vibrio													0	1	0
West Nile virus													0	0	0
Zika													0	0	1
TOTAL DISEASES	22	25	0	0	0	0	0	0	0	0	0	0	47	209	343
Revoked/Suspect Diseases Investigated		2											2	5	6
Contact Investigation													0	5	0

Public Health Nurse Report -August FY2020
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ANIMAL TO HUMAN BITES	JUL	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	Apr	MAY	JUN	T20	T19	T18
DOG	1	1											2	23	42
CAT		1											1	0	0
BAT		1											1	0	8
SKUNK													0	1	0
RACOON													0	0	0
other													0	0	1
TOTAL BITES	1	3	0	0	0	0	0	0	0	0	0	0	4	24	51

IMMUNIZATIONS	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	FY20	FY19	FY18
B12	2	2											4	24	24
Flu (Seasonal)													0	712	522
Hep B													0	2	0
Polio													0	4	0
TDap													0	6	0
Varicella													0	0	2
Consult													0	702	319
Fire/Police	4	8											12	157	59
Schools	2	7											9	172	42
Town Agencies	2	2											4	267	185
Community Agencies	1	2											3	103	32

ASSISTANCE PROGRAMS	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	FY20	FY19	FY18
Food Pantry	2	2											4	14	13
Food Stamps		0											0	1	0
Friends		0											4	0	0
Gift of Warmth		2											2 ($429)	20($5817)	20($7250)
Good Neighbor		0											0	2	5 $425/fam
Park & Rec	1	0											1	2	1
Salvation Army		0											0	1	0
Self Help	1	1											2	26	34

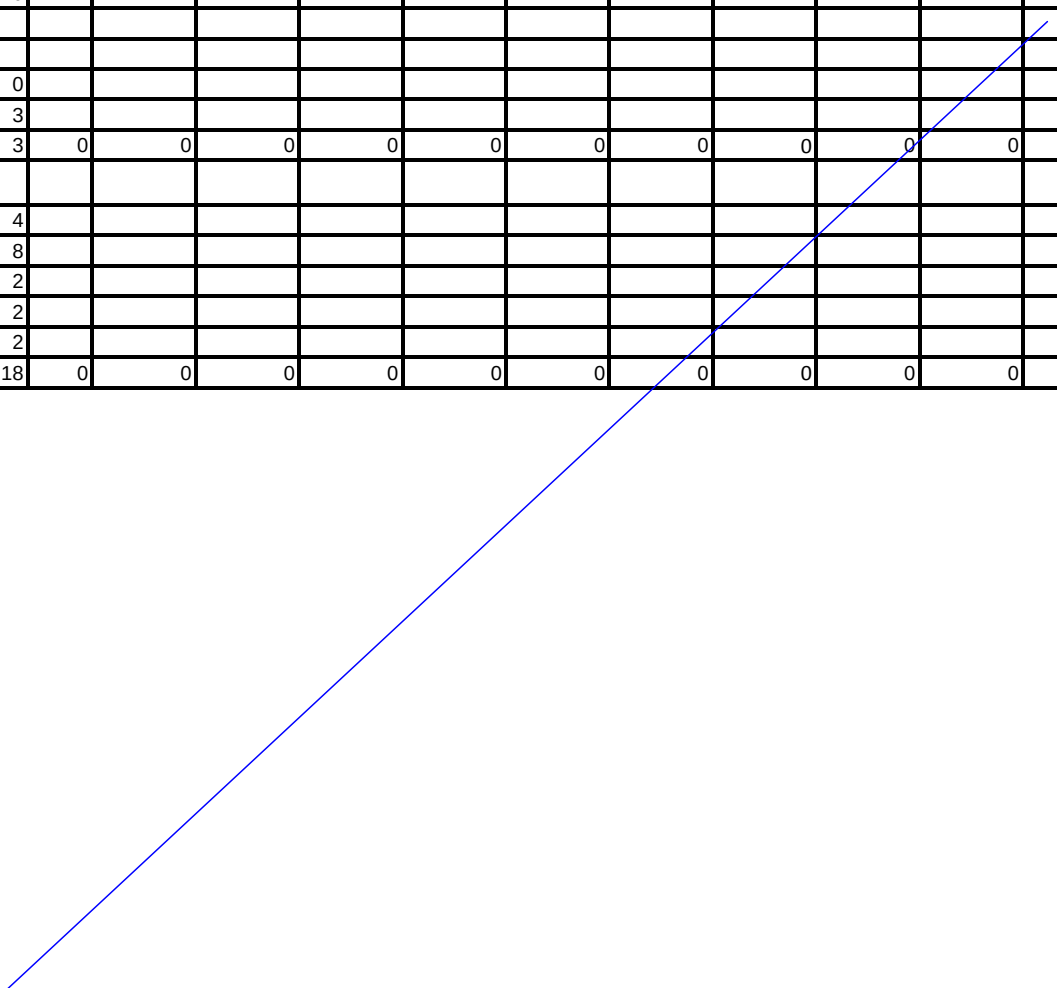
Gift Cards Distributed - 6

Donation to Gift of Warmth: First Baptist Church $265.00

Public Health Nurse Report -August FY2020
Donna Carmichael and Tiffany Zike

WELLNESS PROGRAMS	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	FY20	FY19	FY18
Office Visits	36	28											64	368	467
Safte Visits	1	0											1	12	10
Clinics	9	5											14	52	0
Housing Visit	0	0											0	5	15
Housing Call	1	0											1	54	110
Camps-summer	8	8											16	42	60
Tanning Insp	0	0											0	0	0
Articles	1	1											2	6	3
Presentations	1												1	27	16
Cable	0												0	7	2

EMPLOYEE WELLNESS	July	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	FY20	FY19	FY18
BP/WELLNESS - DPW/RTS	0	0											0	114	148
CPR/AED INSTRUCTION	12	0											12	18	0
Stop the Bleed													0		
Narcan Training													0	13	
Police Weights		0											0	31	
First Aide	2	3											5	61	
Total People	14	3	0	0	0	0	0	0	0	0	0	0	12	237	
Community Education Hours															
HEALTH ED Tick Borne	1	4											5	126	132
HEALTH ED Mosquito Borne	1	8											9	122	135
HEALTH ED FLU	1	2											3	68	289
GENERAL HEALTH EDUCATION	1	2											3	147	186
HEALTH ED Measles	2	2											4	15	
Total Hours	6	18	0	0	0	0	0	0	0	0	0	0	24	478	1077



Public Health Nurse Report -August FY2020
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MEETINGS, EVENTS, TRAININGS

Title	*Description/Highlights/Votes/Etc.*
Emergency Planning	NC8 - Mtg
	Meeting to hand off and discuss emergency planning goals with Rebecca
	LEPC Certification, CEMP planning
	MEMA Mtg
Concussions	Working towards Roll-out
Trainings	
	Flu Webinar for reimbursement
Summer Camps	Camp Inspections
	new Camp opening for august- paperwork and review
	Managing Packet information
Managing	DVAC Intern and EP Program Coordinator
Public Health Grant Meeting	x 2
Class and compensation meeting	Meeting and follow up review of job descritions vs actual job
Stop the Bleed	4 presentations well received.

Needham Public Health Division

August 30, 2019 (for July and August 2019)

Lynn Schoeff

Activity	Notes
Policies and procedures	The following policies were finalized and filed in the Policy and Procedure Manual on the Public Health shared drive and in Standard Operating Procedures on the Town shared drive: - New staff orientation The following policies were finalized for all of Health and Human Services: - Professional staff licensure - Duty to warn
Other accreditation materials	Completed the orientation packet and checklist for new employees.
Staff training	Presentation for PH staff about reader-centered writing

Other activities:

- Along with Rachael Cain, developed and presented three sessions of a grant writing workshop for staff members from Public Health and the other Health and Human Services divisions.
- Prepared material in support of accessory dwelling bylaw.
- Explored several grant opportunities.

Summary overview for the month:

Continued work on policies and procedures as well as professional development for staff (reader-centered writing and grant-writing).

Needham Public Health Division

Date: August 2019

Staff: Rachael Cain (Greenberg)

Activities and Accomplishments

Safety at Home Program

Activity	Notes
Program Completion and Sustainability	• Work specified under the MetroWest Health Foundation grant is complete as of June 30, 2019, with all funds spent and deliverables met • Home visits and education **will continue** on a slightly more limited basis while they are integrated into the services offered by Aging Services' Social Workers and the Public Health Nurses • Fall prevention lunch and learn being planned for Fall Prevention Awareness Day in September o Focus on how vision can impact falls o Speaker from the MA Association for the Blind and Visually Impaired o Paired with a free vision screening for 15 attendees • **Received a small grant from the Massachusetts Council on Aging to receive funding for event activities**

Housing Authority Assessment

Activity	Notes
Survey Dissemination	• Total of 119 surveys completed (38% response rate), which is sufficient for analysis • Quantitative analysis by consultant is complete • Final report drafted and in the process of being edited

Accreditation Support

Activity	Notes
Community Health Assessment	• No activities in August

Needham Public Health Division

Climate Change Project

Awarded $26,089 grant from the Metropolitan Area Planning Council to implement a one-year climate resiliency project for older adults. Activities will include creating and holding three workshops for older adults about extreme weather and how to prepare for it, as well as a related communications campaign.

Activity	Notes
Planning Activities	• Hired Program Coordinator, who began work in mid-July
Conduct Workshops	• Held first workshop on June 26th • Planning second two workshops, one to be held at CATH and one at the Housing Authority
Communications	• Planning for communications around the next two workshops
Reporting	• Successful site visit from funders on August 15th

Other Public Health Division activities this month:

- Co-led first three grant writing workshops for HHS staff.
- Researched several upcoming grant opportunities.
- Continued ADU research.
- Attended 1.5-day health policy writing workshop

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The Needham Local Emergency Planning Committee, pursuant to the Emergency Planning and Community Right-to-Know Act of 1986, has available for public review copies of the Needham integrated Hazardous Materials Response Plan, the Hazardous Materials Chemical Inventory (Tier II) Reports and the Safety Data Sheets (SDS). They are available by appointment with Chief Dennis Condon or Deputy Chief Donald Anastasi at the Needham Fire Station, 88 Chestnut Street. The Needham Local Emergency Planning Committee meets multiple times a year. The specific location and time is posted with the Town Clerk at Town Hall.

AD#13815397
Needham Times 7/18, 7/25/19

Local Emergency Planning Committee (LEPC)
178 Rosemary Street Needham | 781-455-7940 (tel) | needhamma.gov/LEPC

Weekly 7/18/19

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Please publish in the July 18th and July 25nd editions.

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Massachusetts Department of Public Health

2019
Massachusetts Arbovirus Surveillance and Response Plan

Monica Bharel, MD, MPH
Commissioner
Massachusetts Department of Public Health

Kevin Cranston, MDiv
Assistant Commissioner
Director, Bureau of Infectious Disease and Laboratory Sciences

TABLE OF CONTENTS

Executive Summary

The 2019 Massachusetts Department of Public Health's (MDPH) Arbovirus Surveillance and Response plan provides surveillance and phased response guidance for arthropod-borne viruses (arboviruses) affecting Massachusetts residents, West Nile virus (WNV) and eastern equine encephalitis virus (EEE), in particular. Since 2000, there have been 203 cases of WNV among Massachusetts residents resulting in at least 12 deaths and 26 cases of EEE resulting in at least 14 deaths. This plan reflects a comprehensive review of surveillance activities, mosquito control efforts, public information, and risk communication related to arbovirus control in Massachusetts.

The purpose of the plan is to provide guidance on operational aspects of surveillance and response by state and local agencies responsible for the prevention of mosquito-borne disease in the 2019 season. MDPH will continue to seek advice from its partners and collaborators and modify the plan, as appropriate. This document is open to continual review and evaluation. Information is provided to guide planning and actions to reduce the risk of human disease from endemic arbovirus including EEE and WNV, and to respond to concerns about the introduction of Zika virus, or other emerging arboviruses, into regions of the Americas.

This plan does not address long-term, municipal planning activities. WNV and EEE are endemic diseases in Massachusetts which, although rare, are serious and likely to pose continued threats to human health. Municipalities are encouraged to consider these threats, identify contributing issues in their communities, and include mitigation activities as part of sustainable community development (e.g. source reduction, low-impact development).

Key components of the plan include:

- monitoring trends in EEE and WNV activity in Massachusetts;
- timely collection and dissemination of information on the distribution and intensity of WNV and EEE in the environment;
- laboratory diagnosis of WNV and EEE cases in humans, horses and other animals;
- effective communication, advice, and support of activities that may reduce risk of infection;
- phased response to provide measures to suppress the risk of infection; and
- monitoring for evidence of introduced and emerging arboviruses and new mosquito vector species.

This document provides information about EEE and WNV disease and program goals, and specific guidelines for mosquito, equine, and human surveillance. Additionally, this document provides guidance for the dissemination of information, including routine information; media advisories of positive EEE and WNV findings in mosquitoes, as well as public health alerts related to positive EEE and WNV human cases.

This plan describes MDPH's public outreach efforts to provide helpful and accurate communication with Massachusetts residents about their risk from arboviral diseases and specific actions that individuals and communities can take to reduce this risk. Routine precautions should include: avoiding outdoor activity during times of day with increased mosquito activity; use of mosquito repellents containing an EPA-approved active ingredient; and use of clothing to reduce mosquito access to skin. These personal protective measures form the basis of all risk reduction; the need to utilize them is not reduced by any mosquito control activities, including aerial spraying.

I. INTRODUCTION

The Massachusetts Department of Public Health, in collaboration with the State Reclamation and Mosquito Control Board (SRMCB) and regional mosquito control projects (MCP), conducts surveillance for mosquito-borne viruses that pose a risk to human health. Surveillance currently focuses on West Nile and eastern equine encephalitis viruses, which are found in the local environment and are capable of causing serious illness and death in humans, horses, and other mammals.

The 2019 Massachusetts Surveillance and Response Plan for mosquito-borne diseases is based on a comprehensive plan initially developed for WNV in 2001 in collaboration with local health agencies, other state agencies, academic institutions, the Centers for Disease Control and Prevention (CDC), and interested groups and individuals. It incorporates components of the state's EEE surveillance activities, which began in the 1950s and have continued since that time. Monitoring for WNV began following a 1999 outbreak of human WNV disease in the New York City area, the first known occurrence of this disease in North America. WNV was identified in birds and mosquitoes in Massachusetts during the summer of 2000, in humans in 2001, and has been detected during each consecutive season.

The updated 2019 plan is the result of analyses of surveillance data collected in Massachusetts and the United States. In order to address the complexity and seriousness of the human disease risk posed by EEE, MDPH convened a panel of experts in 2011-2012 who represented the fields of ecology, biology, public health, infectious disease, and toxicology to review MDPH's surveillance and response program and make recommendations for enhancing the program. Those recommendations were incorporated into the plan in 2012 and continue to serve as important components of the current plan. In addition, MDPH continues to promote collaborative efforts with multiple agencies and interest groups by seeking and accepting comment from stakeholders. The purpose of the plan is to provide guidance on operational aspects of surveillance and response by state and local agencies with responsibilities for the prevention of mosquito-borne disease. MDPH will continue to seek advice from its partners and collaborators, and modify the plan, as appropriate. This document is open to continual review and evaluation, with changes made when there is opportunity for improvement.

II. DISEASE HISTORY AND BACKGROUND

A. Eastern Equine Encephalitis Virus

1. Background

Eastern equine encephalitis is a serious disease which occurs sporadically in Massachusetts, with 30-50% mortality and lifelong neurological disability among many survivors. The first symptoms of EEE are fever (often 103º to106ºF), stiff neck, headache, and lack of energy. These symptoms show up three to ten days after a bite from an infected mosquito. Inflammation and swelling of the brain, called encephalitis, is the most dangerous and frequent serious complication. The disease rapidly worsens and some patients may go into a coma within a week. There is no treatment for EEE. In Massachusetts, approximately half of the people identified with EEE have died from the infection. People who survive this disease will often be permanently disabled due to neurologic damage. Few people recover completely.

Historically, clusters of human cases have occurred over a period of two to three years, with a variable number of years between clusters. In the years between these case clusters or outbreaks, isolated cases can and do occur. Outbreaks of human EEE disease in Massachusetts occurred in 1938-39, 1955-56, 1972-74, 1982-84, 1990-92, and, 2004-06. Two cases of EEE occurred in each of 2010 and 2011; one case each of these years occurred in visitors to Massachusetts. Seven human cases of EEE occurred in 2012, a single case in 2013 and no cases from 2014 - 2018.

Massachusetts Eastern Equine Encephalitis Experience		
Year(s)	**Human EEE Cases**	**Human EEE Deaths**
1938-39	35	25
1955-56	16	9
1973-74	6	4
1982-84	10	3
1990-92	4	1
2000-01	2	0
2004-06	13	8
2008	1	1
2010-11	2 (plus 2 non-residents)	1
2012	7	3
2013	1	1
2014-2018	0	0

The U.S. Public Health Service, in collaboration with MDPH, initiated a field surveillance program in 1957; following a 1955-56 outbreak of EEE. The purpose of the program was to gather data to guide prevention and risk reduction for this disease. This program formed the basis for the Commonwealth's current arbovirus program.

2. Risk Factors for Disease Transmission

Eastern equine encephalitis virus is a virus in the genus *Alphavirus* that is native to the Massachusetts environment (enzootic) and is naturally found in some passerine (perching) bird species living in and around fresh-water swamp habitats. These habitats also support populations of the primary mosquito vector, *Culiseta melanura*, which feeds predominantly on birds. The swamp habitats, which support large populations of *Cs. melanura* and are the initial source of EEE, are known as enzootic foci. Although portions of the ecology of EEE virus have yet to be clarified, the virus has a cycle of natural infection among bird populations with occasional ''incidental" symptomatic infections in susceptible species, including humans. The appearance of EEE in late June or early July coincides with the hatching of highly susceptible bird populations. The virus is circulated among the bird populations by *Cs. melanura* and under some circumstances *Cs. morsitans*, another bird-biting mosquito. Initially, a relatively smaller proportion of birds and mosquitoes carry the virus; throughout the mosquito season, continuous transmission between mosquito vectors and bird reservoir hosts increases the proportion of infected birds and mosquitoes leading to an overall greater amount of virus present in the environment. This is called the virus amplification cycle. Depending on when virus circulation begins, the size of the *Culiseta* populations, weather conditions, and probably additional, currently unidentified factors, this virus amplification cycle may eventually spill over and involve secondary, or "bridge", mosquito vectors that feed on both birds and mammals. In the Northeast, these bridge vectors are mosquito species, such as *Coquillettidia perturbans, Ochlerotatus* (formerly *Aedes*) *canadensis,* and *Aedes vexans*. These bridge vectors are presumed to be responsible for the transfer of EEE to incidental hosts, including mammals such as humans, horses, llamas, and alpacas; and large birds such as emus and ostriches. For the purposes of risk assessment and communication with the public, *Cs. melanura* is considered to be and will be reported as a "bird-biter" while *C. perturbans, O. canadensis,* and *A. vexans* are considered to be and will be reported as "mammal-biters". *Culex* species mosquitoes found positive for EEE are not considered to play a significant role in transmission of the virus to humans or animals and are considered to be and will be reported as bird-biters.

In the Northeast, the EEE enzootic foci are large hardwood swamps of mature white cedars and red maples. To grow in the permanently wet swamps, tree roots spread out across the peat soils characteristic of these habitats. These root systems create dark holes, or crypts, that are generally filled with water. These crypts are the preferred ovipositing (egg-laying) sites for *Cs. melanura* and are where the larvae develop. *Cs. melanura* survives the winter as larvae in these crypts. The amount of rainfall during the summer and fall affects the survival of the larvae during the winter and, in part, determines the population of adult mosquitoes the following year.

The risk of EEE in humans varies by geographical area in Massachusetts, as well as in the United States, and is correlated with the location of the necessary swamp habitats. In Massachusetts, these areas occur across the state, but are most common in southeastern Massachusetts. The majority of EEE cases have occurred in Norfolk, Bristol, and Plymouth counties, with some cases also occurring in Essex and Middlesex County (Figure 1). A very few cases have also occurred further west in Massachusetts. Historically, Barnstable and the Islands of Martha's Vineyard and Nantucket have not had human cases of EEE. 2012 was unusual in that five of seven human cases and four of seven animal cases resided outside southeastern Massachusetts. The significance of this is unclear at present; this may or may not be a harbinger of more widespread risk in Massachusetts. The situation has been closely monitored since then and there was early evidence of EEE activity in one of these areas which resulted in two horses infected with EEE in 2013.

Currently, it is impossible to predict, with complete accuracy, the appearance of EEE and the probability of human EEE infection in any given year. However, over 50 years of surveillance for EEE in Massachusetts has enabled the development of a mosquito-based EEE surveillance system and the

identification of several factors that help provide an estimate of human risk. These estimates are used to alert the residents of the state and guide mosquito control activities. Risk estimates are based on the current level of EEE activity in both bird-biting and mammal-biting mosquito species, population levels of these species, timing of virus identification in these species, recent and historic levels of EEE activity, and prevailing weather conditions.

Human cases are more likely when multiple factors indicate that risk is increasing in a given place at a given time. Identification of EEE in the enzootic mosquito vector, *Cs melanura*, is useful for determining areas of virus amplification and as a proxy measure of the amount of EEE virus in the environment. The overall amount of EEE virus present in the environment correlates with the population size of the primary mosquito vector, *Cs melanura*. Abundant populations of this species provide greater opportunity for the virus to perpetuate or amplify within the bird population. Theoretically, the more virus that is circulating between mosquitoes and birds, the more likely it will be to be picked up by a bridge vector mosquito and transmitted to humans. Identification of EEE in bridge vector mosquito species confirms the presence of infected mosquitoes of a species known to feed on humans. The more virus that has spilled over into bridge vector species, the greater the chance that a person will be exposed to the virus. Warm temperatures increase the rate of both mosquito development and virus replication within mosquitoes. Consistently elevated temperatures increase mosquito populations of all species, speed up virus multiplication within mosquitoes, and therefore act to increase the amount of virus in the environment overall.

Other factors that affect the risk of EEE infection for humans are the abundance of key mosquito species at critical periods of the transmission season, groundwater levels, and the timing of rainfall and flooding during the mosquito season. Long-term weather patterns during the fall and winter that produce high ground water levels and snow cover may enhance survival of *Cs. melanura* larvae. The abundance of these larval populations may serve as an early indicator of the potential for human disease later in the year.

Multiple factors affect the development, survival, and abundance of mosquitoes. It is not currently possible to accurately forecast either the abundance of mosquitoes or the risks for encountering an infected vector later in the season. Risk assessment relies upon a robust mosquito surveillance system to monitor both mosquito populations and virus amplification as the season progresses.

B. West Nile Virus

1. Background

West Nile virus (WNV) first appeared in the United States in 1999. Since the initial outbreak in New York City, the virus has spread across the US from east to west. Following the identification of WNV in birds and mosquitoes in Massachusetts during the summer of 2000, MDPH arranged meetings between local, state, and federal officials, academicians, environmentalists and the public to develop recommendations to adapt the arbovirus surveillance and response plan to include activities appropriate for WNV. Four workgroups addressed the issues of surveillance, risk reduction interventions, pesticide toxicity, and communication.

WNV infection may be asymptomatic in some people, but it leads to morbidity and mortality in others. WNV causes sporadic disease of humans, and occasionally significant outbreaks. Nationally, 2,554 human cases of WNV neuroinvasive disease (meningitis and encephalitis) and WNV fever were reported to the CDC in 2018. The majority of people who are infected with WNV (approximately 80%) will have no symptoms. A smaller proportion of people who become infected (~ 20%) will have symptoms such as fever, headache, body aches, nausea, vomiting, and sometimes swollen lymph glands. They may also develop a skin rash on the chest, stomach, and back. Less than 1% of people infected with WNV will develop severe illness, such as encephalitis or meningitis. The symptoms of severe illness can include high fever, headache, neck stiffness, stupor, disorientation, coma, tremors, convulsions, muscle weakness, vision loss, numbness, and paralysis. Persons older than 50 years of age have a higher risk of developing severe illness. In Massachusetts, there were at least 12 fatal WNV human cases identified

between 2002 and 2018. All but three of these fatalities were in individuals 80 years of age or older; all of them were in individuals over 60.

2. Risk Factors for Disease Transmission

West Nile virus is amplified by a cycle of continuous transmission between mosquito vectors and bird reservoir hosts. Infected mosquitoes carry virus and transmit it to susceptible bird species. WNV infection can be fatal in some species of birds, particularly American crows and blue jays (corvids). Confirmation of WNV in dead birds historically provided sentinel information used for assessing the risk of human WNV infections. However, the proportion of susceptible birds has decreased over time so that testing dead birds for the presence of virus is no longer an efficient surveillance tool.

The principal mosquito vectors for West Nile virus on the East Coast are members of the genus *Culex*, primarily *C. pipiens* and *C. restuans*. These species may be abundant in urban areas, breeding easily in artificial containers, such as birdbaths, discarded tires, buckets, clogged gutters, catch basins, and other standing water sources. Both species feed mainly on birds and occasionally on mammals, including humans. Peak feeding activity for these species occurs from dusk into the late evening. Consistently high temperatures and lower precipitation rates are factors that have been associated with higher mosquito infection and human illness rates. Additionally, warmer winter temperature conditions may result in larger numbers of *Culex* species overwintering as adults, with resulting increases in early season *Culex* abundance.

There are additional mosquito species in Massachusetts that can be involved in the transmission of WNV to humans. *Culex salinarius* lives in brackish and freshwater wetlands and feeds on amphibians, birds, and mammals; it is well known for biting humans. *Ochlerotatus japonicus* may be involved in the transmission of both WNV and EEE. This species utilizes natural and artificial containers, such as tires and rock pools as larval habitat. It feeds mainly on mammals and is an aggressive human biter. Unlike EEE, distinguishing between bird- and mammal-biting species of mosquitoes is of less importance for risk assessment purposes and these designations are not routinely used.

West Nile virus activity varies from year to year. When large numbers of infected birds and elevated mosquito populations occur in a relatively small geographic area, the result is a high mosquito infection rate and an increased risk of transmission of virus to humans. In addition, there is evidence that when meteorologic conditions are such that *Cx. pipiens* populations are increased relative to *Cx. restuans*, the risk of transmission to humans may be increased. Surveillance evidence indicates that WNV is established in the United States and that virus activity is likely to occur annually.

Most municipalities in Massachusetts will only have sporadic human cases of WNV and are unlikely to have more than one year. However, several highly urbanized areas in Massachusetts have accounted for over 80% of the human WNV infections between 2001 and 2018 (Figure 2).

Summaries of historical surveillance information for EEE and WNV in Massachusetts are available online at www.mass.gov/dph/mosquito. During the season, information is provided daily with current surveillance information and risk assessments which can be found through the same site.

III. PROGRAM GOALS

Timely and accurate information based on surveillance information is used to provide an estimate of the level of risk for human disease from WNV and EEE. Based on this surveillance information, plans and actions to reduce risk can be developed and implemented when needed. Program activities include:

- Testing mosquitoes, horses, other appropriate animals, and humans to identify EEE and WNV infections;
- Tracking trends in incidence and prevalence of EEE and WNV infections by geographic area;
- Estimating viral infection rates in mosquitoes;
- Stratification of risk by geographic areas as a function of relative risk of human disease;
- Conducting surveillance for human and animal disease;

- Educating human and animal medical practitioners on the appropriate procedures for detecting infections and disease caused by mosquito-borne viruses;
- Recommending measures to reduce virus transmission and disease risk;
- Educating the public on mosquito-borne diseases and disease risk and common-sense precautions to reduce the risk of infection;
- Working to detect emerging arboviruses, such as Jamestown Canyon virus, and introduced arbovirus infections in travelers to areas with transmission of these arboviruses, such as dengue, chikungunya and Zika viruses;
- Working to detect the introduction, establishment and geographic spread of new mosquito vector species; and
- Participating in the national Arbovirus Surveillance Network.

IV. AGENCY ROLES

A. Massachusetts Department of Public Health (MDPH)

The central purpose of arbovirus surveillance is to provide information that will guide planning and activities to reduce the risk of human disease from EEE and WNV infection. To achieve this, the main objectives are to monitor trends in EEE and WNV in Massachusetts; provide timely information on the distribution and intensity of WNV and EEE activity in the environment; perform laboratory diagnosis of WNV and EEE cases in humans, horses and other animals; communicate effectively with officials and the public; provide guidelines, advice, and support on activities that effectively reduce risk for disease; and provide information on the safety, anticipated benefits, and potential adverse effects of proposed prevention interventions. The arbovirus surveillance program should also have the capacity to respond to concerns about the introduction of travel-associated diseases, like Zika virus, by monitoring for evidence of introduced and emerging arboviruses and new mosquito vector species

MDPH works cooperatively with the SRMCB, regional mosquito control projects, local health departments, and other agencies to collectively identify and support the use of safe and effective mosquito control measures based on integrated pest management (IPM) principles. The use of pesticides as a means to reduce human risk is one of several methods used as part of an overall strategy.

B. State Reclamation and Mosquito Control Board (SRMCB)

The SRMCB oversees mosquito control programs and activities in the Commonwealth of Massachusetts. The SRMCB consists of three members representing the Department of Agricultural Resources (DAR), Department of Conservation and Recreation (DCR), and Department of Environmental Protection (DEP). Additionally, the SRMCB advises its respective state agency Commissioners on actions to reduce mosquito populations based on MDPH findings and characterization of risk.

The SRMCB's 'Operational Response Plan to Reduce the Risk of Mosquito-Borne Disease in Massachusetts' addresses the issues related to the operational aspects of adult mosquito surveillance and control to prevent and/or reduce the risk of mosquito-borne diseases. The plan may be accessed online from https://www.mass.gov/massachusetts-emergency-operations-response-plan-for-mosquito-borne-illness

In 2006, the SRMCB created the Mosquito Advisory Group (MAG) to provide independent, scientific advice to the SRMCB regarding the justification, timing, location and options for intervention tactics such as to prevent and/or suppress and contain infected mosquito populations that may otherwise result in an outbreak of disease in people and animals.

C. Mosquito Control Projects (MCPs)

There are 11 organized Mosquito Control Projects or Districts located throughout Massachusetts; in 2018 the Pioneer Valley Mosquito Control Project was officially approved and is in the development phase for service offerings. All of the mosquito control activities of these agencies are performed under the aegis of the SRMCB. MCPs collaborate with local boards of health in their jurisdictions to perform public education, promote the use of personal protection and to control mosquitoes. Locally authorized mosquito control efforts employ a variety of targeted activities for source reduction, larviciding and adulticiding that are in compliance with the SRMCB Operational Response plan. Additional details relating to MCPs may be found within the SRMCB Operational Plan and online at
https://www.mass.gov/state-reclamation-and-mosquito-control-board-srmcb
https://www.mass.gov/massachusetts-emergency-operations-response-plan-for-mosquito-borne-illness

D. Local Boards of Health (LBOHs)

LBOHs are the local health authorities and the primary points of contact within a community for MDPH. Surveillance information is communicated to the LBOH who may work with their MCP (if any) to determine mosquito control response activities, conduct educational outreach via the media and/or other means, investigate cases, disseminate surveillance and risk assessment information to other community leaders and undertake other activities based on their community's needs.

V. SURVEILLANCE

A. Mosquito Surveillance

Surveillance of certain species of mosquitoes for arboviruses is a core function of MDPH. Although there are up to 51 species of mosquitoes found in Massachusetts, only species involved in the spread of disease are tested for surveillance purposes. Monitoring mosquitoes for the presence of virus provides an estimate of risk to humans. Massachusetts has a long-term field surveillance program that was initiated in 1957 for EEE and was enhanced in 2000 to include WNV surveillance. The extensive experience in Massachusetts with surveillance for mosquito-borne disease provides expertise and capacity to guide risk reduction efforts. MDPH uses a comprehensive and flexible strategy that modifies certain surveillance activities in response to trends in disease risk.

On an ongoing basis, MDPH monitors national and regional surveillance data and current scientific literature to assess risk of newly emerging arboviruses in Massachusetts. In addition, a defined subset of mosquitoes will be tested for the presence of new or emerging viruses using tissue culture methods.

1. Fixed and Long-Term Trap Sites

MDPH field staff trap mosquitoes at long-term sites maintained primarily in the EEE high-risk areas of southeastern and eastern Massachusetts (Figure 2) and from other areas as circumstances demand and resources allow. Trapping of gravid (egg-bearing) mosquitoes for WNV testing is conducted both by MCPs and MDPH field staff at various locations throughout the state during the arbovirus season. After trapping, all collected mosquitoes are sorted into groups by species and counted by hand. At the Massachusetts State Public Health Laboratory (MA SPHL), these samples (grouped or pooled sets of 10-50 mosquitoes) for WNV and EEE. These are frequently referred to as "mosquito pools" which indicates the grouping of mosquitoes for testing purposes and is not a reference to any body of water. Test results from routine mosquito collections are usually available within 24 hours after delivery of mosquitoes to the MA SPHL. Routine collections from fixed and long-term trap sites provide the best available baseline information for detecting trends in mosquito abundance and virus prevalence, and for estimating the relative risk for human infection from EEE virus and WNV. MDPH field staff monitor larvae from select sites in late fall and early spring to determine end-season and pre-season larval abundance. Informal monitoring of larval abundance from these sites continues on a weekly basis during the arbovirus season.

2. Supplemental Trap Sites

When EEE or WNV activity is detected in an area, additional trap sites and/or trap types are used to obtain more information regarding the intensity of virus activity in mosquitoes. The following risk indicators may result in the implementation of more intensive mosquito trapping: 1) virus isolations in mosquitoes; 2) emergence of large numbers of human-biting mosquitoes in an area with a high rate of virus activity and 3) identification of human or animal cases.

3. Mosquito Control Project Trap Sites

MCPs use a variety of available control strategies to impact mosquito abundance. Monitoring mosquito abundance is accomplished through various surveillance methods including but not limited to larval dip counts and the use of light/ CO_2 baited traps and gravid traps.

4. Results

Results of mosquito trapping and testing provide information on:

- the numbers of positive mosquito samples (mosquito pools) from a community;
- general measures of mosquito populations; and
- relative EEE infection rates in mosquito populations.

B. Avian Surveillance

MDPH discontinued avian surveillance for WNV as of April, 2009. When the virus was first introduced into the United States, WNV caused high mortality rates in certain species of birds, particularly corvids, thus reporting and testing of dead birds was a productive way to detect and monitor WNV activity in an area. However, in recent years, the tracking and testing of dead birds has become significantly less useful as a surveillance tool. Monitoring mosquitoes for presence of virus is the primary predictive indicator of human arbovirus disease risk. Therefore, the routine laboratory testing of dead wild birds for West Nile virus (WNV) has been eliminated. This is consistent with recent policy changes in multiple states.

Most birds that are infected with EEE virus survive the viremia, making individual dead bird EEE monitoring impractical. Non-native bird species such as emus, ostriches, and exotic game birds are highly susceptible to EEE and infections within farmed flocks have occurred in Massachusetts. Testing of highly suspect bird specimens for EEE and/or WNV infection is done on an as-needed basis as determined by MDPH.

C. Animal Surveillance

Specimens from horses and other domestic animals that have severe neurological disease suspected of being caused by EEE or WNV infection are tested at the MA SPHL. Testing can take up to several weeks to complete depending upon the type of sample submitted and the testing protocol required to obtain a definitive result. Veterinarians, DAR, the United States Department of Agriculture (USDA) and Tufts University Cummings School of Veterinary Medicine collaborate with MDPH to identify and report suspect animal cases. In addition, blood and/or tissue samples from animals from other sources, such as zoos, horse stables, or the wild are tested, as appropriate. Current information on WNV and EEE infections in horses, along with clinical specimen submission procedures, are disseminated to large animal veterinarians, stable owners, and others through various distribution methods and are posted on the MDPH arbovirus website at https://www.mass.gov/mosquito-borne-diseases Horses and other animals can be immunized against infection with WNV and EEE with available veterinary vaccines. Vaccination is the primary means of preventing infection in animals.

Due to the time delay inherent in specimen acquisition and testing, specimens from animal with an illness compatible with either WNV or EEE infection that test positive on the screening test will be reported as a preliminary result to the ordering veterinarian, the local board of health in the town of the animal's residence, the local board of health in the likely city/town of exposure (if different from place of residence), and the local mosquito control project, if there is one. This information may be used to inform clinical decisions first and foremost, and secondarily to inform planning for public health and mosquito control activities. This animal will not be considered to represent a confirmed case until testing is completed; appropriate changes to risk levels will be made following confirmatory testing.

D. Human Surveillance

1. Routine surveillance

Specimens from human cases of encephalitis and meningoencephalitis should be submitted to the MA SPHL for WNV and EEE testing. Testing for both viruses usually consists of a preliminary screening test (an enzyme immunoassay for antibody to the viruses), followed by confirmatory testing by plaque reduction neutralization test (PRNT) for specific antibody. Certain specimens, cerebrospinal fluid drawn shortly after symptom onset, may be tested by polymerase chain reaction (PCR). Only specimens that are positive on the confirmatory PRNT test or on PCR at the MA SPHL are considered to represent true cases and will be used for risk assessment. Increasing availability of commercial laboratory testing for WNV has diverted submission of samples away from the MA SPHL. Current commercially available testing is equivalent to the screening test that MDPH runs, but does not extend to the confirmatory testing capability available at the MA SPHL. Not all specimens reported to be positive based on commercial laboratory testing will confirm with the more specific confirmatory testing that is performed by the MA SPHL. Only those tests that are confirmed positive (through testing at the MA SPHL) will be officially reported out. Specimens from any individual reported to be positive based on commercial laboratory testing will be requested for additional testing.

Testing may take several weeks to complete dependent upon the type of sample submitted and the testing protocol necessary to obtain a definitive result. Under certain circumstances, definitive results cannot be obtained by the MA SPHL and samples are forwarded to the Centers for Disease Control and Prevention (CDC) for additional testing. Time to receipt of final results from CDC is variable. Current information on WNV and EEE infections in humans, along with clinical specimen submission procedures, are disseminated to physicians (infectious disease, emergency medicine and primary care), emergency department directors, hospital infection control practitioners, and local boards of health through various distribution methods and are posted on the MDPH arbovirus website at https://www.mass.gov/mosquito-borne-diseases.

Due to the time delay inherent in specimen acquisition and testing, specimens from patients with an illness compatible with either WNV or EEE infection that test positive on the screening test will be reported as a preliminary result to the ordering provider, the local board of health in the town of the patient's residence, the local board of health in the likely city/town of exposure (if different from place of residence), and the local mosquito control project, if there is one. This information may be used to inform clinical decisions first and foremost, and secondarily to inform planning for public health and mosquito control activities. These patients will not be considered to represent confirmed cases until testing is completed; appropriate changes to risk levels will be made following confirmatory testing. Samples reported to be preliminarily positive from blood donor screening programs will also be reported to the local board of health and the mosquito control project, if there is one, for similar reasons.

Because antibodies to WNV can persist for months, a positive laboratory test alone does not necessarily indicate evidence of current infection. Laboratory data must be correlated with clinical information and exposure risk in order to identify current, confirmed cases for the purposes of surveillance. The frequency of positive laboratory tests from individuals who otherwise do not appear to represent true, current instances of infection will be highest immediately following very active years, such as occurred in 2012.

2. Active surveillance

If surveillance data estimate a high risk of human disease, active surveillance may be instituted in targeted areas. Active surveillance involves regularly contacting local health care facilities to communicate current surveillance information, promoting disease prevention strategies, reviewing specimen submission procedures, and highlighting the need for testing patients presenting with signs and symptoms possibly representing infection with EEE virus or WNV. The Health and Homeland Alert Network (HHAN), a secure electronic alerting system, is used to send information to local boards of health upon confirmation of EEE or WNV in any specimen.

3. Pesticide related surveillance

Outreach on pesticide illness reporting is coordinated by the MDPH's Bureau of Environmental Health. In the event of an aerial pesticide application, active surveillance efforts will be implemented with emergency departments and intensified outreach efforts will be made to health care providers.

VI. COMMUNICATION OF CONFIRMED SURVEILLANCE INFORMATION

MDPH works with the SRMCB and MCPs to identify and support the use of risk reduction and disease prevention methods that are specific to the causes of disease, and supports planning and practices which incorporate the most appropriate prevention methods. Additionally, MDPH routinely communicates with health agencies in neighboring states to share relevant arbovirus findings.

Prior to the beginning of the arbovirus season, general disease information and specimen submission procedures are provided to local boards of health via the HHAN. The local boards of health (LBOH) are asked to provide routine and emergency contact information for a primary and secondary arbovirus contact during the season. Although routine surveillance specimen notifications are scheduled during normal business hours, test results sometimes become available after hours. General information and fact sheets are posted on the MDPH arbovirus website and are available publicly.

Summaries of surveillance findings are compiled and released in weekly reports issued on Monday afternoons to local boards of health and mosquito control projects.

Initial identification of virus in mosquitoes from a given town is reported to the LBOH and MCP by telephone. Adjacent towns are notified via a moderate level HHAN alert. In order to encourage risk communication on a larger area level rather than a city/town level, all subsequent positive findings in mosquitoes are reported once daily to all affected towns and adjacent towns, via a moderate level HHAN alert. All subsequent positive mosquito findings will also be reported once daily to all MCPs and the SRMCB.

Laboratory confirmation of a human WNV or EEE case is immediately reported to the submitting physician, submitting laboratory and LBOH in the town where the case resides. If the LBOH cannot be reached in a timely manner, a severe level HHAN alert is sent.

Laboratory confirmation of WNV or EEE in a veterinary specimen is immediately reported by telephone to the submitting veterinarian, the MDAR Division of Animal Health, and the LBOH. If the LBOH cannot be reached via telephone in a timely manner, a severe level HHAN alert is sent.

Risk assessment changes will be reported to the LBOH, the MCP and any immediately adjacent community. Routine risk assessment level changes from low to moderate will be done twice per week, on Mondays and Thursdays. Assessed changes to high or critical will be communicated immediately.

The MDPH Regional Health Office (RHO) and the Office of Preparedness and Emergency Management (OPEM) Regional Public Health Preparedness Coordinator in the area can offer assistance with local response. All laboratory confirmed results for WNV and EEE in humans, veterinary specimens, and mosquitoes are provided to the RHO, OPEM, MCPs and members of the SRMCB once the LBOH has been notified.

At the time of notification, MDPH encourages LBOH to share the information with other local agencies and high-risk populations in their community, as appropriate. MDPH provides LBOH with sample press releases for their use. Depending on the circumstances, MDPH may also issue a public health alert. In addition, weekly summaries of results from mosquito samples submitted and tested will be posted by town as News Items on the HHAN.

After all appropriate individuals and agencies have been notified, positive surveillance findings are made available to the media and general public on the MDPH Arbovirus website at http://www.mosquitoresults.com/. In order to protect patient confidentiality, only limited information is released on any individual. MDPH generally releases only age category, gender, current patient status,

county of residence and likely exposure location, if known. This website, which also includes links to a variety of educational materials related to mosquito-borne diseases, is updated on a daily basis throughout the arbovirus season. Results are also reported to the CDC's ArboNET reporting system.

MDPH usually issues public health alerts through the media when surveillance information indicates an increased risk of human disease or if a significant surveillance event occurs (for example, the first arbovirus activity of the season). In general, alerts include current surveillance information and emphasize prevention strategies.

VII. PREVENTION AND RESPONSE: RECOMMENDATIONS FOR PHASED RESPONSE TO SURVEILLANCE DATA

The guidance provided here is based on current knowledge of risk for human disease, and appropriateness and efficacy of interventions available to reduce that risk. Multiple factors contribute to the risk for mosquito-transmitted human disease. Decisions about risk reduction measures should be made after consideration of surveillance information.

Public awareness of what can be done to reduce risk of infection is of utmost importance. Typically, risk for any individual is expected to be relatively low, and the routine precautions taken by individuals may be sufficient to reduce opportunities for infection. Routine precautions should include:

- avoiding outdoor activity in areas, and during times of day, with increased mosquito activity;
- use of mosquito repellents containing an EPA registered active ingredient; and
- use of clothing to reduce mosquito access to skin.

These personal protective measures **must** form the basis of all risk reduction and the need to utilize them is not reduced by any mosquito control activities, including aerial spraying. When multiple factors that indicate an increased risk for transmission to humans are present, additional risk reduction measures may be necessary. These guidelines take into consideration the complexity of reducing risk of human disease from EEE and WNV infection, and form a framework for decision-making by both individuals and agencies.

General guidelines are provided for an array of situations as noted in the Surveillance and Response Plan tables that follow. Specific situations must be evaluated individually and options discussed before actions are taken. Estimating risk from mosquito-borne disease(s) is complex and many factors modify specific risk factors. MDPH assesses risk and works with LBOH, MCPs, and the SRMCB to develop the most appropriate response activities to reduce the risk of human disease. There is no single indicator that can provide a precise measure of risk, and no single action that can completely ensure prevention of infection.

MDPH works collaboratively with other state agencies, the SRMCB and MCPs to collectively identify and support the use of safe and effective mosquito control measures based on integrated pest management (IPM) principles.

Risk for mosquito-borne disease is virtually eliminated by the first local hard frost which kills most remaining adult mosquitoes. Since *Culex* species, which spread WNV, find warm, protected areas to survive the winter, isolated cases of WNV may rarely occur even after a hard frost.

A hard, or killing frost, is defined meteorologically as two consecutive hours of temperatures below 28 degrees Fahrenheit or three hours below 32 degrees. This will occur at different times for different communities, and there may even be variation within communities based on local geography. MDPH does not have meteorologic data or expertise and cannot determine when individual communities have experienced a hard frost. Sources of information to assist local officials with determining when a hard frost has occurred can be found on the weather reports from local media outlets, through the National Weather Service (http://w2.weather.gov/climate/) and other online resources such as Weather Underground (https://www.wunderground.com/). Community officials may be aware of additional local resources that are available. Although mosquitoes are not killed until a hard frost occurs, they are extremely unlikely to be active when temperatures fall below 50 degrees in the evening, and communities

may wish to consider this information when making decisions about scheduling or cancelling planned outdoor events late in the season.

Criteria for re-evaluating late season risk in communities that reached high or critical levels of risk from EEE are not clearly defined. MDPH is working with mosquito and disease experts to assess whether or not surveillance and/or temperature data can be used to accurately predict declining risk, toward the end of the mosquito season and prior to the occurrence of a hard frost. Multiple challenges to this exist including potentially increasing infection rates among surviving late-season mosquitoes, yet decreasing trapping success as evenings cool. This limits data available to assess accurate mosquito abundance and infection rates. Any actionable information will be released as an addendum to the plan.

A. MDPH Guidance

Human cases of WNV and EEE occur primarily in August and September although the specific timing of the peak disease transmission season is affected by mosquito populations, level of virus activity and weather conditions (Figure 4).

MDPH uses data from arbovirus surveillance to assess human risk levels as outlined in the phased response tables of this plan. **Risk levels are defined for "focal areas". Focal areas frequently, but not always, incorporate multiple communities, towns, or cities. Factors considered in the assessment of human risk and the outlining of a particular focal area include: mosquito habitat, virus isolations in surveillance specimens from previous years, human population densities, type and timing of recent isolations of virus in mosquitoes, occurrence of human case(s) in the current or previous years, current and predicted weather patterns, and seasonality of conditions needed to present risk of human disease.** In general, focal areas are likely to include the municipality with the positive finding and at least all adjacent communities. In general, assignment of risk will involve identifying the highest risk communities and then setting surrounding communities at the next highest risk level. For example, when evidence exists that a focal area is at high risk for EEE, in most cases, all adjacent communities will be set at moderate. Geographic areas commonly associated with human cases will have larger focal areas than those without a repeated history of human cases.

Prolonged heat promotes risk from both WNV and EEE by increasing the rate of mosquito reproduction and development, as well as decreasing the amount of time it takes for an infected mosquito to become able to transmit the virus. Weather conditions favorable for development of elevated WNV risk include hot, generally dry weather with rain occurring as downpours rather than light precipitation. Weather conditions favorable for development of elevated EEE risk include increased rainfall in the preceding fall and/or spring and mild winters or those with insulating snow cover. Evidence for elevated risk is also indicated by EEE activity in the preceding year, isolation of virus from a mammal-biting species of mosquito and isolations of the virus before mid-July.

Although mosquito surveillance data will be reported to local jurisdictions as it becomes available, in general, risk assessments that result in changes of low to moderate levels in communities are conducted twice per week, on Mondays and Thursdays. This streamlines communication and improves the ability of the MCPs to plan and schedule response activities. An exception to this schedule will be when information is obtained that indicates a community should be moved from moderate to high risk because of the need for timely consideration of recommended response activities. Additional exceptions to this protocol may be made as dictated by rapidly evolving situations.

B. Risk Reduction and Prevention Guidance for Seasons with Indicators of Increased EEE Risk

Based on historical experience with EEE, MDPH has identified specific critical indicators for overall EEE, risk, and provides specific risk reduction and prevention guidance for seasons with an anticipated increased EEE risk. Activities that may be undertaken in response to indicators of increased risk include:

- MDPH may release public health alerts throughout the season to remind the public of the steps to take to reduce their risk of exposure to mosquitoes. Local boards of health are encouraged to conduct

their own outreach which should include information about personal prevention measures such as: avoiding outdoor activity during times of day, with increased mosquito activity; use of mosquito repellents containing an EPA-approved active ingredient; and use of clothing to reduce mosquito access to skin. These personal protective measures must form the basis of all risk reduction and the need to utilize them is not reduced by any mosquito control activities, including aerial spraying.

- Local municipalities may be encouraged to reschedule outdoor evening events to avoid the period between dusk and dawn which correspond to peak mosquito activity.
- For communities that participate in a local mosquito control district, MCPs may increase their source reduction activities to reduce mosquito-breeding habitats and to reduce adult mosquito abundance. This may include ground and aerial larviciding.
- For communities that participate in a local mosquito control district, after sustained findings of positive mosquito isolates, adult mosquito control efforts including targeted ground adulticiding operations should be considered, if not already in progress, where surveillance indicates human risk. The decision to use ground-based adult mosquito vector control will depend on critical modifying variables including the time of year, mosquito population abundance, and proximity of virus activity to populations.
- Other intensified efforts may be implemented following coordination between MDPH and other agencies including DEP, DAR, and DCR.
- If the risk for multiple human infections with EEE virus becomes widespread and involves multiple jurisdictions, MDPH will convene the SRMCB, MCPs, and MAG to get their recommendation for appropriate mosquito control interventions to reduce public health risk. The SRMCB will provide recommendations on appropriate pesticide(s), route(s), and means of treatment for specific areas. Interventions may include state-funded aerial application of mosquito adulticide. Assessment of the need for and utility of a focal or large-scale aerial application of mosquito adulticide includes evaluating evidence that the seasonal and biological conditions present a persistent risk of human disease, and that those same conditions permit the effective use of an aerially applied pesticide. Aerial applications cannot and do not eliminate risk and must not be viewed by the public or municipalities as a solution to EEE risk; aerial applications are one tool that can be used in conjunction with all other available risk mitigation tools.

VIII. EMERGING ARBOVIRUS ISSUES

A. Expanding EEE Virus Habitat

As indicated by virus activity surveillance, the geographic area of risk for EEE has increased outside the historical areas of southeastern Massachusetts. Human and animal cases have occurred in Essex, Franklin and Hampshire counties. EEE risk has also increased throughout New England; New Hampshire, Maine and Vermont have all detected unusual activity. Based on the surveillance data tracked by MDPH, there are communities outside of the Southeastern Region of the state that either do not belong to an established MCP, or do not have an MCP operating in their region, that are now at increased risk for EEE virus activity. Expansion of the current mosquito virus surveillance network is required to provide adequate surveillance data to assess the public's risk for arboviral diseases.

B. Introduced Mosquito Species

MDPH and the MCPs are taking proactive measures to conduct surveillance for mosquito species that are expanding northward, especially *Aedes albopictus*. *Ae. albopictus* is an aggressive mammal-biting species that was introduced to North America from Asia around 1985; it has been implicated in the transmission of arboviruses such as dengue, chikungunya, yellow fever, and Zika, where these viruses circulate. Where it occurs, this species is generally more abundant in urban areas, breeding easily in artificial containers, such as birdbaths, discarded tires, buckets, clogged gutters, catch basins, and other standing water sources. These mosquitoes are aggressive biters that actively seek out mammals, including humans, including during ***daytime*** hours, unlike the more familiar mosquito vectors for WNV and EEE. The adult mosquitoes are black with distinctive white stripes on their legs and thorax and are sometimes referred to as "Asian tiger mosquitoes". While *Ae. albopictus* has displaced native mosquito species across the southern US, its establishment in northern latitudes has been limited to date.

The range of *Ae. albopictus* is expanding into the Northeast likely due to changes in the climate and based on new surveillance data, there is evidence that focal *Ae. albopictus* populations can over-winter, particularly during mild winters or in protected environments such as tire piles, in Massachusetts. Surveillance specifically targeting the adult stage of this species in Massachusetts began in 2008. Beginning in 2014, MDPH and the MCP's began a more coordinated effort to systematically survey for the presence of *Ae. albopictus* in MA. This survey centers on areas and activities known to correlate with *Ae. albopictus* introduction in other states. The targeted areas are closely monitored using traps specifically designed to capture both adult *Ae. albopictus* and their eggs. Adult *Ae. albopictus* are identifiable based on their distinctive appearance; eggs must be allowed to develop into the adult stage in captivity in order to identify the species. Surveillance for this invasive species of mosquito is critically important at this time and requires the continued collaboration and cooperation of all MCPs and MDPH.

Because these mosquitoes almost exclusively feed on mammals and not the bird species that serve as reservoirs for WNV and EEE, these mosquitoes are not expected to play a significant role in spreading either WNV or EEE. However, if large populations of this mosquito species become established in Massachusetts over time, as has been suggested may happen with changes in climate, it could eventually serve as a vector for other arboviruses that do not currently circulate in the area. See Table 3 for recommendations related to a phased response for surveillance and response to *Ae. albopictus* and Figure 5 for a map of communities with any finding of *Aedes albopictus* since 2009.

Control of *Ae. albopictus* is difficult once it is established although its flight range is quite limited at approximately 150 yards. Commonly used larval control measures include: environmental sanitation focused on the permanent elimination of containers producing *Ae. albopictus*; chemicals or biological agents used as larvacides to kill or prevent development of mosquito immature stages; and biological control which relies on aquatic predators. Both larvaciding and biological control measures are limited in efficacy due to the preference of this species for breeding in small containers. Identification and removal of non-essential containers (e.g. refuse and tires) and reduction and regular cleaning of useful containers (e.g. toys, bird baths, and gutters) are critical to reduce breeding sites and therefore mosquito populations. Because this species is most active during the day, mosquito control techniques employed during the dusk to dawn hours when local vector mosquito species are most active, will be less effective. The use of personal precautions such as avoiding outdoor activity in areas with increased mosquito activity, use of mosquito repellents containing an EPA registered active ingredient, and use of clothing to reduce mosquito access to skin must form the basis of all risk reduction, as they do for all mosquito-borne diseases.

Any identifications of *Ae. albopictus* will be reported to the LBOH and MCP by telephone and will be shared with the SRMCB and MAG by email. MDPH will work with the MCP, if there is one, to perform any necessary enhanced surveillance. Simply identifying the presence of the species in a particular area is not evidence of any immediate public health risk.

In the extremely unlikely event that a human case of dengue, chikungunya, Zika, yellow fever, or other non-endemic arbovirus is reported, and patient history does not include out-of-region travel, then surveillance for and testing of *Ae. albopictus* may be indicated in the area. If any virus of public health importance is identified from *Ae. albopictus* mosquitoes, both mosquito control and public health intervention measures may be necessary. Appropriate responses will be determined in collaborative efforts between state and local health and the Mosquito Control Projects.

Aedes aegypti, another important vector species for arboviral diseases, has been reported as far north as New York state, and its range may also be expanding northward; however, it has not been detected in Massachusetts. MDPH and MCPs will continue to be vigilant for the appearance of this, or any other invasive mosquito vector species.

C. Introduced or Emerging Arboviral Diseases

MDPH is continuing to work with its partner agencies to monitor for emerging arboviral diseases. Every year, some Massachusetts residents traveling abroad, become infected with mosquito-borne diseases such as dengue, malaria, chikungunya and Zika. Given the species of mosquitoes that are currently found in Massachusetts, it is very unlikely that these diseases will become established at this time.

However, the diagnosis of any arboviral disease in Massachusetts residents is reportable to the LBOH and MDPH (105 CMR 300.00: Reportable diseases, surveillance, and isolation and quarantine requirements | Mass.gov) and requires public health investigation. If an investigation indicates that the disease was acquired locally (i.e. NOT acquired through foreign travel), MDPH may test banked mosquito specimens for the presence of the virus and/or perform enhanced mosquito surveillance, alone or in conjunction with a local MCP, in order to assess the risk to public health. Specific surveillance and response activities will be situation dependent and will be determined drawing on the expertise of all partners. Specific public health risk messages will be developed, shared with local partners, and communicated to the public as indicated.

In addition, MDPH, as part of its routine surveillance, has the potential to test a portion of trapped and submitted mosquitoes with a non-specific screening test which, if positive, would trigger more specific testing to detect an introduced or emerging disease.

Testing for non-endemic arboviruses is not routinely performed at the Massachusetts State Public Health Laboratory. However, due to the recent emergence of Zika virus in Central and South America and the Caribbean, MDPH rapidly implemented human testing for dengue, chikungunya and Zika viruses. Developing the capacity to test for Jamestown Canyon in mosquitoes is being explored. Decisions to perform surveillance for any arboviral pathogen within local mosquitoes will be based on information indicating new or unusual activity and/or local environmental detection of mosquito vectors that could support new viral agents. This continues to be part of an ongoing risk assessment performed by MDPH and CDC's Arbovirus Surveillance Network.

Aerial Adulticide Application in Response to Threat of EEE
2019 Multi-Agency Response Flowchart

1. Determination of Response

- When human risk is elevated to a high level of concern as indicated by the MDPH Surveillance and Response Plan; DPH will determine, in consultation with Mosquito Control Projects, SRMCB, and the Mosquito Advisory Group whether aerial application is warranted.

2. Characterization of Area of Risk

- Once consensus is obtained, DPH characterizes the area of risk and delineates the perimeter of the spray area based on current surveillance information, habitat, areas of historical activity likely to contribute to current risk and known patterns of virus spread.
- DPH/BIDLS provides the GIS perimeter map to inter-agency collaborators as soon as possible.

3. Commissioner Certification

- DPH/BIDLS requests that the Commissioner of Public Health issue a "Certification that Pesticide Application is Necessary to Protect Public Health"

Action Items 4a-4c Occur Simultaneously:

4a. Determination of Appropriate Pesticide

- Prior to July 1 of each season, DPH/BEH and DAR will determine the type of pesticide to be used in the event that an aerial application will be warranted and obtain any EPA pesticide waivers, if necessary, for use in aerial application.
- In the event that aerial application is warranted, DPH/BEH and DAR will confirm this selected pesticide for use.

4b.Determination of No-Spray Zones

- Aerial no-spray zones (mosquito treatment sensitive areas data layers) defined:
  1) Certified organic farms
  2) Priority habitats for federally listed endangered and threatened species
  3) Surface water supply resource areas
  4) Commercial fish hatcheries/aquaculture
- DAR reviews any emergency waivers needed to use pesticides on school property and ensure compliance with pesticide laws.
- DAR/SRMCB will submit a 'Notice of Intent' to EPA to obtain an NPDES permit within 30 days of the aerial adulticide event.

4c.Exclusion/Inclusion of Priority Habitats:

- DPH will determine, in consultation with SRMCB, DAR, DEP, and DFW if spraying in mosquito treatment sensitive areas is necessary to protect the public health.
- If spraying in these areas is necessary to reduce the risk to public health then:
  - DPH requests a permit from DFW be issued to DAR for taking endangered, threatened, or special concern species.

4d. Spray Efficacy Monitoring

- DAR/SRMCB and MDPH initiates plans for standardized monitoring of pre- and post-spray mosquito activity as part of spray efficacy determination. MDPH may assist DAR/SRMCB with GIS mapping
- All agencies to follow procedures outlined in the SRMCB/Massachusetts Mosquito Control Surveillance Protocol for Evaluation of Efficacy of Aerial Adulticide Application Regarding Mosquito-Borne Disease(SRMCB Protocol, Appendix 3)
- SRMCB provides a report of the intervention that includes percent efficacy results (SRMCB SOP, p.23 'Assess Operation').

5. Preparation of Final GIS Data Map

- DAR coordinates compilation of mosquito treatment sensitive areas data layers (no-spray zones) developed by DAR, DFW, and DEP within designated DPH spray area into a final map.

6. Environmental Monitoring

- DEP, DAR, DFG and DPH/BEH notify partner environmental agency collaborators of planned environmental monitoring to provide opportunity for input/collaboration.
- DEP, DAR, and DPH/BEH and BIDLS initiate plans for pre-/post-monitoring for public drinking water reservoirs, honeybees, surface waters, and cranberries in designated spray area.

7. Emergency Room and Poison Control Contacts

- DPH/BEH contacts and provides pesticide illness surveillance protocols to emergency departments, poison control centers, and local health departments.

8. Notification of Date & Time of Application

- DAR and DPH provide public notices regarding the locations, dates, and times of aerial spraying.
- DAR will maintain a website with GIS maps of the aerial spray area and will update this site daily during spray operations.
- DPH will provide recorded hotline information regarding the spray zone, precautionary measures, and telephone numbers to report fish kills or other environmental impacts.

9. Operational Procedures-Aerial Application

- DAR/SRMCB initiates aerial spray operations using collective guidance and consensus developed through multi-agency, cross-secretariat process.
- The aerial application operational procedures are followed as described in the SRMCB Operational Response Plan.

DPH- Department of Public Health
BIDLS- Bureau of Infectious Disease and Laboratory Sciences
BEH- Bureau of Environmental Health

DAR- Department of Agricultural Resources
SRMCB- State Reclamation and Mosquito Control Board
DFG- Department of Fish and Game
DFW- Division of Fisheries and Wildlife

Table 1. Guidelines for Phased Response to WNV Surveillance Data

Risk Category	Probability of locally acquired human disease	Definition of Risk Category for a Focal Area[1]	Recommended Response
1	WNV – Low	All localities begin the year at low <u>Current Year</u> 1. No evidence of WNV activity in mosquitoes in the focal area OR 1. Sporadic WNV activity in mosquitoes in the focal area. And 2. No animal or human cases Definitions: ***Sporadic*** WNV activity- when 1-2 mosquito isolates are detected during non-consecutive weeks within one focal area. ***Sustained*** WNV activity- when mosquito isolates are detected for at least 2 consecutive weeks within one focal area. (NOTE: Two consecutive weekly findings from the same trap location may not always be considered indicative of sustained activity) .	1. MDPH staff provides educational materials and clinical specimen submission protocols to targeted groups involved in arbovirus surveillance, including, but not limited to, local boards of health, physicians, veterinarians, animal control officers, and stable owners. 2. Educational efforts directed to the general public on personal prevention steps and source reduction, particularly to those populations at higher risk for severe disease (e.g., the elderly). 3. Passive human and horse surveillance. 4. Public health alert sent out by MDPH in response to first WNV virus positive mosquito pool detected during the season. The alert will summarize current surveillance information and emphasize personal prevention strategies. 5. Emphasize the need for schools to comply with MA requirements for filing outdoor IPM plans. For localities participating in local mosquito control projects: 6. Assess mosquito populations, monitor larval and adult mosquito density. 7. Routine collection and testing of mosquitoes. 8. Initiate source reduction; use larvicides at specific sites identified by entomologic survey. In making a decision to use larvicide consider the abundance of *Culex* larvae, intensity of prior virus activity and weather. 9. Locally determined, standard, adult mosquito vector control activities are implemented. No specific supplemental control efforts are recommended.

[1] Focal Area- May incorporate multiple communities, towns or cities. Factors considered in the assessment of human risk and the outlining of a particular focal area include: mosquito habitat, prior virus isolations in surveillance specimens from previous years, human population densities, type and timing of recent isolations of virus in mosquitoes, occurrence of human case(s) in the current or previous years, current and predicted weather patterns, and seasonality of conditions needed to present risk of human disease.

2	WNV - Moderate	Current Year 1. Sustained or increasing WNV activity in mosquitoes in the focal area. OR 2. One confirmed animal or human case Definitions: ***Sporadic*** WNV activity- when 1-2 mosquito isolates are detected during non-consecutive weeks within one focal area. ***Sustained*** WNV activity- when mosquito isolates are detected for at least 2 consecutive weeks within one focal area. (NOTE: Two consecutive weekly findings from the same trap location may not always be considered indicative of sustained activity)	Response as in category 1, plus: 1. Expand community outreach and public education programs, particularly among high-risk populations, focused on risk potential and personal protection, emphasizing source reduction. 2. Local boards of health are contacted via phone or HHAN (Health and Homeland Alert Network) upon confirmation of WNV in any specimen. Advise health care facilities of increased risk status and corresponding need to send specimens to the MA SPHL for testing. 3. Supplemental mosquito trapping and testing may be performed in areas with positive WNV findings. For localities participating in local mosquito control projects: 4. Increase larval control and source reduction measures. 5. If not already in progress, standard, locally determined adult mosquito vector control efforts including targeted ground adulticiding operations should be considered against *Culex* mosquitoes and other potential vectors, as appropriate. The decision to use ground-based adult mosquito control will depend on critical modifying variables including the time of year, mosquito population abundance and proximity of virus activity to populations.
3	WNV – High	Current year 1. Multiple isolations during the same week from the focal area plus at least one multiple meteorological or ecological conditions (such as above average temperatures, dry conditions, or larval abundance) associated with increased abundance and increased risk of human disease. Or 2. Two or more confirmed animal or human cases of WNV occurring within the focal area (focal area based on exposure history of cases)	Response as in category 2, plus: 1. Intensify public education on personal protection measures including avoiding outdoor activity during peak mosquito hours, wearing appropriate clothing, using repellents and source reduction. a. Utilize multimedia messages including public health alerts from MDPH, press releases from local boards of health, local newspaper articles, cable channel interviews, etc. b. Encourage local boards of health to actively seek out high-risk populations in their communities (nursing homes, etc.) and educate them on personal protection and avoiding outdoor evening events. c. Advisory information on pesticides provided by MDPH Bureau of Environmental Health. 2. Intensify and expand active surveillance for human cases. For localities participating in local mosquito control projects: 3. Intensify larviciding and/or adulticiding control measures where surveillance indicates human risk. Local, ground- based ULV applications of adulticide may be repeated as necessary to achieve adequate mosquito control. 4. Duly authorized local officials may request that the DPH Commissioner issue a certification that pesticide application is necessary to protect public health in order to preempt homeowner private property no-spray requests.

4	WNV - Critical	An excessive number of human cases clustered in time and space AND evidence that risk is likely to increase based on time of year, weather patterns, mosquito populations or other factors specific to the situation.	Response as in category 4, plus: 1. MDPH will confer with local boards of health, the SRMCB and Mosquito Control Projects to discuss the need for additional interventions. If additional mosquito control activities are indicated, the SRMCB will determine the appropriate pesticide and extent, route and means of treatment. 2. MDPH recommends reduction of outdoor activities, during peak mosquito activity hours, especially by the elderly and others at higher risk for severe WNV disease, in areas of intensive virus activity for high risk populations or individuals.

Table 2. Guidelines for Phased Response to EEE Surveillance Data

Risk Category	Probability of locally acquired human disease	Definition of Risk Category for a Focal Area[2]	Recommended Response
1	EEE - Remote	All of the following conditions must be met: Prior Year No EEE activity detected in community or focal area in at least 10 years And Current Year 1. No current surveillance findings indicating EEE activity in mosquitoes in the focal area And 2. No confirmed animal or human EEE cases.	1. MDPH staff provides educational materials and clinical specimen submission protocols to targeted groups involved in arbovirus surveillance, including, but not limited to, local boards of health, physicians, veterinarians, animal control officers, and stable owners. 2. Educational efforts directed to the general public on personal prevention steps and source reduction, particularly to those populations at higher risk for severe disease (e.g., children and the elderly). 3. Passive human and horse surveillance. 4. Public health alert sent out by MDPH in response to first EEE virus positive mosquito pool detected during the season. The alert will summarize current surveillance information and emphasize personal prevention strategies. 5. Emphasize the need for schools to comply with MA requirements for filing outdoor IPM plans. For localities participating in local mosquito control projects: 6. Assess mosquito populations, monitor larval and adult mosquito density. 7. Routine collection and testing of mosquitoes. 8. Initiate source reduction; use larvicides at specific sites identified by entomologic survey. In making a decision to use larvicide consider the abundance of *Culex* larvae, intensity of prior virus activity and weather. 9. Locally determined, standard, adult mosquito vector control activities are implemented. No specific supplemental control efforts are recommended.

[2] Focal Area- May incorporate multiple communities, towns or cities. Factors considered in the assessment of human risk and the outlining of a particular focal area include: mosquito habitat, prior virus isolations in surveillance specimens from previous years, human population densities, type and timing of recent isolations of virus in mosquitoes, occurrence of human case(s) in the current or previous years, current and predicted weather patterns, and seasonality of conditions needed to present risk of human disease.

2	EEE - Low	Prior Year Any EEE activity detected within the last 10 years Or Current Year 1. Sporadic EEE isolations in *Cs. melanura* mosquito in the community or focal area And 2. No confirmed animal or human cases. Definitions: ***Sporadic*** EEE activity- when 1-2 mosquito isolates are detected during non-consecutive weeks within one focal area. ***Sustained*** EEE activity- when mosquito isolates are detected for 2 or more consecutive weeks within one focal area.	Response as in category 1, plus: 1. Expand community outreach and public education programs, particularly among high-risk populations, focused on risk potential and personal protection, emphasizing source reduction. For localities participating in local mosquito control projects: 2. Increase larval control and source reduction measures. 3. Locally established standard adult mosquito vector control activities continue.
3	EEE - Moderate	Prior Year Sustained EEE activity in bird-biting mosquitoes; or EEE isolate from mammal-biting mosquitoes; or confirmation of one human or animal EEE case in the community or focal area Or Current year 1. Sustained EEE activity in *Cs. melanura* with minimum infection rates that are at or below mean levels for focal area trap sites Or 2. A single EEE isolate from mammal-biting mosquitoes (bridge vector species) Or 3. Sustained EEE activity plus at least one multiple meteorological or ecological condition (rainfall, temperature, seasonal conditions, or larval abundance) associated with elevated mosquito abundance and thus likely to increase the risk of human disease AND 4. No confirmed animal or human EEE cases in current year	Response as in category 2, plus: 1. Outreach and public health educational efforts are intensified including media alerts as needed. 2. Public health alert sent out by MDPH in response to first pool of EEE positive mammal-biting mosquitoes detected during the season. The alert will summarize current surveillance information and emphasize personal prevention strategies. 3. HHAN (Health and Homeland Alert Network) alerts or phone calls are provided to local boards of health upon confirmation of EEE in any specimen; advise health care facilities of increased risk status and corresponding needs to send specimens to the MA SPHL for testing. 4. Supplemental mosquito trapping and testing in areas with positive EEE findings if MDPH resources allow. Notify all boards of health of positive findings. For localities participating in local mosquito control projects: 5. If not already in progress, standard, locally established adult mosquito vector control efforts including targeted ground adulticiding operations should be considered where surveillance indicates human risk. The decision to use ground-based adult mosquito control will depend on critical modifying variables including the time of year, mosquito population abundance and proximity of virus activity to at-risk populations. 6. Duly authorized local officials may request that the DPH Commissioner issue a certification that pesticide application is necessary to protect public health in order to preempt homeowner private property no-spray requests. 7. Supplemental mosquito trapping and testing in areas with positive EEE findings. Notify all boards of health of positive findings.

4	EEE - High	<u>Current Year</u> 1. Sustained or increasing EEE activity in *Cs. melanura* with weekly mosquito minimum infection rates above the mean, Or 2. 2 or more EEE isolates in mammal-biting mosquitoes from 2 different traps. And/or 3. Sustained or increasing EEE activity in mosquitoes plus multiple meteorological or ecological conditions (rainfall, temperature, seasonal conditions, or larval abundance) associated with elevated mosquito abundance and thus very likely to increase the risk of human disease. AND 4. No confirmed animal or human EEE cases in current year	Response as in category 3, plus: 1. Intensify public education on personal protection measures including avoiding outdoor activity during peak mosquito hours, wearing appropriate clothing, using repellents and source reduction. a. Utilize multimedia messages including public health alerts from MDPH, press releases from local boards of health, local newspaper articles, cable channel interviews, etc. b. Encourage local boards of health to actively seek out high-risk populations in their communities (nursing homes, schools, workers employed in outdoor occupations, etc.) and educate them on personal protection c. Advisory information on pesticides provided by MDPH Bureau of Environmental Health. d. Urge towns and schools to consider rescheduling outdoor, evening events.† 2. For localities participating in local mosquito control projects, intensify larviciding and/or adulticiding control measures where surveillance indicates human risk. Local, ground- based ULV applications of adulticide may be repeated as necessary to achieve adequate mosquito vector control. Duly authorized local officials may request that the DPH Commissioner issue a certification that pesticide application is necessary to protect public health in order to preempt homeowner private property no-spray requests. 3. Active surveillance for human cases is intensified. Health care facilities are advised of increased risk status and corresponding needs to send specimens to the MA SPHL for testing. 4. Local officials should evaluate all quantitative indicators including population density and time of year and may proceed with focal area aerial adulticiding. 5. MDPH will confer with local health officials, SRMCB and MCPs to determine if the risk of disease transmission warrants classification as level 5. 6. MDPH will confer with local health agencies, SRMCB and Mosquito Control Projects to discuss the use of intensive mosquito control methods. If elevated risk is assessed in multiple jurisdictions and evidence exists that risk is likely to either increase (based on time of season, weather patterns, etc.) or remain persistently elevated, the interventions may include state-funded aerial application of mosquito adulticide which, if conditions warrant, may be repeated as necessary to interrupt the virus transmission cycle and protect public health.

† See Appendix 2 for schedule of recommended cancellation time for use

5	EEE - Critical	Current Year 1. Multiple quantitative measures indicating critical risk of human infection (e.g. early season positive surveillance indicators, and sustained high mosquito infection rates, plus multiple meteorological or ecological conditions (rainfall, temperature, seasonal conditions, or larval abundance) indicating rapidly escalating epizootic activity) Or 2. A single confirmed EEE human or animal case	Response as in category 4, plus: 1. Continued highly intensified public outreach messages on personal protective measures. Frequent media updates and intensified community level education an outreach efforts. Strong recommendation for rescheduling of outdoor, evening events.† 2. MDPH will confer with local health agencies, SRMCB and Mosquito Control Projects to discuss the use of intensive mosquito control methods and determine the measures needed to be taken by the agencies to allow for and assure that the most appropriate mosquito control interventions are applied to reduce risk of human infection. These interventions may include state-funded aerial application of mosquito adulticide. Factors to be considered in making this decision include the seasonal and biological conditions needed to present a continuing high risk of EEE human disease and that those same conditions permit the effective use of an aerially applied pesticide. Once critical human risk has been identified, the SRMCB will determine the adulticide activities that should be implemented in response to identified risk by making recommendations on: A. Appropriate pesticide B. Extent, route and means of treatment C. Targeted treatment areas 3. MDPH Bureau of Environmental Health will initiate active surveillance for pesticide-related illness via emergency departments and with health care providers only if aerial spraying commences. 4. MDPH will designate high-risk areas where individual no spray requests may be preempted by local and state officials based on this risk level. If this becomes necessary, notification will be given to the public. 5. MDPH recommends restriction of group outdoor activities, during peak mosquito activity hours, in areas of intensive virus activity. 6. MDPH will communicate with health care providers in the affected area regarding surveillance findings and encourage prompt sample submission from all clinically suspect cases.

† See Appendix 2 for schedule of recommended cancellation time for use during 2019 season

Table 3. Guidelines for Phased Response to *Aedes albopictus*

Risk Category	Definition of Risk Category	Recommended Response
1	No identification of *Aedes albopictus* activity in a given area	-MDPH, SRMCB and MCDs identify areas proven to serve as routes of entry for *A. albopictus* (examples: shipping ports, tire recyclers, etc.) -Coordinate surveillance in these areas
2	Isolated or intermittent identification in a given area of adult *Aedes albopictus* likely to represent introduction or repeated reintroductions	-Continue or expand surveillance -Submit any adult mosquitoes for storage and possible testing at the MA SPHL as the situation warrants -Work with LBOH to identify possible habitat/potential breeding sites and initiate clean-up as necessary
3	Consistent findings of adult *Aedes albopictus* or evidence of possible overwintering	-Submit any adult mosquitoes for storage and possible testing at the MA SPHL as the situation warrants -Expand surveillance to detect extent of geographic distribution -Work with LBOH to identify possible habitat/potential breeding sites and initiate clean-up - Educational efforts directed to the general public on personal prevention steps and source reduction -DPH consultation with MCDs, SRMCB, and MAG to assess and evaluate the need for larvaciding or adulticiding interventions

Figure 1: County of Residence of West Nile Virus Human Cases, 2000-2018

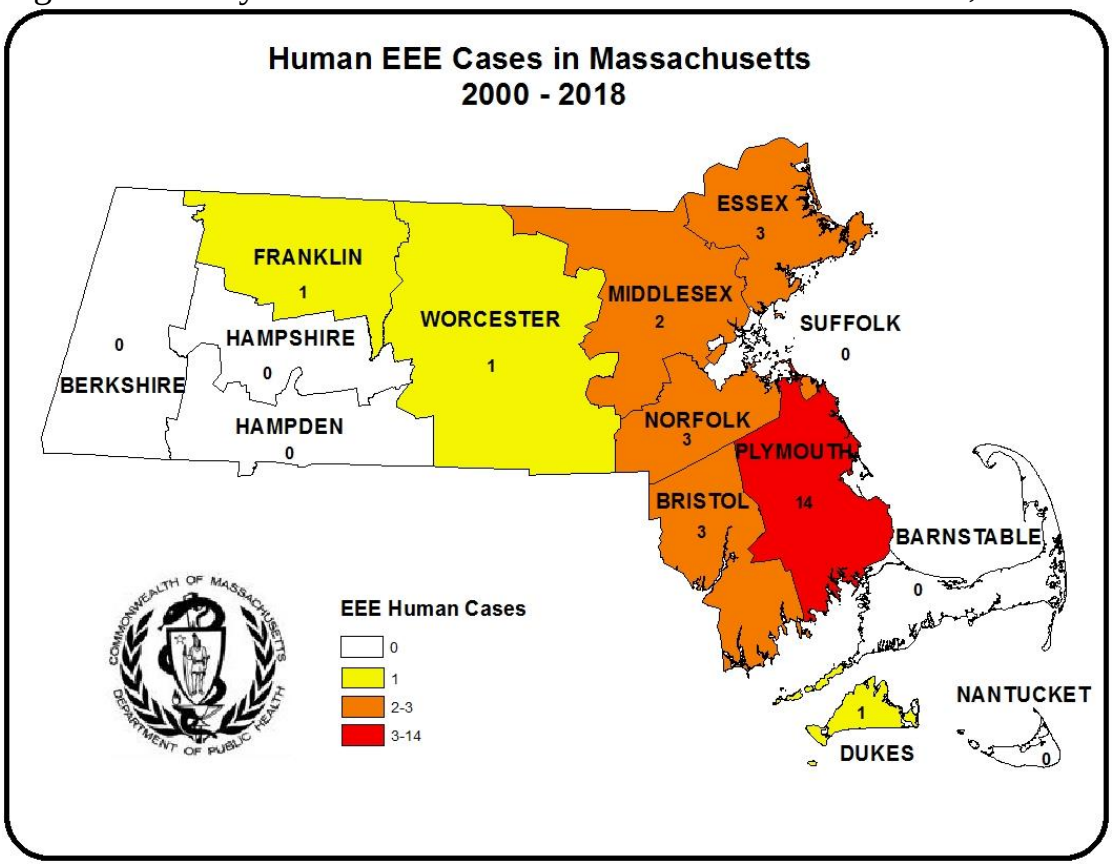


Figure 2: Municipality of Residence of West Nile Virus Human Cases, 2001-2018

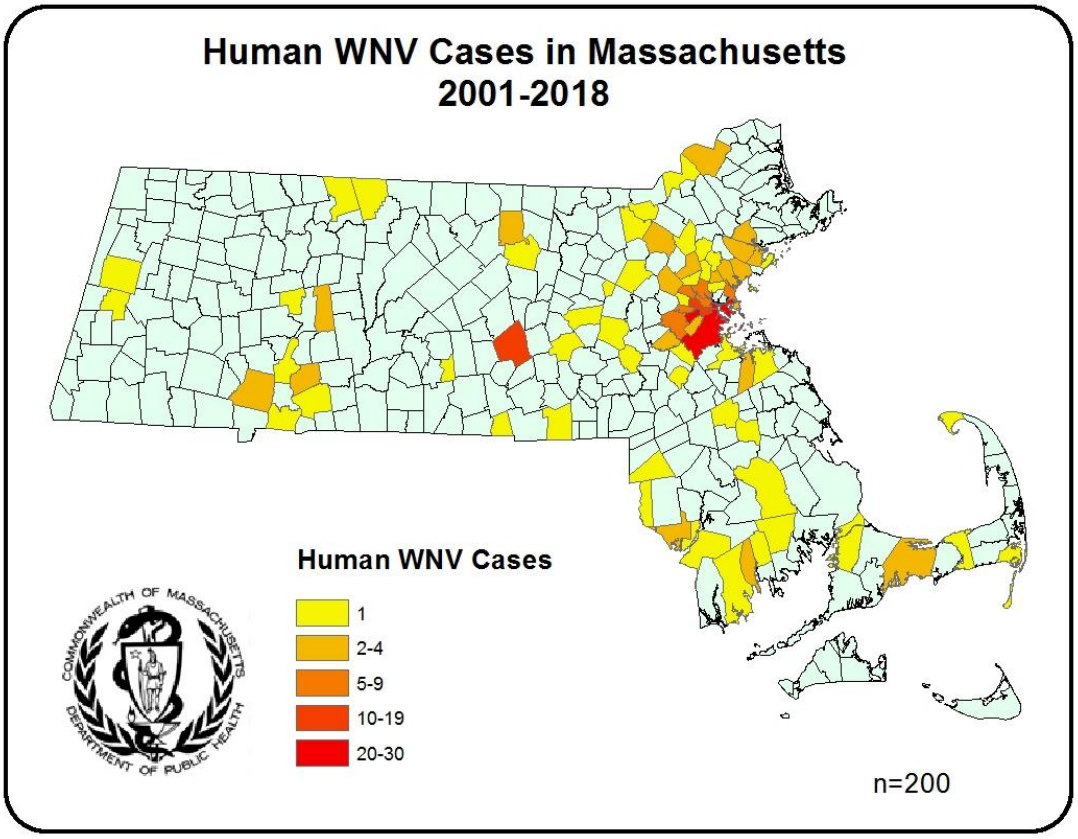


Figure 3: Location of MDPH Long-Term Mosquito Trap Sites

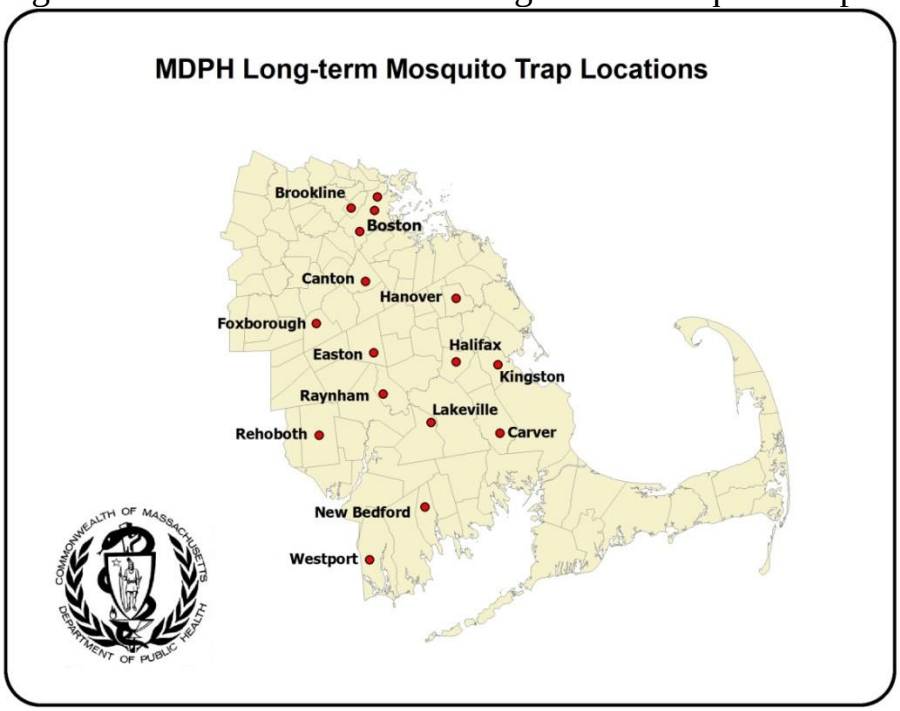


Figure 4: Month of Symptom Onset of WNV and EEE Human Cases in Massachusetts, 2001-2018.

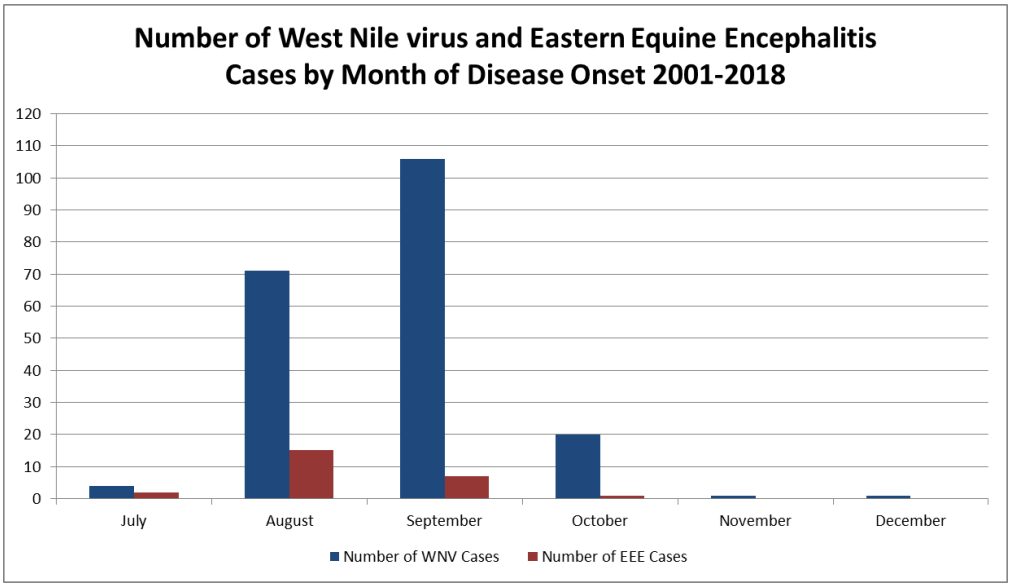
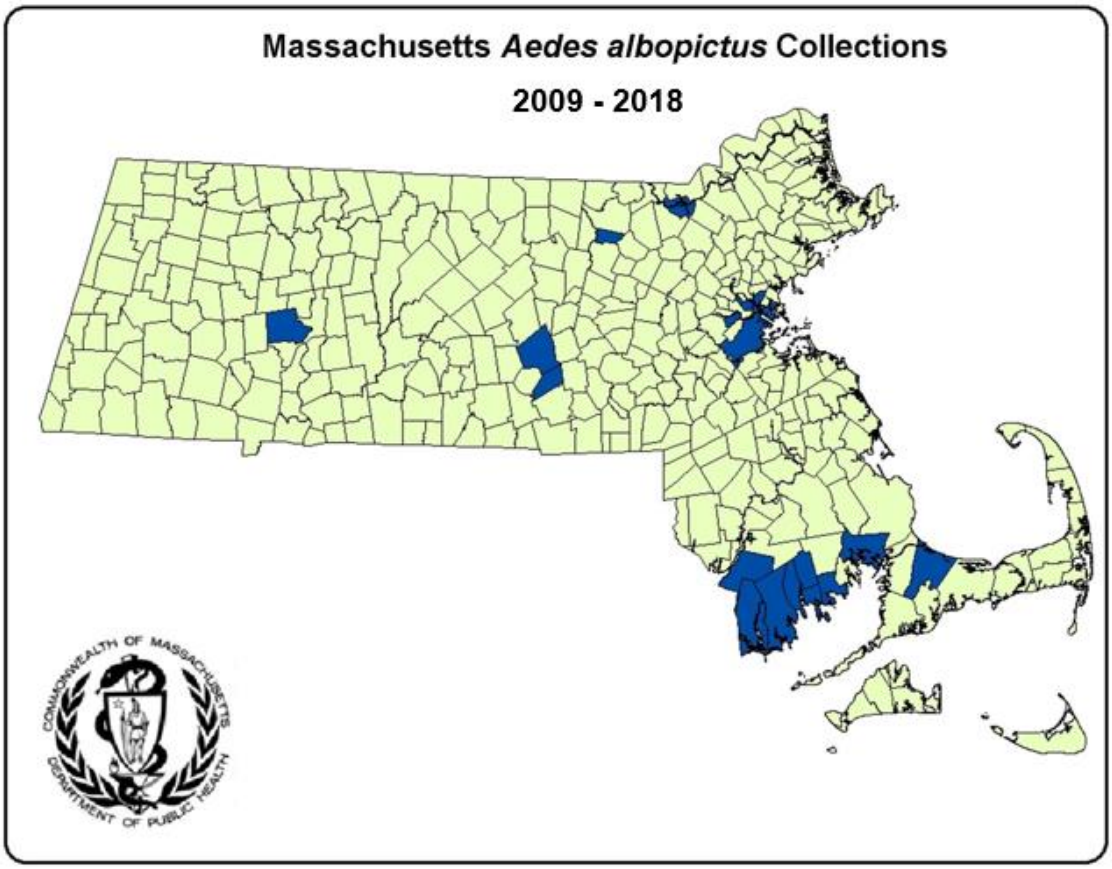


Figure 5: Location of *Aedes albopictus* collections, 2009-2018



Appendix 1: Mosquitoes Associated with Arboviral Activity in Massachusetts

Aedes vexans – Is a common nuisance mosquito. Temporary flooded areas such as woodland pools and natural depressions are the preferred larval habitat of this mosquito. It feeds on mammals and is an aggressive human biter. This species is typically collected from May to October. *Ae vexans* is an epizootic (bridge) vector of eastern equine encephalitis (EEE) virus.

Coquillettidia perturbans - Cattail marshes are the primary larval habitat of this mosquito. It feeds on both birds and mammals. It is a persistent human biter and one of the most common mosquitoes in Massachusetts. This species is typically collected from June to September. *Cq perturbans* is an epizootic (bridge) vector of EEE virus.

Culex pipiens – Artificial containers are the preferred larval habitat of this mosquito. It feeds mainly on birds and occasionally on mammals. It will bite humans, typically from dusk into the evening. This species is regularly collected from May to October but can be found year round as it readily overwinters in man-made structures. *Cx pipiens* is the primary vector of West Nile Virus (WNV).

Culex restuans – Natural and artificial containers are the preferred larval habitat of this mosquito. It feeds almost primarily on birds but has been known to bite humans on occasion. This species is typically collected from May to October but can be found year round as it readily overwinters in man-made structures. *Cx restuans* has been implicated as a vector of WNV.

Culex salinarius – Brackish and freshwater wetlands are the preferred habitat of this mosquito. It feeds on birds, mammals, and amphibians and is well known for biting humans. This species is typically collected from May to October but can be found year round as it readily overwinters in natural and man-made structures. *Cx salinarius* may be involved in the transmission of both WNV and EEE.

Culiseta melanura –White cedar and red maple swamps are the preferred larval habitat of this mosquito. It feeds almost exclusively on birds. This species is typically collected from May to October. *Cs melanura* is the primary enzootic vector of EEE.

Ochlerotatus canadensis – Shaded woodland pools are the preferred larval habitat of this mosquito. It feeds mainly on birds and mammals but is also known to take blood meals from amphibians and reptiles. This mosquito can be a fierce human biter near its larval habitat. This species is typically collected from May to October. *Oc canadensis* is an epizootic (bridge) vector of eastern equine encephalitis EEE virus.

Ochlerotatus japonicus – Natural and artificial containers such as tires, catch basins, and rock pools are the preferred larval habitat of this mosquito. It feeds mainly on mammals and is an aggressive human biter. This species is typically collected from May to October. *Oc japonicus* may be involved in the transmission of both WNV and EEE.

APPENDIX 2: RECOMMENDED CANCELLATION TIMES FOR OUTDOOR ACTIVITIES IN AREAS OF HIGH RISK FOR EASTERN EQUINE ENCEPHALITIS (EEE)

The types of mosquitoes most likely to transmit EEE infection are likely to be out searching for food (an animal to bite) at dusk, the time period between when the sun sets and it gets completely dark. **The exact timing of this increased activity is influenced by many factors including temperature, cloud cover, wind and precipitation and cannot be predicted precisely for any given day**. Here, the approximate time of sunset was used to establish standardized recommendations for cancellation times of outdoor activities during periods of high EEE risk.

This does not eliminate risk nor does it alleviate the need for the use of repellants or clothing for protection from mosquitoes.

July 2019

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3 8:30 PM	4	5	6
7	8	9	10 8:30 PM	11	12	13
14	15	16	17 8:30 PM	18	19	20
21	22	23	24 8:15 PM	25	26	27
28	29	30	31 8:15 PM			

August 2019

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			8:00 PM	1	2	3
4	5	6	7 8:00 PM	8	9	10
11	12	13	14 8:00 PM	15	16	17
18	19	20	21 7:45PM	22	23	24
25	26	27	28 7:30 PM	29	30	31

September 2019

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4 7:30 PM	5	6	7
8	9	10	11 7:15 PM	12	13	14
15	16	17	18 7:00 PM	19	20	21
22	23	24	25 6:45 PM	26	27	28
29	30					

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This does not eliminate risk nor does it alleviate the need for the use of repellants or clothing for protection from mosquitoes.

References:

Background Information-Eastern Equine Encephalitis:

Eastern equine encephalitis--New Hampshire and Massachusetts, August-September 2005. Centers for Disease Control and Prevention (CDC); MMWR Morb Mortal Wkly Rep. 2006 Jun 30;55(25):697-700.

Human eastern equine encephalitis in Massachusetts: predictive indicators from mosquitoes collected at 10 long-term trap sites, 1979-2004. Hachiya M, Osborne M, Stinson C, Werner BG.; Am J Trop Med Hyg. 2007 Feb;76(2):285-92.

Eastern equine encephalitis virus in mosquitoes and their role as bridge vectors. Armstrong PM, Andreadis TG.; Emerg Infect Dis. 2010 Dec;16(12):1869-74.

Background Information -West Nile Virus:

West Nile virus activity - United States, 2009. Centers for Disease Control and Prevention (CDC); MMWR Morb Mortal Wkly Rep. 2010 Jul 2;59(25):769-72.

Surveillance for human West Nile virus disease - United States, 1999-2008. Lindsey NP, Staples JE, Lehman JA, Fischer M; Centers for Disease Control and Prevention (CDC); MMWR Surveill Summ. 2010 Apr 2;59(2):1-17. Erratum in: MMWR Surveill

Local impact of temperature and precipitation on West Nile virus infection in Culex species mosquitoes in northeast Illinois, USA. Ruiz MO, Chaves LF, Hamer GL, Sun T, Brown WM, Walker ED, Haramis L, Goldberg TL, Kitron UD. Parasit Vectors. 2010 Mar 19;3(1):19.

Goal need a proposal to be submitted (as stated in recent email) — To extend order Bott to approve (show evidence that working to connec

Tara Gurge

From: Tara Gurge
Sent: Friday, May 17, 2019 11:07 AM
To: 'Tal Achituv'
Subject: RE: FW:URGENT- 57 walker lane HEARING WIL

Importance: High

Tal-

Thanks for the follow-up email. It is very helpful to know that these meetings and these sewer connection discussions are taking place. I was not made aware of that. When is your next meeting? The Health Division would like to attend. Let me know. I will also follow-up with the Town Engineer with this latest information that you provided.

Also – Just a reminder. Here are the email excerpts noted below that were discussed and agreed to when we allowed your pipe repair to be conducted, along with my follow-up email correspondence from my contact a MassDEP. This Enforceable Agreement Order was given by the Town of Needham Engineering AND Health Depts. back in November 2017, as you may recall. (See highlighted area.) See below:

On Thu, Nov 30, 2017 at 4:37 PM Tara Gurge <TGurge@needhamma.gov> wrote:

Tal -

Great – So I'm taking this as the most updated version. I just got off the phone with Tom Ryder from our Town Engineering Dept. **He is in agreement, that we can allow this pipe repair between the home and the septic tank, as long as you agree to sign an 'Enforceable Agreement' with the Health Department** which states that you will be connecting to the town municipal sewer system in the near future (next couple of years.)

Email from MassDEP – After we received your follow-up info. that you provided to me from your contacts at MassDEP, we again reached back out to our contact below and asked her if indeed **the septic system pipes, along with the septic system components, are all part of the complete septic system, and that if a pipe fails due to its age, then that is also considered part of the complete septic system,** thus a new compliant Title Five septic system needs to be installed and/or the property must be connected to the municipal sewer system? And here was her direct response. SEE BELOW:

Email excerpt from Claire Golden @ Mass DEP — (see attached - sent 3/13/19

There is an existing Enforceable Agreement for the upgrade which was consented to. The Enforceable Agreement is, to the best of my knowledge, in full force and effect.

The upgrade needs to happen either by enforcing the Agreement and/or pursuing other enforcement options. With orangeburg pipe you're likely looking at a 60 year old system that has outlasted standard systems and needs an upgrade.

I hope this helps.
Claire

MassDEP
Department of Environmental Protection

Claire A. Golden, EEIV
MassDEP Wastewater Management and Surface Water Permitting Programs
205B Lowell St
Wilmington, MA 01887
978-694-3244
978-694-3499 (fax)
claire.golden@mass.gov

Follow MassDEP on Twitter at http://twitter.com/MassDEP
Visit our website at www.mass.gov/eea/agencies/massdep

PLEASE NOTE: If you cannot meet this Enforceable Agreement deadline, we must know this ASAP. We may be able to work with you on giving you a one-time extension, but you must submit a detailed sewer connection proposal to all Town Depts. involved in giving us all details on this project, which must also include strict timeframes for this sewer connection. This proposal will need to be submitted to the Board of Health for their final approval in a timely manner. (The BOH meets on a monthly basis.)

Please get back to me and let me know if you have any follow-up questions on that requirement. I will also need to hear back from you on when your next meeting is scheduled for, and where this meeting is taking place, etc.

Thanks for your continued cooperation in this urgent public health matter.

Thanks,

TARA E. GURGE, R.S., C.E.H.T., M.S.
ASSISTANT PUBLIC HEALTH DIRECTOR
Needham Public Health Division
Health and Human Services Department
178 Rosemary Street
Needham, MA 02494
Ph- (781) 455-7940; Ext. 211/Fax- (781) 455-7922
Mobile- (781) 883-0127
Email - tgurge@needhamma.gov
Web- www.needhamma.gov/health

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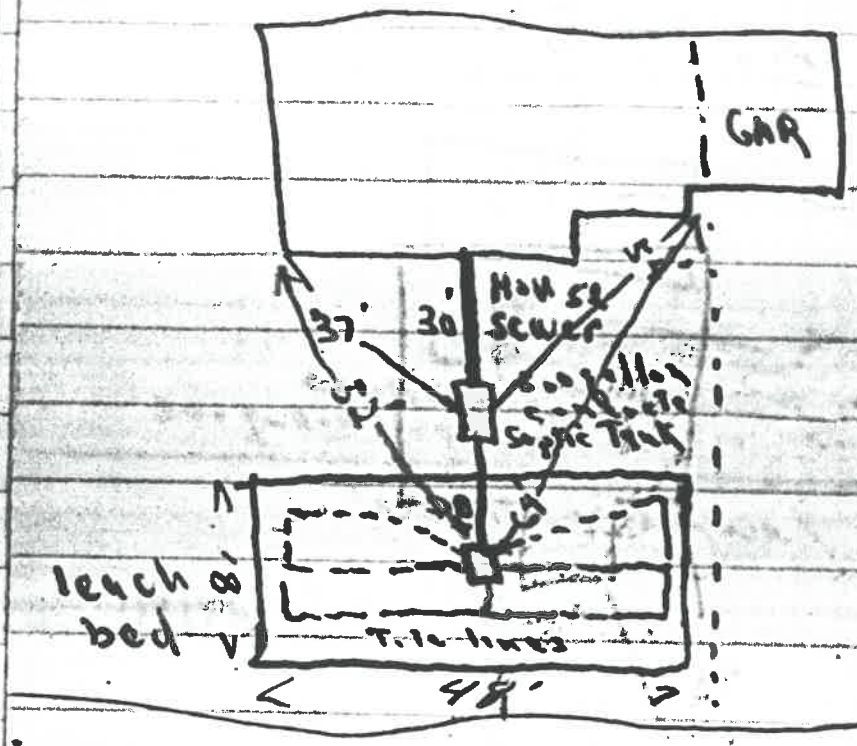
42 ✓

B224 - 0

Jensen-Bielski - 57 WALKER LANE

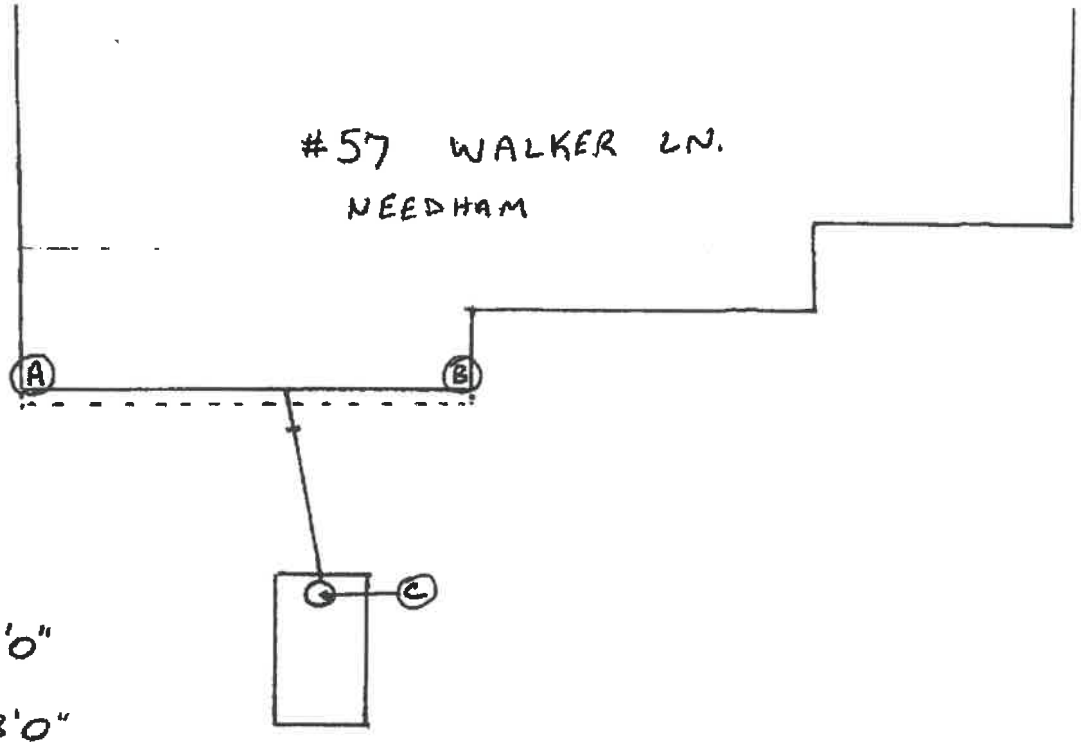


9/26/56 -

Leach system in properly but inlet line from Septic tank to Distrib. box seems lower than leach tile lines - nec. to raise.

10/15/56 - INLET LINE TO DISTRIBUTION BOX RAISED

FINAL APPR - 10/16/56



A TO C = 34'0"

B TO C = 28'0"

Pipe Replaced from Existing CAST IRON coming OUT OF HOUSE INTO Existing Septic TANK. New inlet tee installed.

12/1/2017

KENNY JONES CORP.
P.O. Box 72
WALPOLE, MA 02081
508-850-5151

Tara Gurge

From: Tal Achituv <tal@achituv.com>
Sent: Thursday, November 30, 2017 5:07 PM
To: Tara Gurge
Cc: Rachel Achituv
Subject: Re: Repair to sewer main at 57 Walker Lane

Thanks Tara.

Kenny says he will be ready for inspection at 1.
On Thu, Nov 30, 2017 at 4:37 PM Tara Gurge <TGurge@needhamma.gov> wrote:

Tal -

Great – So I'm taking this as the most updated version. I just got off the phone with Tom Ryder from our Town Engineering Dept. He is in agreement, that we can allow this pipe repair between the home and the septic tank, as long as you agree to sign an 'Enforceable Agreement' with the Health Department which states that you will be connecting to the town municipal sewer system in the near future (next couple of years.)

We understand, due to your recent email, that you will not be finishing off your second floor addition space (as stated in the attached document that was in your septic file – done by previous owner), until you connect your property to the municipal sewer, once it gets brought down the street in front of your house.

The Enforceable agreement will be following in a separate email shortly. In the meantime, you may set up an appointment with Kenny Jones for the repair. I know you mentioned that you wanted to conduct this repair tomorrow, so right now we have some slots available at 9 AM, and also any time between 12-2 PM in the afternoon. We will have to meet with the septic installer on site to confirm that this pipe was replaced and that it's at the correct invert and that it's Schedule 40 PVC piping, etc.

Please let me know what time works best for the installer, so we can put that in our schedule.

Thanks,

Tara

From: Tal Achituv [mailto:tal@achituv.com]
Sent: Thursday, November 30, 2017 4:04 PM

To: Tara Gurge
Cc: Rachel Achituv
Subject: Repair to sewer main at 57 Walker Lane

Dear Tara,

To follow up on our conversation, I would like to summarize the conditions and plans regarding the sewage emergency at our house at 57 Walker Lane.

The situation is that there is a blockage in the pipe going from the house to the septic tank caused by deterioration of the orangeburg (cardboard+tar) pipe which connects the cast-iron main line to the septic tank.

This deterioration causes cracking/perforation, narrowing, and root-penetration into the pipe, which in turn also allows sewage to seep into the ground - since it is sitting in the blocked pipe which is no longer structurally sound, as well as backing up of sewage into the basement.

The house has an extension, built in 1996 by the previous owners, and we are aware that it cannot be turned into a bedroom without first making the necessary improvements to make such a remodel compliant with Title V (either through expanding/replacing the septic, or connecting to sewer).

Also, our intention is to connect to sewer, and we have been working as a group as part of an ongoing effort together with the town, primarily through Conservation (Matt Varrell), to understand the best way to deal with road reconstruction, utilities burial, gas service and sewer service. The main idea is to wait before taking any action until the residents and the town could design together a solution that incorporates all the environmental needs and requirements, and not only minimize cost and maximize effectiveness, but also minimize any risk to the environment by only opening up the road once and then replacing it with a proper modern road. The current state is that in this year's town meeting a budget has been approved to run a study to understand what is causing the deterioration of the pond. Pending the study's finding, our hope is that together with the town we can deal with floodwater infiltration, roof runoff, and replacement of septic systems to help address the level of nutrients flowing into the pond causing it to become unusable to the public.

Given that these bureaucratic processes take years, it is hard to predict by when we would be able to finalize all of these plans. I am encouraged that the study that we worked hard to get is due in the next few weeks, and that the new director of conservation seems to be as eager as Matt Varrell to work with the neighborhood towards finding a solution for the pond. This has been 2+ years of meetings, and I hope that we could arrive at a solution for walker lane in as little time as possible. It greatly depends on the rate in which the town will be moving forward with planning and recommendations for remediation of the nutrient overflow into the pond.

Had it been easier (or even feasible) to connect to sewer we would have chosen to do that over fixing the orangeburg pipe. But since the sewer main is two houses away, and more than 10 feet deep (well below the water table) it is a complicated and expensive process that cannot be feasibly done before the ground freezes anyway. I have been assured of this by several contractors. The ones that have the necessary equipment to pump out the water while they work are either overbooked, not licensed in the town, or unreachable at this time.

I had hoped to avoid having to deal with replacement of the orangeburg pipe through alternative means of opening up the clogged pipe but since Chris Seariac, the superintendent of water/sewer strongly advised against it, I am left with no other option but replacing the portion of the pipe that is deteriorated, for which we require a permit from the board of health.

Given this situation, the background, and the future plans, I hope that you can approve the permit for this work.

Best regards,

Tal Achituv.

Needham Public Health Department

1471 Highland Avenue, Needham, MA 02492 781-455-7500 ext. 511
www.needhamma.gov/health 781-455-0892 (fax)

Prevent. Promote. Protect.

December 1, 2017

Mr. Tal Achituv
57 Walker Lane
Needham, MA 02492

Re: Septic System Enforceable Agreement for #57 Walker Lane in Needham

Dear Mr. Achituv;

As you recall, we recently issued a Septic Construction permit to allow you to replace the Orangeburg pipe leading from your home to your septic tank, at the property address noted above, which according to our records is only an 800 gallon septic tank, which does not meet today's Title Five Septic System standards. The Town Engineering and Water and Sewer Departments, along with the Public Health Division, allowed this repair under the agreed to condition that an ***Enforceable Agreement*** would be signed and dated by you, which states that you will be connecting to the municipal sewer system in the next couple of years. (NOTE: We allowed you to conduct this repair in lieu of submitting a failed Title Five Septic System report, where if your system was found to be in failure, due to this compromised pipe (which you reported that raw sewage was actively backing up into your home), PER MASS DEPARTMENT OF ENVIRONMENTAL PROTECTION (MA DEP) REQUIREMENTS, YOU MUST CONNECT THIS SEPTIC SYSTEM WITHIN TWO YEARS FROM THE DATE OF THE FAILED TITLE FIVE INSPECTION REPORT, which obligates you to connect on or before the date that your emergency repair was made, which was on **December 1, 2017**.

Since at this time, it is not possible to connect to the municipal system (which is located two houses down), we are requiring that this ***Enforceable Agreement*** be set up and adhered to in order to meet our septic system abandonment/connecting to sewer requirements. This is an agreement between the Public Health Division and the property owner.

See Enforceable Agreement noted below:

I, Tal Achituv, who owns the property located at **#57 Walker Lane in Needham, MA**, agrees that the property will be fully connected to the municipal sewer line on the street on or before December 1, 2019. I agree that once the property is connected to the municipal sewer system, that a Septic Abandonment Form (see attached) is filled out and signed/dated, and submitted back to the Public Health Department for review/approval. (**NOTE**: I agree that this property is currently being evaluated and a decision will be made on the timing of this connection in the near future. I will continue to keep the Public Health Dept. in the loop on that.)

Property owner – Print: Tal Achituv / Sign: _____

Date: 12/15/17

Please call me if you have any questions at (781) 455-7500; Ext. 262.

Sincerely,

Tara E. Gurge, R.S., C.E.H.T., M.S.
Assistant Public Health Director

Tara Gurge

From: Golden, Claire (DEP) <claire.golden@state.ma.us>
Sent: Wednesday, March 13, 2019 11:35 AM
To: Tara Gurge
Cc: Brander, Kevin (DEP)
Subject: RE: Enforceable Agreement question

Tara,

There is an existing Enforceable Agreement for the upgrade which was consented to. The Enforceable Agreement is, to the best of my knowledge, in full force and effect.

The upgrade needs to happen either by enforcing the Agreement and/or pursuing other enforcement options. With orangeburg pipe you're likely looking at a 60 year old system that has outlasted standard systems and needs an upgrade.

I hope this helps.
Claire

MassDEP
Department of Environmental Protection

Claire A. Golden, EEIV
MassDEP Wastewater Management and Surface Water Permitting Programs
205B Lowell St
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978-694-3244
978-694-3499 (fax)
claire.golden@mass.gov

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Visit our website at www.mass.gov/eea/agencies/massdep

From: Tara Gurge [mailto:TGurge@needhamma.gov]
Sent: Tuesday, March 12, 2019 9:23 AM
To: Brander, Kevin (DEP)
Subject: Enforceable Agreement question
Importance: High

Kevin –

Hello – Hope you are doing well. I have a question - Is it true that the septic system pipes, along with the septic system components, are all part of the complete septic system, and that if a pipe fails due to its age, then that is also considered part of the complete septic system, thus a new compliant Title Five septic system needs to be installed and/or the property must be connected to the municipal sewer system?

We had a septic system fail in town near a pond that had 'Orangeburg' piping that had collapsed that needed immediate Emergency replacement, and we allowed the emergency repair ONLY under the condition that the system would be

properly decommissioned and then tied into the municipal sewer system within a 2-year time frame. So we issued an Enforceable Agreement as a result. (We are approaching the 2-year deadline, and we are now getting push-back from the owner that is now stating that this was a simple 'plumbing issue' and not a septic issue, and the Enforceable Agreement does not apply in his case??? Is that accurate?

Please let me know.

Thanks,

TARA E. GURGE, R.S., C.E.H.T., M.S.
ASSISTANT PUBLIC HEALTH DIRECTOR
Needham Public Health Division
Health and Human Services Department
178 Rosemary Street
Needham, MA 02494
Ph- (781) 455-7940; Ext. 211/Fax- (781) 455-7922
Mobile- (781) 883-0127
Email - tgurge@needhamma.gov
Web- www.needhamma.gov/health

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July 12, 2019

Tara E. Gurge
Assistant Public Health Director
Needham Public Health Dept.
1471 Highland Ave.
Needham, MA 02492

Dear Ms. Gurge,

At your request I am writing to describe the efforts that I have made since the signing of the "Enforceable Agreement" on December 1, 2017, approximately 18 months ago. At that time I had contacted the Town because I believed my septic system may have failed. As we now know, the septic system did not fail, but the "Orangeburg pipe" which connected my septic system to the house did fail. In the process of my investigations, I learned that this kind of pipe which is much like cardboard, was used during the war and post war era instead of cast iron. The septic related problem I experienced has now been resolved by replacing that piping with regulation PVC piping suitable for a 21st century system.

I understand that the Agreement requires that "per Mass Dept. of Environmental Protection (MA DEP) requirements, I must connect this septic system within two years from the date of the failed title five inspection report". I will provide below details on the efforts I've made to comply with this agreement. There are two additional conditions that relate to this compliance.

1. My septic system has been tested and confirmed that it is indeed in good working condition, and in fact did not fail.
2. My conversations subsequent to my original contact with the Town have reinforced an understanding that I would be required to take "reasonable means" to comply with the agreement and connect to Town sewer.

While I considered asking you to waive this Agreement now that we know the septic system has not failed, I do want to make clear that I am still very committed to connecting to the Town sewer system. However, as you will see in the information below, the steps required to connect by December 1 do not, in my belief, meet the standards of "reasonable means".

When this first happened and I began the process to cost out and undertake a remedy to the situation, I was given an estimate by the both town engineering staff, as well as contractors, that I should expect to pay between $20K-$30K to connect my home to the Town sewer. I assume that $40K would be the upper range of what the Town would expect to be a "reasonable" cost to comply with the Agreement. Had the estimates I received come anywhere close to this estimate, I would have proceeded. But the estimates I received (and I'm summarizing here, more details are below) led to a likely price of closer to $95K-$120K range and possibly higher when the terrain of the land and proximity to the pond is considered. More important, a decision to act unilaterally to solve my own problem would involve interfering with or even blocking the longer range plans of my Walker Pond neighbors.

Initially, since the agreement was signed just as the ground was starting to freeze, we had to wait till spring before any contractor would seriously engage. Early in the spring of 2018 I started reaching out to contractors, and once some started coming on-site it became clear that this kind of job cannot be done by most contractors due to the complex conditions including length, depth, proximity to wetlands, need to work under the water table, etc. It has been extremely difficult to get contractors due to these reasons.

Of the ~50 contractors I contacted, the vast majority was incapable of doing this. The contractors who can, of which there are only a few in this area, are very busy. Additionally, the complexity-to-size ratio makes this job of no interest to some (such as Lynch Development). Bigger contractors who aren't scared away by the complexity-size ratio are booking into 2021 (such as Fed Corp). The initial efforts through the spring and summer of '18 have come up with two willing and able contractors (Malone & Murphy), only one of which would acutally communicate and come for a site visit (Murphy).

Cost estimates from Bob Murphy were in the 80-100k range, exclusive of engineering/permits/fees. The town engineer pushed back on these costs, but the town engineer's estimates were not taking into account some of the complexities that are apparent in the field and were plans that did not take into account the need to not block the neighbors from being able to connect as well, like the need for the sewer to stay deep enough, and the need for a manhole, etc.

After several iterations between Bob and Tony, either way you look at it the project comes out at 90-130k with the engineering costs of $10K-$30K excluded. The high engineering costs make even looking into getting a more serious quote from Bob than the one you'll find attached infeasible. Moreover, the engineering process is only likely to cause further increases in the costs rather than savings due to extra findings that may come up.

In our meeting with the town, which you attended back in May, Tony the town engineer had mentioned the option for the town engineering department to develop such a plan for the neighborhood, if we exhaust all options for finding a feasible solution for connecting my house to the town sewer. He had pointed out that he knows at least one more contractor who is currently doing similar work, and which was not on my lists of contractors -- Jones Contracting.

After finally getting Jones Contracting on site, you'll find the estimate attached below, which is in-line with Bob Murphy's estimates, if not a little 'worse' (more expensive). Jones also pointed out that in the work done elsewhere in Needham, at similar depth and also near water, additional costs of tens of thousands of dollars kept being added due to findings on the ground (unsuitable material, digging depth required wider trenches and more road reconstruction, etc.) and suggests that this would likely cost more.

I have also been in touch with MA DEP, in efforts to understand the requirements and limitations that may be in effect, as well as the rest of the neighbors in order to attempt to bring (average) cost and complexity down, and I am glad to report that the neighbors on the road who are on septic systems are generally looking forward to being able to connect to sewer, if costs are reasonable.

At the DEP I reached out to Marybeth Chubb, and Claire Golden; The advice I received from both the Boston office as well as the North East Regional Office supports my assesment that while it is important that we seriously look into connecting to sewer, that the failure of the pipe leading from my house to the septic system is not a cause for failing of the septic system itself. They also mentioned that the two year requirement is not a MA DEP requirement, but rather that timing on these cases are entirely within the control of the LAA (in our case, the Needham BoH).

We are also very optimistic, through the neighborhood efforts, that through an integral approach to the all the issues at the town involving the road, walker lane, and walker pond, we will be able to come to the best outcome - of everyone connecting to sewer.

While most of my efforts have been invested towards finding a way to connect to sewer, I have also looked into replacing the septic system, and you'll find a quote for a system that is suitable both for my house, and to the proximity to the pond (a presby EnviroSeptic) which comes in at $30K.

I hope that we can all agree that it is worth putting time and effort on all sides to figure out how we might be able to connect to sewer, rather than end up installing a septic system. I think that this process has taught both you and me a lot about the situation that we did not realize at the beginning, and I hope that you would agree that the complexity uncovered merits reconsideration.

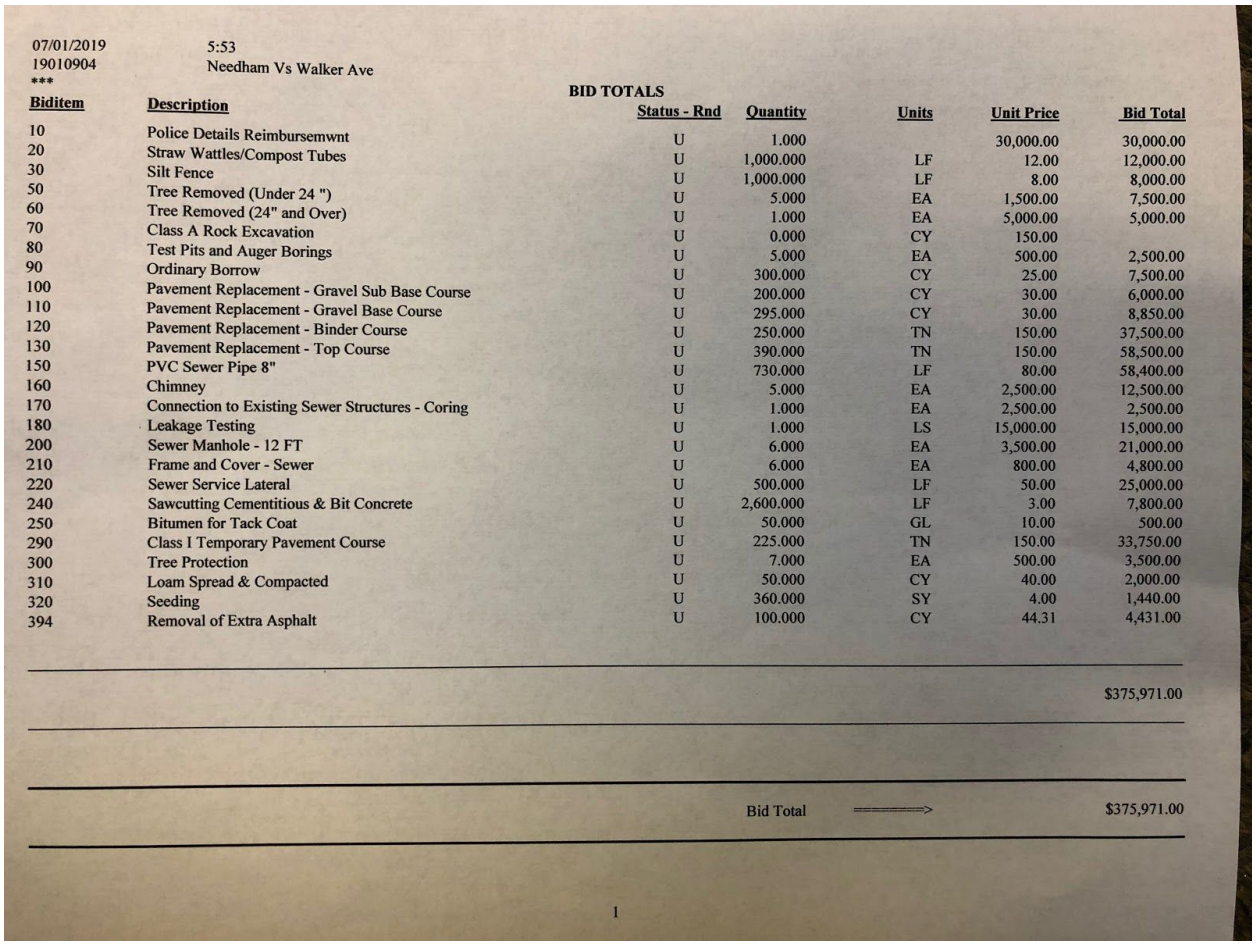
In summary, I signed the agreement with the understanding that this was, at most, a $30K-$40K problem, that it was required by MA DEP and that our septic system has failed. I submit below evidence of my good faith efforts to comply with the Agreement. Because none of these understandings are correct I respectfully request that the Agreement be set aside or voided. I further suggest that because the Town and the Walker Pond neighborhood have a long range interest in permanently resolving the potential of septic failures, and have a long range interest in preserving and protecting Walker Pond that the Dept of Public Health replace that Agreement with an Agreement to engage with the Walker Pond neighbors to explore the problems and potential solutions, involving a range of public and private experts, to develop a consensus plan of action.

Please find attached below:

- Timeline of my efforts to comply with the agreement
- Partial list(s) of contractors I have contacted
- Sewer Cost estimates from Bob Murphy
- Sewer Cost estimates from Jones Contracting
- Report from Kenny Jones after inspecting the septic system recently
- Septic (EnviroSeptic) estimate from Kenny Jones
- Map showing the other locations of sewer in the vicinity, showing that there are not better options for sewer than the one explored (initially we were hoping that the sewer on Central Ave is closer)

Sewer Estimates

From Russell Jones - Jones Contracting



07/01/2019 5:53
19010904 Needham Vs Walker Ave
***

BID TOTALS

Biditem	Description	Status - Rnd	Quantity	Units	Unit Price	Bid Total
10	Police Details Reimbursemwnt	U	1.000		30,000.00	30,000.00
20	Straw Wattles/Compost Tubes	U	1,000.000	LF	12.00	12,000.00
30	Silt Fence	U	1,000.000	LF	8.00	8,000.00
50	Tree Removed (Under 24 ")	U	5.000	EA	1,500.00	7,500.00
60	Tree Removed (24" and Over)	U	1.000	EA	5,000.00	5,000.00
70	Class A Rock Excavation	U	0.000	CY	150.00	
80	Test Pits and Auger Borings	U	5.000	EA	500.00	2,500.00
90	Ordinary Borrow	U	300.000	CY	25.00	7,500.00
100	Pavement Replacement - Gravel Sub Base Course	U	200.000	CY	30.00	6,000.00
110	Pavement Replacement - Gravel Base Course	U	295.000	CY	30.00	8,850.00
120	Pavement Replacement - Binder Course	U	250.000	TN	150.00	37,500.00
130	Pavement Replacement - Top Course	U	390.000	TN	150.00	58,500.00
150	PVC Sewer Pipe 8"	U	730.000	LF	80.00	58,400.00
160	Chimney	U	5.000	EA	2,500.00	12,500.00
170	Connection to Existing Sewer Structures - Coring	U	1.000	EA	2,500.00	2,500.00
180	Leakage Testing	U	1.000	LS	15,000.00	15,000.00
200	Sewer Manhole - 12 FT	U	6.000	EA	3,500.00	21,000.00
210	Frame and Cover - Sewer	U	6.000	EA	800.00	4,800.00
220	Sewer Service Lateral	U	500.000	LF	50.00	25,000.00
240	Sawcutting Cementitious & Bit Concrete	U	2,600.000	LF	3.00	7,800.00
250	Bitumen for Tack Coat	U	50.000	GL	10.00	500.00
290	Class I Temporary Pavement Course	U	225.000	TN	150.00	33,750.00
300	Tree Protection	U	7.000	EA	500.00	3,500.00
310	Loam Spread & Compacted	U	50.000	CY	40.00	2,000.00
320	Seeding	U	360.000	SY	4.00	1,440.00
394	Removal of Extra Asphalt	U	100.000	CY	44.31	4,431.00

$375,971.00

Bid Total ==========> $375,971.00

1

Septic Evaluation

Kenny Jones
CORPORATION
Excavating Contractors
(508) 850-5151

2092 Main St.
Walpole, MA 02081
Office: (508)-850-5151
Cell: (774)-259-4062
www.kennyjonescorp.com
kenny@kennyjonescorp.com

Septic System Examination:

RE: 57 Walker Ln. Needham, MA

On Friday 6/28/19 I examined the existing septic system at 57 Walker Ln. Needham, MA. I opened the septic tank covers and found that the inlet and outlet tees were in place and that the level in the tank was good.

I located the distribution box and found that the level was at the bottom of the outlet lines and that all outlet lines were taking effluent when water was added to the box with a garden hose.

Kenneth A. Jones, Jr. – President Kenny Jones Corp.

Septic Estimate

Kenny Jones Corporation
P.O. BOX 72
Walpole, MA 02081
Phone 508 850-5151
kenny@kennyjonescorp.com
www.kennyjonescorp.com

ADDRESS
Tal Achituv
57 Walker Ln.
Needham, MA 02492

PROPOSAL 1781

DATE 06/30/2019

ACTIVITY	QTY	RATE	AMOUNT
Engineering Proposal submitted for work at 404 N. Main St. Sharon, MA. Price includes the following: SEPTIC SYSTEM DESIGN WORK: $4,775 - Provide backhoe services to dig for perk test = $400 - Provide permit fees to Town of Needham = $1,375 - Provide services of Glossa Engineering, Inc. to provide the following: = $3,000 - Perform soil analysis and perk test - Create septic system design plan - Once system is installed create "as-built" plan Note: Additional costs may be incurred if Notice of intent / Order of conditions are required by Needham Conservation Commission	1	4,775.00	4,775.00
Septic System Conceptual Esstimate submitted for work at 57 Walker Ln. Needham, MA. Based on site visit on 6/28/19 and other worked performed in the area. A firm proposal will be created once design plans have been completed and approved. Price includes the following: - Furnish & install 125' of filter mitt erosion control barrier - Pump, crush, and remove existing septic tank and leaching area as necessary to get new system in - Furnish & install new, 1,500 gallon, H-10 loading, 2-compartment septic tank with risers & covers - Furnish & install new H-10 distribution box with riser & cover as necessary - Furnish & install septic sand / ASTM C-33 concrete sand as necessary (approx. 200 yards) - Furnish & install 240' of Presby Enviro-septic leaching pipes - Furnish & install observation ports in leaching area - Furnish & install vent pipe including granite post style vent concealer - Furnish & install magnetic locator tape over system components - Backfill and grade site per plan, blend in yard to try to smooth out remove excess fill (approx. 100 yards) - Loam & hydro-seed areas disturbed by system installation	1	26,000.00	26,000.00

Payment to be made as follows: 1/2 payment at start of job, and balance upon completion. Any deviations or alterations from above specifications, involving extra costs will be executed only upon written order, and will become an extra charge over an above original proposal. *Ledge is an extra charge.
Requests for additional Hydro seeding after initial application (if included in proposal) is an additional charge.

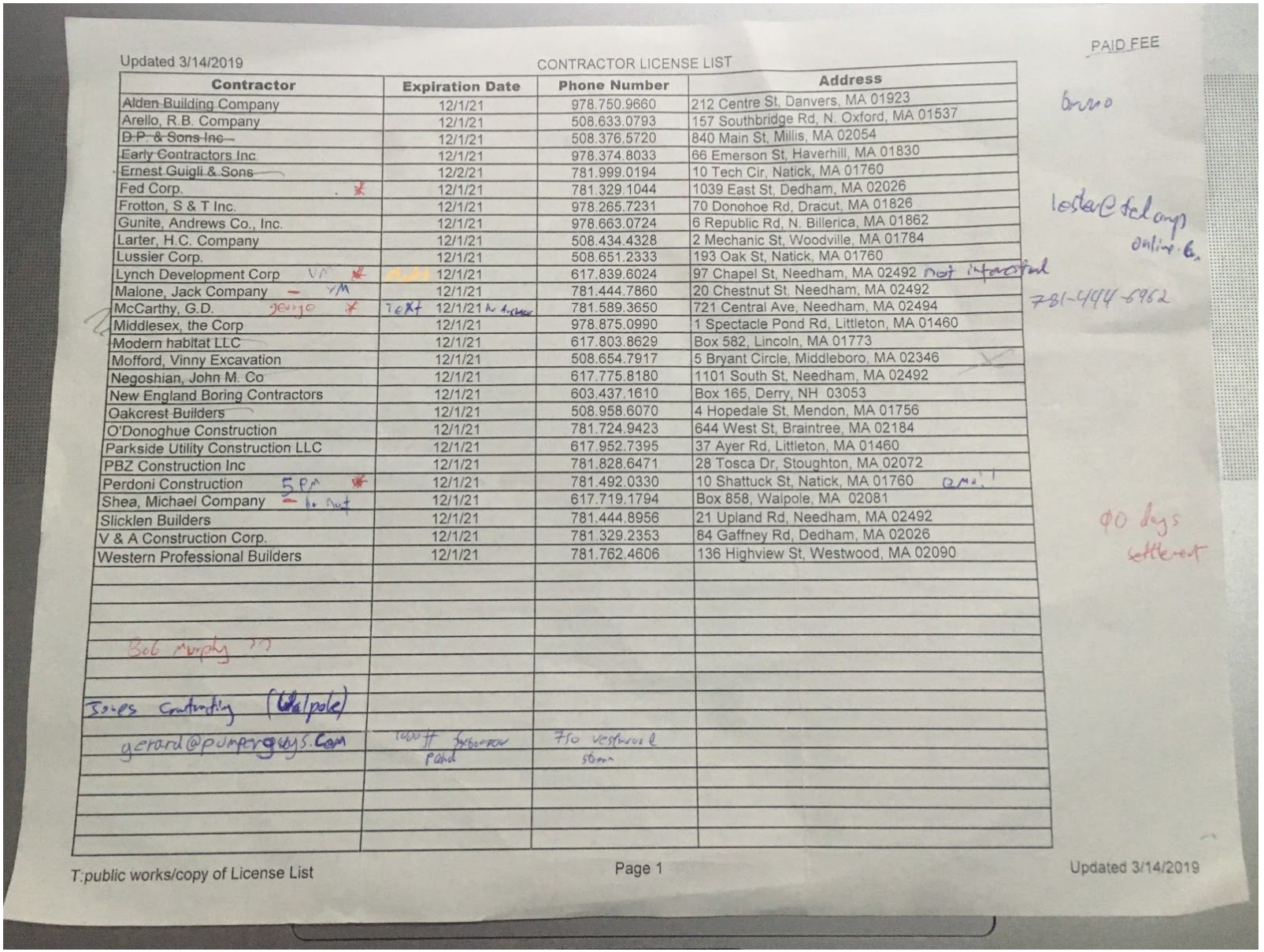
Contractor assumes no responsibility for any damage to underground sprinkler systems or driveways.
All agreements are contingent upon strikes, accidents or delays beyond our control. Acceptance of the Proposal constitutes a contract.
Proposal will be honored for thirty (30) days from date of issue.

TOTAL **$30,775.00**

Accepted By

Accepted Date

Partial list of contractors contacted



Updated 3/14/2019

CONTRACTOR LICENSE LIST

PAID FEE

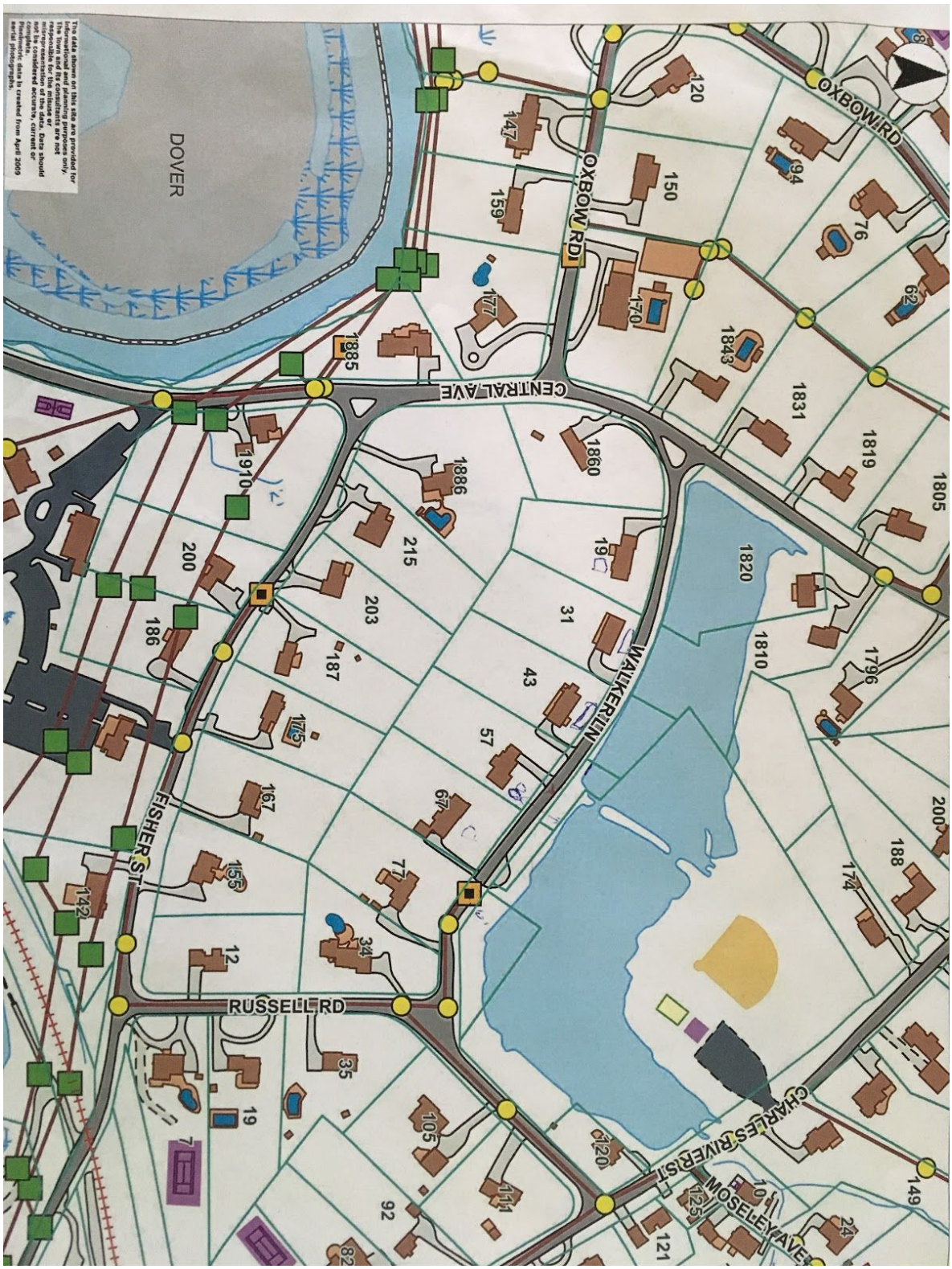
Contractor	Expiration Date	Phone Number	Address
Alden Building Company	12/1/21	978.750.9660	212 Centre St, Danvers, MA 01923
Arello, R.B. Company	12/1/21	508.633.0793	157 Southbridge Rd, N. Oxford, MA 01537
D.P. & Sons Inc	12/1/21	508.376.5720	840 Main St, Millis, MA 02054
Early Contractors Inc	12/1/21	978.374.8033	66 Emerson St, Haverhill, MA 01830
Ernest Guigli & Sons	12/2/21	781.999.0194	10 Tech Cir, Natick, MA 01760
Fed Corp.	12/1/21	781.329.1044	1039 East St, Dedham, MA 02026
Frotton, S & T Inc.	12/1/21	978.265.7231	70 Donohoe Rd, Dracut, MA 01826
Gunite, Andrews Co., Inc.	12/1/21	978.663.0724	6 Republic Rd, N. Billerica, MA 01862
Larter, H.C. Company	12/1/21	508.434.4328	2 Mechanic St, Woodville, MA 01784
Lussier Corp.	12/1/21	508.651.2333	193 Oak St, Natick, MA 01760
Lynch Development Corp	12/1/21	617.839.6024	97 Chapel St, Needham, MA 02492
Malone, Jack Company	12/1/21	781.444.7860	20 Chestnut St. Needham, MA 02492
McCarthy, G.D.	12/1/21	781.589.3650	721 Central Ave, Needham, MA 02494
Middlesex, the Corp	12/1/21	978.875.0990	1 Spectacle Pond Rd, Littleton, MA 01460
Modern habitat LLC	12/1/21	617.803.8629	Box 582, Lincoln, MA 01773
Mofford, Vinny Excavation	12/1/21	508.654.7917	5 Bryant Circle, Middleboro, MA 02346
Negoshian, John M. Co	12/1/21	617.775.8180	1101 South St, Needham, MA 02492
New England Boring Contractors	12/1/21	603.437.1610	Box 165, Derry, NH 03053
Oakcrest Builders	12/1/21	508.958.6070	4 Hopedale St, Mendon, MA 01756
O'Donoghue Construction	12/1/21	781.724.9423	644 West St, Braintree, MA 02184
Parkside Utility Construction LLC	12/1/21	617.952.7395	37 Ayer Rd, Littleton, MA 01460
PBZ Construction Inc	12/1/21	781.828.6471	28 Tosca Dr, Stoughton, MA 02072
Perdoni Construction	12/1/21	781.492.0330	10 Shattuck St, Natick, MA 01760
Shea, Michael Company	12/1/21	617.719.1794	Box 858, Walpole, MA 02081
Slicklen Builders	12/1/21	781.444.8956	21 Upland Rd, Needham, MA 02492
V & A Construction Corp.	12/1/21	781.329.2353	84 Gaffney Rd, Dedham, MA 02026
Western Professional Builders	12/1/21	781.762.4606	136 Highview St, Westwood, MA 02090

T:public works/copy of License List

Page 1

Updated 3/14/2019

Sewer location in the area



Timeline

Date	Event
November 1, 2017	Sewage in basement - Talk to Water/Sewer (Chris) - showing video - recommended against pipe-in-pipe,
November 29, 2017	Spoke to Kenny Jones
November 29, 2017	Sent plans to Karen Fruci
November 30, 2017	Acknowledged plans - said Kerry Malone will be in touch
November 30, 2017	Showed plans to Tom @ DPW/Engineering
December 1st 2018	Got permit + Work done -- E-mail understands connecting to sewer once it is in front of my house
December 15, 2017	Signed Enforceable Agreement given to Tara
March - April	Called contractors (see list attached)
May 4, 2018	Touch base w/Tara
May 8, 2018	Tara response
May 18, 2018	Tara check-in
June 27, 2018	Neighborhood meeting
July 16, 2018	Emailing with CRWA and MA River Alliance
July 23, 2018	Call with MA River Alliance
August 14, 2018	Neighborhood meeting - Pond + Road + CRWA + MARA + Garlick [Tal, Dan, Peter and Mark]
September 6, 2018	Sent plans to Bob Murphy [Asked that he try to come by before the 16th]
September 11, 2018	Town meeting about stormwater by-laws
September 25, 2018	Bob Murphy too busy
September 26, 2018	Spoke to Malone on the phone, emailed plans AGAIN
September 28, 2018	Bob Murphy follow up
October 4, 2018	Meeting on-site with MA Rep. Garlick re: pond, sewer

October 10, 2018	Reach out to MA Rep. Garlick in effort to help understand State requirements
November 2, 2018	Tara Check-in, Kerry Malone claims to not have documents (sent months ago, and then again)
November 2, 2018	Response to Tara - Malone not reponding
November 5, 2018	Tara check-in
November 5, 2018	response to tara
November 5, 2018	Tal <> Tara
December 19, 2018	Tara check-in
Feb-Mar 2019	Back and forth with Bob Murphy, looking for NEW engineering plan
March 7, 2019	DEP - Sanh.Tran [310 CMR 15.305 - LAA can set own deadline for completion of upgrade]
March 12, 2019	Bob Murphy + Buckley Engineer @ Bay Colony Group
March 20, 2019	Tara check in- follow up on engineering, Tony suggest a <60k solution (which won't work)
March 25, 2019	Quote from Bill Buckley at Bay Colony Group - $12k + 3 months turnaround
March 27, 2019	Neighborhood meeting - Quotes on road, further discussion on septics and sewer
March 29, 2019	DEP - Phone Marybeth Chubb / Claire Golden / Kevin Brander
April 1st 2019	DEP - Olusegun Onatunde -Forwarding to NERO
April 15, 2019	(date approx) Phone conversation with Claire Golden
April 24, 2019	Neighborhood meeting - Road re-pave delayed while we wait for sewer answers; Agreed to patch soon as we wait
April 26, 2019	Tara Checks in
May 14, 2019	Tara Check-in
May 16, 2019	General overview update to Tara
May 30, 2019	Tara checking in with town Chris/Tony 'have not heard from me in a while'
May 31, 2019	Meeting @ DPW with Tara, Tony+Tom(Engineering), Sean (Water/Sewer), and Deb (Conservation)
June 2019	Contacting Jones contracting working on Winding River Rd
	Quote from Jones Contracting comes in at > $100k per house, even after aggregation
June 27, 2019	Discussion with Conservation Commission
June 30, 2019	Kenny inspects Septic, find it to be functioning properly, provides quote for EnviroSeptic

Board of Health
TOWN OF NEEDHAM
AGENDA FACT SHEET

Needham Public Health
Prevent. Promote. Protect.

MEETING DATE: 09/13/2019

Agenda Item	Medical and Recreational Cannabis, CBD Products
Presenter(s)	Mr. Timothy Muir McDonald, Director of Health & Human Services Tara Gurge, Assistant Public Health Director Diana Acosta, Environmental Health Agent

1.	**BRIEF DESCRIPTION OF TOPIC TO BE DISCUSSED**

Update on Medical and Recreational Cannabis regulations. New CBD Store coming to Needham entitled, 'Your CBD Store' to be located at 1096 Great Plain Avenue. Received a heads up from the Building Commissioner. Review discussions that we have had with new store owner. Spoke to other Health Department directors that have this same store open already in their towns. Review potential regulation enforcement challenges on sale of CBD-infused edibles and infused pet treats.

2.	**VOTE REQUIRED BY BOARD OF HEALTH**

No specific vote is required, nor is one expected.

3.	**BACK UP INFORMATION ATTACHED**

Packet with information including MDAR Policy Statement on Sale of Hemp/Hemp Products and MA DPH CBD in Food Fact Sheet for food establishments.

CBD (Cannabidiol) in Food Manufactured or Sold in Massachusetts

If I have a Massachusetts license or permit under 105 CMR 500 (Regulations for Good Manufacturing Practices for Food) to manufacture food, is it legal to add cannabidiol (CBD) to that food?

No. The Massachusetts Department of Public Health (DPH) regulates food manufacturing in the Commonwealth (see 105 CMR 500). These regulations require that all food must be from approved sources that comply with federal, state, and local law and must not contain any prohibited ingredients. The FDA has concluded that federal law prohibits the addition of CBD to food products because CBD is an active ingredient in FDA-approved drugs. Since CBD is not an approved ingredient under federal law, it may not be added to manufactured foods.

If I have a Massachusetts permit under 105 CMR 590 (Minimum Sanitation Standards for Food Establishments) as a food establishment, is it legal to add CBD to food I distribute at retail?

No. The DPH sets minimum sanitary standards for food establishments in the Commonwealth. These regulations are enforced by local boards of health in partnership with the state (see 105 CMR 590). The regulations incorporate the FDA's Food Code, which requires that food be obtained from sources that comply with federal, state, and local laws and must not contain any prohibited ingredients. As noted above, the FDA has concluded that federal law prohibits the addition of CBD to food products because CBD is an active ingredient in FDA-approved drugs. Since CBD is not an approved ingredient under federal law, it may not be added to foods distributed at retail.

If I am licensed or permitted as a food manufacturer or retailer in Massachusetts, is it legal to add hulled hemp seeds, hemp seed protein, and/or hemp seed oil to food I manufacture and/or sell at retail?

Yes. The FDA has completed its evaluation of generally recognized as safe (GRAS) notices for hulled hemp seeds, hemp seed protein and hemp seed oil. These products can be legally added to human food, provided they comply with all other requirements.

I have a license issued by the Massachusetts Department of Agricultural Resources (MDAR) under its Interim Commercial Industrial Hemp Program Policy. Is it legal for me to add CBD to manufactured or retail food?

No. The MDAR Hemp Program does not provide an exception to the federal prohibition against adding CBD into food products.

May I market my hemp products (e.g., hulled hemp seeds, hemp seed protein and hemp seed oil) by making therapeutic claims without FDA approval?

No. The FDA has reiterated that cannabis products (hemp-derived or otherwise) that are marketed with claims of therapeutic benefit or any other disease claim must be approved by the FDA.

May I sell cosmetic products containing hemp or CBD at retail in Massachusetts?

DPH does not regulate cosmetics. The FDA has issued Frequently Asked Questions that address cannabis and cannabis-derived ingredients in cosmetics.

What can I do if I had an adverse reaction to a cosmetic product labeled as containing CBD?

You can report a cosmetic related complaint directly to the FDA.

Massachusetts Department of Public Health
Bureau of Environmental Health
250 Washington Street, 7th Floor, Boston, MA 02108
Phone: 617-624-5757 | Fax: 617-624-5777 | TTY: 617-624-5286

June 2019

THE COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENERGY AND ENVIRONMENTAL AFFAIRS

Department of Agricultural Resources
251 Causeway Street, Suite 500, Boston, MA 02114
617-626-1700 fax: 617-626-1850 www.mass.gov/agr

MDAR MASSACHUSETTS DEPARTMENT OF AGRICULTURAL RESOURCES

CHARLES D. BAKER
Governor

KARYN E. POLITO
Lt. Governor

KATHLEEN A. THEOHARIDES
Secretary

JOHN LEBEAUX
Commissioner

POLICY STATEMENT REGARDING THE SALE OF HEMP-DERIVED PRODUCTS IN THE COMMONWEALTH

This document sets forth the Massachusetts Department of Agricultural Resources ("Department") Policy Statement on the Sale of Hemp-Derived Products in the Commonwealth ("Policy"). This Policy provides notice of categories of hemp-derived products that are approved for sale in the Commonwealth and identifies products that are prohibited for sale. This Policy also provides information on how a person or entity may become licensed to sell as required by M.G.L. c. 128, Section 118. All proposed activities related to the sale of hemp-derived products must comply with this Policy in order to be considered in compliance with M.G.L. c. 128, Section 118.

Please note that this Policy applies only to hemp and hemp-derived products. All activities related to marijuana or the sale of any product containing marijuana are under the jurisdiction of the Cannabis Control Commission or law enforcement.

CONTROLLING LAW

The cultivation, processing, and sale of hemp in the Commonwealth of Massachusetts are regulated by both federal and state law.

With the passing of the Agricultural Improvement Act of 2018, referred to as the "2018 Farm Bill," signed on December 20, 2018, federal law now treats hemp as an agricultural commodity. Previously, hemp was not distinguished from marijuana under federal law, except under limited circumstances. Effective with this change in law, hemp is now legally recognized as a separate crop, the cultivation of which falls under the jurisdiction of the Unites States Department of Agriculture ("USDA") and state departments of agriculture, if approved by USDA. Additionally, the United States Food and Drug Administration ("FDA") retained its jurisdiction to address public health requirements for hemp-derived products under the Federal Food, Drug, and Cosmetic Act ("FFDCA") and other related laws.

The FDA has recently issued a statement that limits the types of cannabis-derived (including hemp-derived) products that may be manufactured and sold to consumers. In particular, the FDA has prohibited any food or other consumable products containing the cannabinoid known as "CBD" from interstate commerce without its approval.[1]

Under state law, Sections 116 through 123 of Massachusetts General Laws Chapter 128 assign the Department responsibility to regulate all activities related to hemp and industrial hemp within the Commonwealth of Massachusetts. The law directs the Department to administer a licensing and registration program for the cultivation, processing, and sale of hemp and industrial hemp in the Commonwealth. More particularly, the law assigns the Department general oversight responsibility for approving the sale of hemp-derived products for

[1] *See* https://www.fda.gov/news-events/press-announcements/statement-fda-commissioner-scott-gottlieb-md-new-steps-advance-agencys-continued-evaluation.

commercial purposes within the Commonwealth. The Department's regulation of hemp-derived products is separate and in addition to controlling federal law, including FDA directives.

The Massachusetts Department of Public Health ("DPH") is responsible for regulating food safety in the Commonwealth. DPH has recently issued policy guidance that is consistent with the FDA policy in prohibiting the manufacture or sale of any food or other consumable products containing CBD.[2] Under the state health and sanitary code, local boards of health have authority to enforce public health laws and regulations within a municipality.

SALE OF HEMP-DERIVED PRODUCTS

Under M.G.L. c. 128, Section 118, a license is required to "sell" industrial hemp (i.e. the products made from hemp). MDAR construes the term "sell" or "sale" of hemp to include the following sale transactions:

- Massachusetts Licensed Grower to Massachusetts Licensed Grower
- Massachusetts Licensed Grower to Massachusetts Licensed Processor
- Massachusetts Licensed Processor to Massachusetts retail facility (store)

Effective immediately, a person or entity that proposes to engage in the activities listed above shall be deemed licensed under M.G.L. c. 128, Section 118, provided that the person or entity is selling the hemp-derived products that are allowed under this Policy and is otherwise licensed as a Grower or Processor and in good standing with the Department. Such products are also deemed approved commercial uses under M.G.L. c. 128, Section 117(c). No further action or approval by the Department will be needed.

All persons or entities proposing to sell hemp-derived products in the Commonwealth are also responsible for complying with all applicable federal and state laws and regulations, including any regulations or guidance issued by the FDA, DPH, or local boards of health. Applicable laws and regulations are as follows:

- Products for sale must be in compliance with the FDCA, as amended, and Section 351 of the Public Health Service Act.
- Products must be in compliance with applicable DPH guidance.
- Products must be allowed for sale under this Policy and, as such, be deemed to be approved commercial uses pursuant to M.G.L. c. 128, Section 117(c).

APPROVED HEMP-DERIVED PRODUCTS

The following hemp-derived products are approved for sale in the Commonwealth pursuant to M.G.L. c. 128, Section 117(c) and under FDA and DPH guidance:

- Hemp seed
- Hemp seed oil
- Hulled hemp
- Hemp seed powder
- Hemp protein
- Clothing
- Building material
- Items made from hemp fiber
- Flower/plant from a Massachusetts licensed Grower to a Massachusetts licensed Grower or Processor

[2] *See:* https://www.mass.gov/info-details/cbd-in-food-manufactured-or-sold-in-massachusetts

HEMP PRODUCTS NOT APPROVED FOR SALE

The following products are **NOT** approved for sale in the Commonwealth pursuant to M.G.L. c. 128, Section 117(c) and are likewise prohibited for sale under FDA and DPH guidance:

- Any food product containing CBD;
- Any product containing CBD derived from hemp that makes therapeutic/medicinal claims;
- Any product that contains hemp as dietary supplement;
- Animal feed that contains any hemp products;[3]
- Unprocessed or raw plant material, including the flower that is meant for end use by a consumer.

The Department will provide compliance assistance to individuals licensed pursuant to M. G. L. c. 128 who are interested in engaging in the sale of any hemp-derived products. However, it is the responsibility of any person involved with the sale of hemp-derived products to review and understand M.G.L. c. 128, Sections 116 through 123 and this Policy.

Failure to comply may result in enforcement action from the Department, DPH, the local board of health, or law enforcement. This may include the inability to sell any hemp-derived products in the future, the destruction or seizure of illegal products, loss of license, or further legal action to determine whether the product sold is in compliance.

[3] *See* https://www.aafco.org/Portals/0/SiteContent/Announcements/Guidelines_on_Hemp_in_Animal_Food_May_1_2019.pdf.

Board of Health
TOWN OF NEEDHAM
AGENDA FACT SHEET

Needham Public Health
Prevent. Promote. Protect.

MEETING DATE: 09/13/2019

Agenda Item	Pest Management
Presenter(s)	Diana Acosta, Environmental Health Agent

1.	**BRIEF DESCRIPTION OF TOPIC TO BE DISCUSSED**

Updates from July and August for pest management project that took place in the Great Plain Ave parking lot. Review actions that took place at this site. Discuss the pros and cons of a potential amendment to the trash hauler regulation related to dumpsters. Additionally, there is interest in creating an ordinance to officially require monthly pest control in food establishments in Needham.

2.	**VOTE REQUIRED BY SELECT BOARD**

No specific vote is required, nor is one expected.

3.	**BACK UP INFORMATION ATTACHED**

Descriptions of Great Plain Ave are in packet and a memo explaining a potential ordinance and amendment to regulation is included.

NEEDHAM PUBLIC HEALTH

Memorandum

To: Needham Board of Health
From: Diana Acosta, Environmental Health Agent
Re: Environmental Health Responsibilities
Date: August 29, 2019

In response to our recent pest concern that we have been dealing with at the Masala Art, Hearth Pizza and Farmhouse Restaurant on Great Plain Avenue, the idea of adding an amendment related to dumpsters to the current waste hauler regulation has been discussed. We have recently reviewed a dumpster regulation from Arlington, MA. This regulation gives the agents of the Board of Health the authority to regulate commercial and residential dumpsters. This involves an application and $110 fee to be submitted and a permit to be issued for each dumpster in Needham with the exception of dumpsters used for collecting construction debris. The Arlington Board of Health, in conjunction with the Planning Board must approve the location of each dumpster. The permit holder is subject to meet certain criteria which include maintaining the dumpster and its enclosure free of odors, debris, and other nuisances.

There is interest in adopting a similar regulation in Needham but there is a concern that there is not enough man power to meet the requirements set forth by such a regulation. For example, there are a few waste haulers whom have been operating without a permit. Their permit renewal applications have been completed, with required recycling plans approved, and their renewal permit fees paid, however some companies have failed to send all their vehicles in to be inspected by the Needham Public Health Division thus not completing the permitting requirements. The Public Health Division is not able to keep track of exactly when these haulers are in town as haulers are not required to submit a pick up schedule. Additionally, many come in on an as-need basis, which in turn makes enforcing this piece highly challenging. The addition of the dumpster regulation will add a significant weight to our current responsibilities. In the meetings, the concern was raised on whether or not we would be able to keep up with the requirements of the regulation in a satisfactory way. Though Arlington enacted a dumpster regulation, the full program has not been rolled out yet as the new Food Code was adopted at the same time.

In addition to the dumpsters, we would like to create an ordinance for emergency pest enforcement similar to the trans-fat ordinance which complements the 2013 Federal Food Code. This ordinance would now officially require Needham food establishments to have a pest control service at least on a monthly basis. The Public Health Division will also be able to make a weekly pest control service a requirement when activity has been noted inside establishments. Currently the 2013 Federal Food Code or state code, 105 CMR 590.000, make no mention of a specific frequency for pest control to service a food establishment. Enacting this ordinance can aid in mitigating pest problems and prevent them from getting to the point of the Great Plain Avenue site as previously mentioned. We would also like to include in this ordinance other pest control requirements when an emergency order is issued, such as installing rodent landscape exclusion measures, which are proven to be successful in removing and preventing rodent harborage, and requiring establishments to work with a list of qualified pest control companies. Increase in establishment dumpster pick-up schedules would be another way to help remove trash/garbage debris, thus decreasing the risk of pests from being attracted to those areas.

Sincerely,

Diana Acosta

Diana C. Acosta, MPH
Environmental Health Agent

Town of Arlington
Department of Health and Human Services
Office of the Board of Health
27 Maple Street
Arlington, MA 02476

Tel: (781) 316-3170
Fax: (781) 316-3175

Wastehauler and Dumpster Regulations and for the Removal and Transportation of Solid Waste or Recyclables

Section 1: Statement of Purpose

Whereas the Arlington Board of Health has seen an 80% increase in rodent complaints throughout the Town since 2015;

Whereas there are 197 Food Establishments permitted in Town during 2018;

Whereas in 2014, 258.5 million tons of Municipal Solid Waste (MSW) was generated nationally[1];

Whereas in 2014, 14.9% of America's MSW was food waste[2];

Whereas on average in 2013 each American produced 4.4 pounds of waste per day[3];

Whereas Massachusetts Waste Ban regulations, as specified in 310 CMR 19.017, are in place to reduce adverse environmental impacts that may result from the human-generated solid waste;

Now, therefore it is the intention of the Arlington Board of Health to regulate dumpsters and wastehaulers that transport solid waste or recyclables to ensure that they are in compliance with the Massachusetts Waste Ban regulations and uniformly comply with permit requirements established by the Town of Arlington.

Section 2: Scope of Authority

This regulation is promulgated pursuant to the authority granted to the Arlington Board of Health by Massachusetts General Laws, Chapter 111, Section 31 that "Boards of Health may make reasonable health regulations".

Section 3: Applicability

These regulations shall apply to all commercial and residential dumpsters within the Town of Arlington, Massachusetts. Temporary dumpsters utilized in conjunction with building permits issued by Inspectional Services shall not fall under the jurisdiction of these regulations. All dumpsters utilized by a permitted food establishment in the Town of Arlington shall comply with both the regulations outlined herein and all applicable

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[1] United States Environmental Protection Agency, (EPA) (2016), *Advancing Sustainable Materials Management: 2014 Tables and Figures*. Retrieved from: https://www.epa.gov/sites/production/files/2016-11/documents/2014_smm_tablesfigures_508.pdf

[2] United States Environmental Protection Agency, (EPA) (2016*), Advancing Sustainable Materials Management: 2014 Tables and Figures*. Retrieved from: https://www.epa.gov/sites/production/files/2016-11/documents/2014_smm_tablesfigures_508.pdf

[3] United States Environmental Protection Agency, (EPA) (2016), *Municipal Solid Waste*. Retrieved from: https://archive.epa.gov/epawaste/nonhaz/municipal/web/html/

requirements as outlined by the current Food and Drug Administration (FDA) Food Code edition enforced in the Town of Arlington.

Section 4: Definitions

Board: The Board of Health or its agent or designee.

Composting: A process of accelerated biodegradation and stabilization of organic material under controlled conditions yielding a product which can be safely used, as those terms are or may be defined by *310 CMR 19.00: Solid Waste Management.*

Dumpster: Any container (other than a conventional trash can with lid) used for the outside storage of solid waste, recyclables, garbage, rubbish, organic matter, or refuse of any sort. This includes 96 gallon rolling toters supplied in lieu of a dumpster, as well as rolling toters used to collect and haul food waste and composting materials. This excludes temporary construction dumpsters permitted by Inspectional Services.

Garbage: The animal, vegetable or other organic waste resulting from the handling, preparing, cooking, consumption or cultivation of food, and containers and cans which have contained food unless such containers have been cleaned and prepared for recycling.

Owner: Any person, including a lessee or mortgagee in possession, who alone or severally with others, has lawful title to or lawful possession, care or control of any property on which a dumpster is located or proposed to be located. Owner also includes any authorized agent of such person.

Private Wastehauler: Any person, who, for compensation, supplies, maintains or services one or more dumpsters, or removes, transports or disposes of the contents thereof who is not apart of the Town's wastehauler contract.

Recycleables: A material that is banned from disposal in the Commonwealth of Massachusetts pursuant to *310 CMR 19.017: Waste Bans*. Mixed paper, cardboard, glass, metal, plastic containers are priority materials of this regulation.

Rubbish: Combustible and noncombustible waste materials, except garbage, and includes but is not limited to such material as paper, rags, cartons, boxes, wood, excelsior, rubber, leather, tree branches, yard trimmings, grass clippings, tin cans, metals, mineral matter, glass, crockery, dust, and the residue from the burning of wood, coal, coke and other combustible materials.

Solid Waste: Useless, unwanted or discarded non-recyclable solid or liquid wastes, excluding items restricted from disposal in Massachusetts, as defined by Table *310 CMR 19.017 (3)* of the Massachusetts Solid Waste regulations (*310 CMR 19.017).*

Waste Ban Materials: All materials designated as banned from disposal in the Commonweath of Massachusetts pursuant to *310 CMR 19.017*: *Waste Bans*, including: asphalt pavement, brick and concrete, cathode ray tubes, clean gypsum wallboard, ferrous and non-ferrous metals, glass and metal containers, lead acid batteries, leaves and yard waste, recyclable paper, cardboard and paperboard, single resin narrow-neckwed plastics, treated and

untreated wood and wood waste (banned from landfills only), white goods (large appliances), and whole tires (banned from landfills only).

Wastehauler: Any person, who, for compensation, supplies, maintains or services one or more dumpsters, or removes, transports or disposes of the contents thereof in accordance with the Town's wastehauler contract. This excludes landscaping companies that haul yard waste.

Section 5: Dumpster Permit Application

5.1 No dumpster shall be used or kept in the Town of Arlington after January, 2019 unless an application is submitted to the Board of Health and a permit is issued by the Board allowing the use of such dumpster. All permits shall expire at the end of the calendar year in which they are issued, and may be renewed annually with the application provided by the Board. There shall be a fee of $100.00 payable for said permit.

Section 6: Wastehauler Permit Application

6.1 No contractor, firm, or person shall supply a dumpster service in the Town of Arlington for the purpose of storage, removal, or transporting of solid waste or recyclables without first obtaining a wastehauler permit from the Board. All permits shall expire at the end of the calendar year in which they are issued, but may be renewed annually with the application provided by the Board. There shall be a fee of $11 0.00 payable for said permit.

Section 7: Dumpster Regulations

7.1 Each dumpster must be located at a distance from the lot line so as to not interfere with the safety, convenience, or health of abutters or residents. Dumpster location must be approved by the Board.

7.2 Each dumpster must be situated so as not to obstruct the view of flowing traffic.

7.3 When deemed necessary by the Board, it may be required that a dumpster site be enclosed or screened by the property owner or authorized agent.

7.4 Each dumpster must be of sufficient size and capacity to eliminate overflowing, and the property owner or authorized agent of the premises utilizing the service must take appropriate action immediately to empty contents when full.

7.5 All dumpsters must have a tight-fitting lid or cover, which shall be kept closed at all times except when being filled, cleaned or emptied. Each dumpster shall be constructed in such a way as to be leak-proof. If drain plugs are provided, they must be tight-fitting so as to prevent the leakage of liquid. All dumpsters must be maintained in good condition, without defect, as to prevent pest activity.

7.6 Any dumpster used for the disposal of liquids or organic matter shall be emptied as necessary to prevent insect or pest attraction.

7.7 The Board may order dumpster capacity size changes and/or additional pickups if in their opinion they find it necessary.

Section 8: Dumpster Permittee Responsibilities

8.1 The owner or agent of the dumpster shall have his/her business name and telephone number conspicuously displayed on the dumpster.

8.2 It shall be the responsibility of the owner and/or agent whose property is being serviced to maintain the dumpster area free of odors, scattered debris, overflowing debris, and all other nuisances. It shall also be the responsibility of the property owner and/or agent being serviced to maintain the dumpster area free from any condition that may be considered an attraction for rodents or other pests.

8.3 Dumpsters must be maintained in good condition. Rust holes, uncovered drain caps, and other physical evidence of neglect that allows rodents and other animals access to the dumpster contents are not permitted. Owners who have a history of poor maintenance shall be required to work with their contractor and swap out the dumpster for one that meets these regulations.

8.4 Dumpsters must be placed on pavement or concrete, not soil. The location must be approved by the Arlington Board of Health.

8.5 Food service establishments must also comply with *105 CMR 590.000*, the State Sanitary Code.

Section 9: Wastehauler Permittee Responsibilities

9.1 The dumpster wastehauler shall have the dumpster deodorized, washed or sanitized as directed by order of the Board as necessary to preclude pest attraction and activity.

9.2 The dumpster wastehauler shall have his/her business name and telephone number conspicuously displayed on the dumpster.

9.3 All permitted wastehaulers must be in compliance with applicable federal, state, and local laws. Each wastehauler vehicle must meet all Department of Transportation safety requirements at all times.

9.4 All materials must be securely contained in the vehicle. Littering or leaking shall be considered a violation of this regulation.

Section 10: Madatory Recycling

10.1 This regulation is intended to support and align with the Townof Arlington's Mandatory Recycling Bylaw as outlined in Massachusetts Waste Ban regulations *310 CMR 19.017*. All recycling must be in compliance with the requirements outlined in the Town's contracted wastehauler services.

Section 11: Violations; Enforcement

11.1 These regulations apply to all dumpsters and wastehaulers in the Town of Arlington whether for residential, commercial, or industrial use.

11.2 The Board is authorized to inspect a permitted dumpster or a permitted wastehauler's truck and load at any time. The Board also has the right to require weight slips or confirmation of disposal of solid waste or recyclables.

11.3 Wastehauler permits may be suspended or revoked by the Board for failure of the wastehauler to comply with the requirements of these regulations.

11.4 The Board may attach any conditions to the dumpster service permit that it deems would serve the interest of the safety, health, welfare, or quality of life of the citizens of the Town of Arlington.

11.5 The Board may, by written decision, vary the application of any provision of these regulations with respect to any particular case, when the enforcement thereof would do manifest injustice; provided that any such decision of the Board shall not conflict with the express purpose of these regulations. Any variance shall, while it is in effect, be available to the public during normal business hours in the Health Department Office.

11.6 Any person who violates the terms of these regulations shall be subject to a fine of $50.00 for the first offense and $100 for each subsequent offense under the non-criminal disposition authorized by M.G.L. Chapter 40 Section 21D and Town bylaw Title VIII, Article 3 Section 7. Each day shall constitute a separate offense.

11.7 If any provision of these regulations is declared invalid or unenforceable by any court of competent jurisdiction, the other provisions of the regulations shall not be affected thereby, but shall continue in full force and effect.

11. Effective Date

These regulations shall take effect on May 23, 2018.

1. _____
Marie Walsh Condon, MD

2. _____
Kenneth Kohlberg, JD, MPH

3. _____
Kevin Fallon, DVM

Public Health Nursing

Communicable disease investigation, surveillance, and case management.

- **This requires access by Massachusetts Department of Public Health 24/7 for emergency cases/outbreaks.**
- **Investigate outbreaks and /or conduct epidemiological surveys of all cases of diseases dangerous to the public's health.**

Hepatitis A

Measles

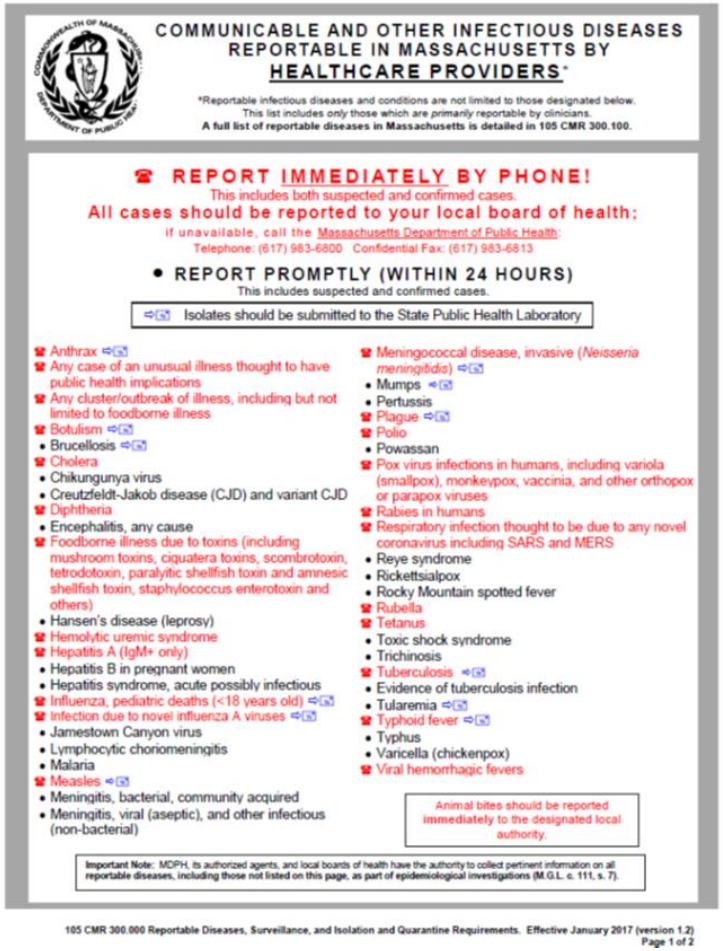
Rabies

Tuberculosis

Polio

Meningitis

Report to the State Department of Public Health all diseases on the list of diseases required to be reported by the Massachusetts General Law



COMMUNICABLE AND OTHER INFECTIOUS DISEASES REPORTABLE IN MASSACHUSETTS BY HEALTHCARE PROVIDERS*

*Reportable infectious diseases and conditions are not limited to those designated below. This list includes only those which are primarily reportable by clinicians.
A full list of reportable diseases in Massachusetts is detailed in 105 CMR 300.100.

☎ REPORT IMMEDIATELY BY PHONE!
This includes both suspected and confirmed cases.
All cases should be reported to your local board of health;
if unavailable, call the Massachusetts Department of Public Health:
Telephone: (617) 983-6800 Confidential Fax: (617) 983-6813

• REPORT PROMPTLY (WITHIN 24 HOURS)
This includes suspected and confirmed cases.

⇨ Isolates should be submitted to the State Public Health Laboratory

- ☎ Anthrax ⇨
- ☎ Any case of an unusual illness thought to have public health implications
- ☎ Any cluster/outbreak of illness, including but not limited to foodborne illness
- ☎ Botulism ⇨
- • Brucellosis ⇨
- ☎ Cholera
- • Chikungunya virus
- • Creutzfeldt-Jakob disease (CJD) and variant CJD
- ☎ Diphtheria
- • Encephalitis, any cause
- ☎ Foodborne illness due to toxins (including mushroom toxins, ciguatera toxins, scombrotoxin, tetrodotoxin, paralytic shellfish toxin and amnesic shellfish toxin, staphylococcus enterotoxin and others)
- • Hansen's disease (leprosy)
- ☎ Hemolytic uremic syndrome
- ☎ Hepatitis A (IgM+ only)
- • Hepatitis B in pregnant women
- • Hepatitis syndrome, acute possibly infectious
- ☎ Influenza, pediatric deaths (<18 years old) ⇨
- ☎ Infection due to novel influenza A viruses ⇨
- • Jamestown Canyon virus
- • Lymphocytic choriomeningitis
- • Malaria
- ☎ Measles ⇨
- • Meningitis, bacterial, community acquired
- • Meningitis, viral (aseptic), and other infectious (non-bacterial)
- ☎ Meningococcal disease, invasive (*Neisseria meningitidis*) ⇨
- • Mumps ⇨
- • Pertussis
- ☎ Plague ⇨
- ☎ Polio
- • Powassan
- ☎ Pox virus infections in humans, including variola (smallpox), monkeypox, vaccinia, and other orthopox or parapox viruses
- ☎ Rabies in humans
- ☎ Respiratory infection thought to be due to any novel coronavirus including SARS and MERS
- • Reye syndrome
- • Rickettsialpox
- • Rocky Mountain spotted fever
- ☎ Rubella
- ☎ Tetanus
- • Toxic shock syndrome
- • Trichinosis
- ☎ Tuberculosis ⇨
- • Evidence of tuberculosis infection
- • Tularemia ⇨
- ☎ Typhoid fever ⇨
- • Typhus
- • Varicella (chickenpox)
- ☎ Viral hemorrhagic fevers

Animal bites should be reported immediately to the designated local authority.

Important Note: MDPH, its authorized agents, and local boards of health have the authority to collect pertinent information on all reportable diseases, including those not listed on this page, as part of epidemiological investigations (M.G.L. c. 111, s. 7).

105 CMR 300.000 Reportable Diseases, Surveillance, and Isolation and Quarantine Requirements. Effective January 2017 (version 1.2)
Page 1 of 2

- Maintain electronic records on MAVEN (Massachusetts Virtual Epidemiologic Network)

LBOH Count - Events Per Disease and Classification in Jurisdiction

July 1, 2018 – June 25, 2019

DISEASE	STATUS	NUM_CASES
Babesiosis	DISEASE_STATUS_CONFIRMED	2
Babesiosis	DISEASE_STATUS_REVOKED	4
Babesiosis	DISEASE_STATUS_SUSPECT	1
Borrelia miyamotoi infection	DISEASE_STATUS_REVOKED	1
Calicivirus/Norovirus	DISEASE_STATUS_CONFIRMED	5
Campylobacteriosis	DISEASE_STATUS_CONFIRMED	5
Campylobacteriosis	DISEASE_STATUS_PROBABLE	1
Giardiasis	DISEASE_STATUS_CONFIRMED	1
Giardiasis	DISEASE_STATUS_PROBABLE	1
Group A streptococcus	DISEASE_STATUS_CONFIRMED	2
Group B streptococcus	DISEASE_STATUS_REVOKED	1
Hepatitis A	DISEASE_STATUS_REVOKED	3
Hepatitis B	DISEASE_STATUS_CONFIRMED	1
Hepatitis B	DISEASE_STATUS_CONTACT	2
Hepatitis B	DISEASE_STATUS_PROBABLE	4
Hepatitis B	DISEASE_STATUS_SUSPECT	1
Hepatitis C	DISEASE_STATUS_CONFIRMED	2
Hepatitis C	DISEASE_STATUS_REVOKED	4
Human Granulocytic Anaplasmosis	DISEASE_STATUS_CONFIRMED	1
Human Granulocytic Anaplasmosis	DISEASE_STATUS_SUSPECT	3
Influenza	DISEASE_STATUS_CONFIRMED	101
Influenza	DISEASE_STATUS_SUSPECT	20
Legionellosis	DISEASE_STATUS_REVOKED	1
Lyme Disease	DISEASE_STATUS_SUSPECT	40
Measles	DISEASE_STATUS_REVOKED	1
Meningitis - Unknown Type	DISEASE_STATUS_SUSPECT	1
Mumps	DISEASE_STATUS_SUSPECT	2
Pertussis (and other Bordetella species)	DISEASE_STATUS_REVOKED	1
Polio	DISEASE_STATUS_REVOKED	1
Rocky Mountain Spotted Fever	DISEASE_STATUS_REVOKED	1
Salmonellosis	DISEASE_STATUS_CONFIRMED	3
Shiga toxin producing organism	DISEASE_STATUS_PROBABLE	1
Shigellosis	DISEASE_STATUS_CONFIRMED	3
Streptococcus pneumoniae	DISEASE_STATUS_CONFIRMED	3
Streptococcus pneumoniae	DISEASE_STATUS_REVOKED	1
Tuberculosis	DISEASE_STATUS_CONFIRMED	10
Tuberculosis	DISEASE_STATUS_SUSPECT	3
Varicella	DISEASE_STATUS_CONFIRMED	1
Varicella	DISEASE_STATUS_PROBABLE	1
Varicella	DISEASE_STATUS_SUSPECT	3
Vibrio sp.	DISEASE_STATUS_CONFIRMED	1
West Nile Infection	DISEASE_STATUS_REVOKED	1

Assist residents, physicians, and facilities in control, treatment and reporting of communicable diseases

- Outbreaks
  - Assisted Living/SNFs
  - Schools (Private/Public)
  - Pre-schools
  - Tracking flu cases throughout the year to see trends: certain facilities, genders, age, locations
- Process
  - Coordination with MDPH
  - Testing stool/blood (if required)
  - Contacting all close contacts and places visited
  - Ex: parents, family, close friends
  - Evaluation of food, places visited, and activities done
  - Contact with providers

Consult and train school nurses, and community groups on communicable disease prevention and surveillance when necessary

Concerns over Vaccine Exemptions

- Newspaper articles
- Discussion with preschools
- Discussions with camps
- Multiple resident calls

Collaboration with Schools

- No hot water
- Coughing fits in a class room
- Pertussis
- Flu/Noro
- Complaints –ex: sickle cell anemia and temp control

Coordinate with environmental health agent with communicable diseases in public eating establishments

Educate the community to prevent spread of disease through articles and speaking engagements

- Flu
- Health and Wellness
- Ticks and Mosquitoes
- Dog Bites
- Any emerging public health educational need

FY 2019

- Articles:
  - Measles, collaborated with Tick/Mosquitoes, Flu
- Presentations:
  - Flu x3, Diabetes, Heart disease, Ticks/Mosquitoes

Keep updated with current trends in state/country through MDPH/CDC webinars, conference calls, and Trainings

Webinars/Conference calls:

- Rickettsia
- Measles
- Flu
- Hep A
- Acute Flaccid Myelitis

Trainings:

- Pediatric Immunization Conference
- Epidemiology Conference

Meetings with Local Hospitals to discuss trends within the Community

BID-Needham

- Frequent communication with Infection Control
- Bi-Annual meetings

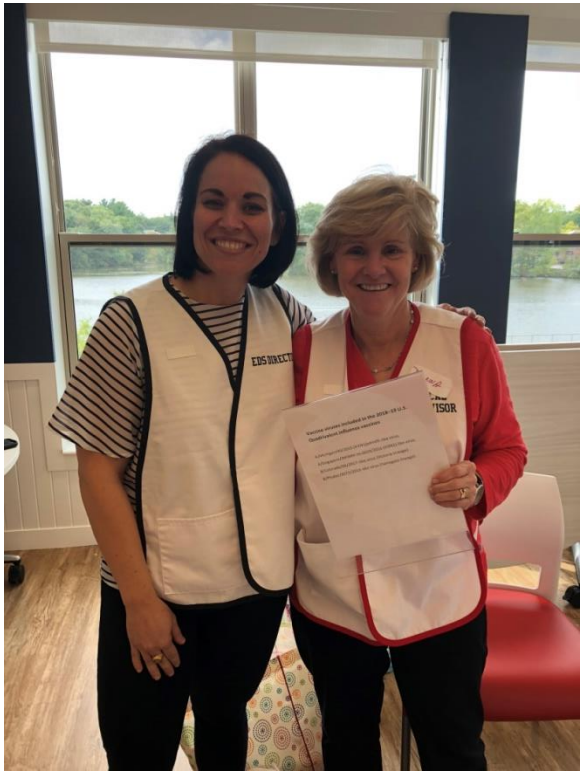
Newton-Wellesley

- Quarterly community meetings
- Annual Infection Control Meeting

2. Perform diversified duties to render professional nursing services

- Wellness/BP Clinics
  - RRC & COA
- TB Medication Management
- Vit B12 Shots
- Education
- HIPPA Compliance
- Referrals:
  - Riverside
  - Interface
  - Assistance Programs

Flu clinics, immunization clinics for outbreak situations in coordination with Massachusetts Department of Public Health



Flu Clinics

- 4 - Town Clinics
- North Hill
- Charles River Arc
- St Bartholomew's

Immunizations:

- Work with school nurses to coordinate immunizations as needed for new students and students in need.

Vaccine management - MIIS

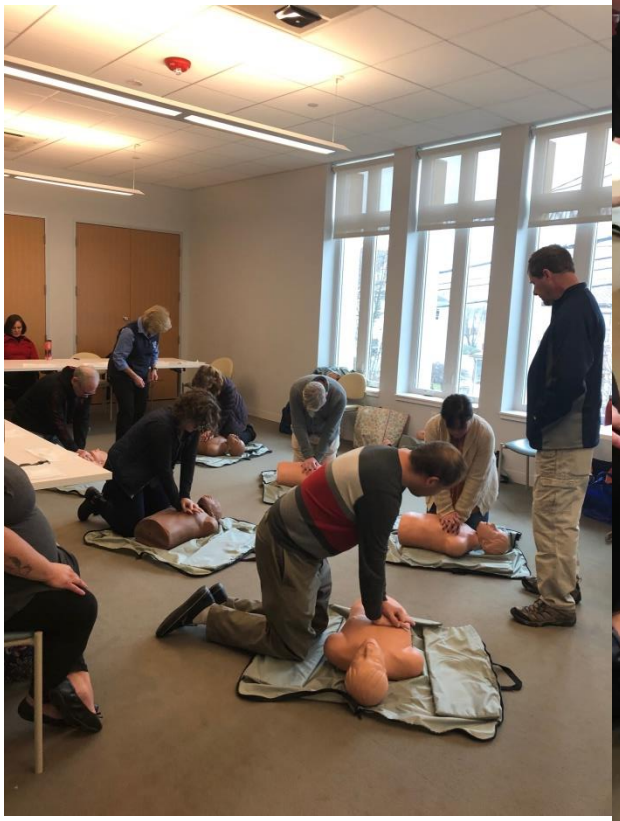
- Statewide system to manage vaccines
- Electronic records for immunization registration
- Enter every immunization we give, including all flu

MIIS

Massachusetts Immunization Information System

Total Immunization 2019: 724

Coordinate, implement and maintain Needham Public Access Defibrillation Program (PAD) including maintenance of AED's in Town Buildings as well as CPR/AED Classes for Town Employees – Teach two CPR Classes



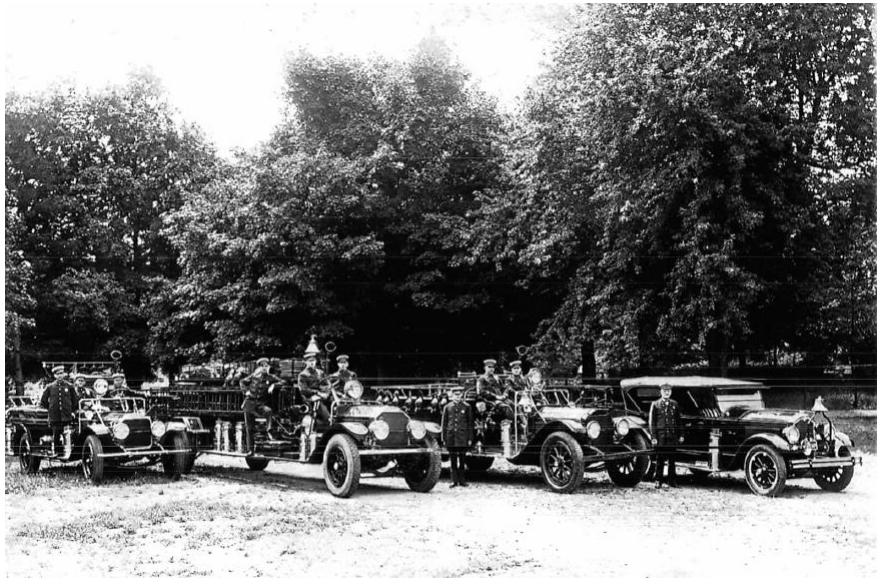
AED

19 AEDs

Stop the Bleed

- Trained building staff and RTS in coordination with EMS
- 19 kits to be hung with each AED
- Planning to Teach course through Needham U.

Narcan Trainings



Coordinate and collaborate with Needham Fire

Employee health- through outreach, clinics, initial assessments, screening and referrals – 4 clinics /month

- Water Department
- DPW am & pm
- RTS (as needed)

- Employee Education
  - Flu/noro
  - Tick, sun protection, mosquitos
  - General health education
- Referral and Support

Manage federal and local assistance programs for community's most vulnerable population

Self Help Inc
Programs & Resources to Help Families & Individuals Thrive (26)

Massachusetts Good Neighbor Energy Fund – The Salvation Army (2)

- Local Programs:
  - Gift of Sight (2)
  - Community Council Food Pantry (10)
  - Gift of Warmth (20)
  - Park and Rec(1)

Community outreach to service groups (Rotary Club, NN Chamber of Commerce), sports groups (concussion awareness)

Collaborate with first responders and municipal departments to help prepare the community for emergencies and disasters

- Plan, Coordinate, and Lead Town Trainings
  - April 1st: Functional Exercise Emergency Operations Center
  - June 10th: Active Threat Workshop

LEPC (Local Emergency Planning Committee)

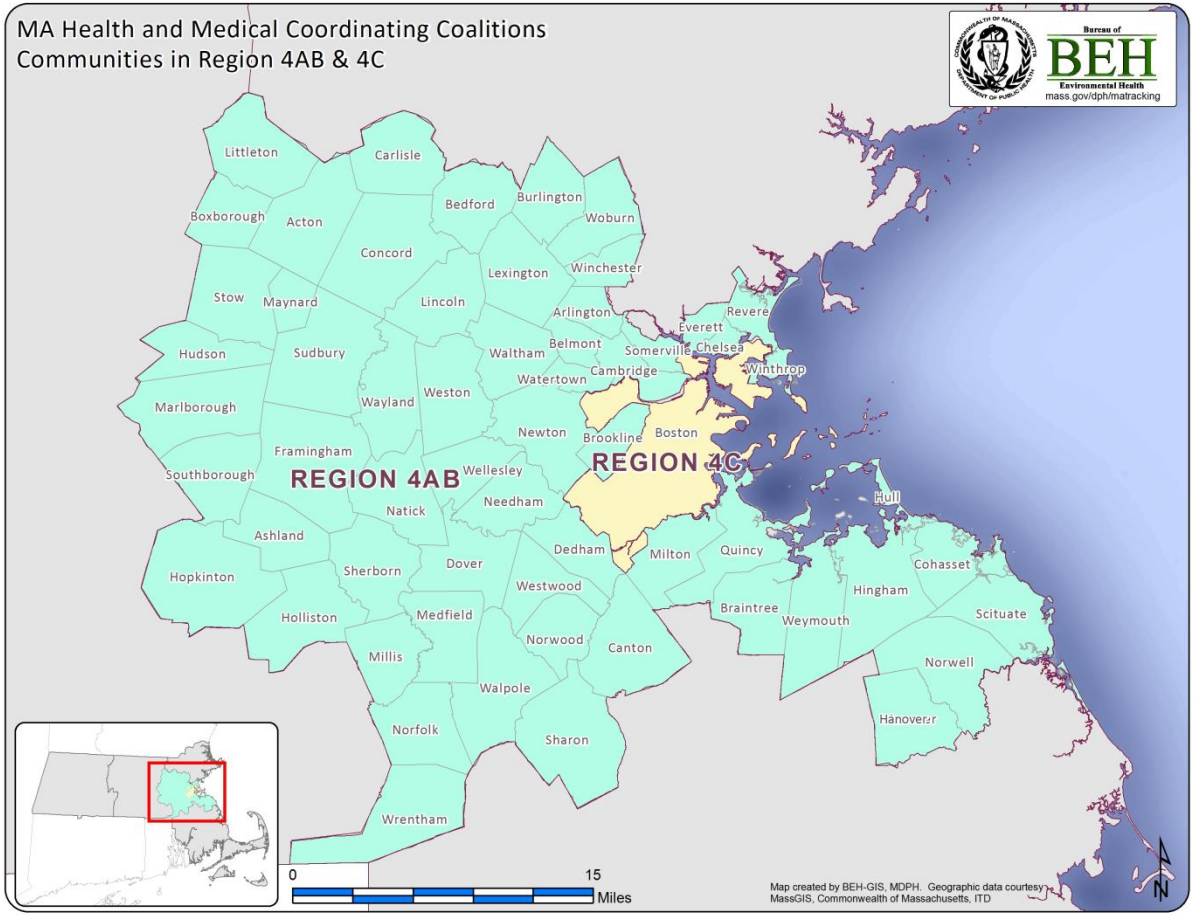
- Monthly meetings
- Presentations
- Certification Application
- Coordination of Trainings

Manage Medical Reserve Corps (MRC) Recruitment, Retention, and Training

- Process paperwork for volunteers
- CORI/SORI Process
- Badging
- Uploading to RAVE System

- Sept 2019 Meet and Greet
- NC8- MRC paperwork and applications
- Region 4AB Trainings
- Quarterly Drills with MDPH for funding

MRPC Region 4AB



Collaborate with regional partners (Region 4AB) with emergency preparedness planning, developing and participating in emergency planning including drills

- Quarterly Meetings
- Trainings:
  - Emerging Infectious Diseases
  - Stop the Bleed
  - Hot Topics in Preparedness
- Stakeholder Meetings
  - Hospitals, Community Centers

Meeting CDC Requirements

- Development of Emergency Dispensing Plans
- Sheltering Plans
- CEMP
- Coordination with MEMA and FEMA on Grant opportunities and Funding for emergencies

Educate the community in preparedness planning and readiness through outreach, speaking engagements, resources and articles

- 2 Emergency Preparedness Discussions at CATH
- Presentation at St Bart's
- Collaboration with local colleges for Emergency Plans
- Work with Nursing Facilities to develop plans
- Emergency Preparedness and Climate Change series (MAPC Grant)
- Grant Writing
  - MVP
  - HMEP
  - EMPG

Maintain list of emergency supplies/ Health Department Trailer for emergency response including EDS/Sheltering

Location	Item - EDS Trailer	Number	Date Bought	Expiration Date	Last Checked	Rotate with EMS
EDS Trailer	Tissue packs	162		n/a	3/1/18	
EDS Trailer	Anti-seetipc wipes	4			3/1/18	
EDS Trailer	Industrial gloves	43			3/1/18	
EDS Trailer	PPE packets : booties, gloves, gown, googles	56			3/1/18	
EDS Trailer	Scale - no batteries required	1		n/a	3/1/18	
EDS Trailer	Vest : clinic flow and ICS	LOTS		n/a	3/1/18	
EDS Trailer	Megaphone : Need 8 C batteries per megaphone - NOT included	2		n/a	3/1/18	
EDS Trailer	Lable maker : Need 6 AA batteries - NOT included	1		n/a	3/1/18	
EDS Trailer	Shoe Covers	1			3/1/18	
EDS Trailer	Surge protector	2		n/a	3/1/18	
EDS Trailer	Caution tape rolls	4		n/a	3/1/18	
EDS Trailer	Duct tape rolls	3		n/a	3/1/18	
EDS Trailer	Needham identification tags	250		n/a	3/1/18	
EDS Trailer	Extension Cords - 50 ft	4		n/a	3/1/18	
EDS Trailer	Flashlights : Need 2 D batteries a piece	6		n/a	3/1/18	
EDS Trailer	Gauze Pad : 4x4 (1200 per box)	4200			3/1/18	
EDS Trailer	Gauze Pad : 2x2	2400			3/1/18	
EDS Trailer	Surgical Tape	120			3/1/18	
EDS Trailer	Cold Press	23			3/1/18	
EDS Trailer	BandAid	2700			3/1/18	
EDS Trailer	Stretch Gauze	96			3/1/18	
EDS Trailer	First Aid Kits (MRC) : Bandaids, Gauze, Anti-septic wipes, roll of tape	81			3/1/18	
EDS Trailer	First Aid Kit (red): CPR mirco sheild	11			3/1/18	
EDS Trailer	Infection control kits : mask, goves,cap, coverall, wipes, waste bag, bio hazard label	450			3/1/18	
EDS Trailer	CHUCKS	300			3/1/18	
EDS Trailer	Tyvek Coverall Suits L	50			3/1/18	
EDS Trailer	Tyvek Coverall Suits XL	25			3/1/18	
EDS Trailer	Gowns	640			3/1/18	
EDS Trailer	Syringe 3mL, 25 Gx1 inch	600		Mar-22	3/1/18	
EDS Trailer	Alcohol wipes	4000			3/1/18	
EDS Trailer	Goggles	330		n/a	3/1/18	
EDS Trailer	Bio Hazard Bags	250			3/1/18	
EDS Trailer	Trauma Dressings	100			3/1/18	
EDS Trailer	Backpacks	100?		n/a	3/1/18	
EDS Trailer	MRC bags	40?		n/a	3/1/18	
EDS Trailer	Theremeter	10		n/a	3/1/18	
EDS Trailer	CPR mouth barriers	62			3/1/18	
EDS Trailer	CPR pocket masks	4			3/1/18	
EDS Trailer	Gloves S	1900			3/1/18	
EDS Trailer	Gloves M	1700			3/1/18	
EDS Trailer	Gloves L	1800			3/1/18	
EDS Trailer	Gloves XL	1600			3/1/18	
EDS Trailer	Surgical Masks	1350			3/1/18	
EDS Trailer	Clock : Needs 1 AA battery , NOT included	1		n/a	3/1/18	
EDS Trailer	Wall light : Needs 4 AA batteries, NOT included	2		n/a	3/1/18	
EDS Trailer	Caps	500			3/1/18	
EDS Trailer	Shoe Covers	50			3/1/18	
EDS Trailer	Sharps Containers	24			3/1/18	
EDS Trailer	N 95 Mask	720	3/26/18	3/26/23	3/26/18	3/1/21
EDS Trailer	Ponchos	200		n/a	3/1/18	
EDS Trailer	Warming Blankets	100		n/a	3/1/18	

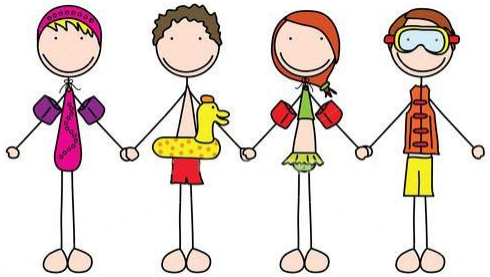
Trailer Supplies

High School Supplies

CATH Supplies

EDS Supplies

Review/ Inspect Summer Camps



Collaborating on housing inspections through implementing and supervising plans of action with municipal & community departments with housing/hoarding situations

Collaborate with animal Control for the management of Human exposure to suspect Rabid Animals.

CCIT(Community Crisis intervention Team) – case management/resident resources

Participate on Health Department Committees and coalitions
Domestic Violence Action Committee, Substance Use Prevention

Needham DVAC

Break the Cycle

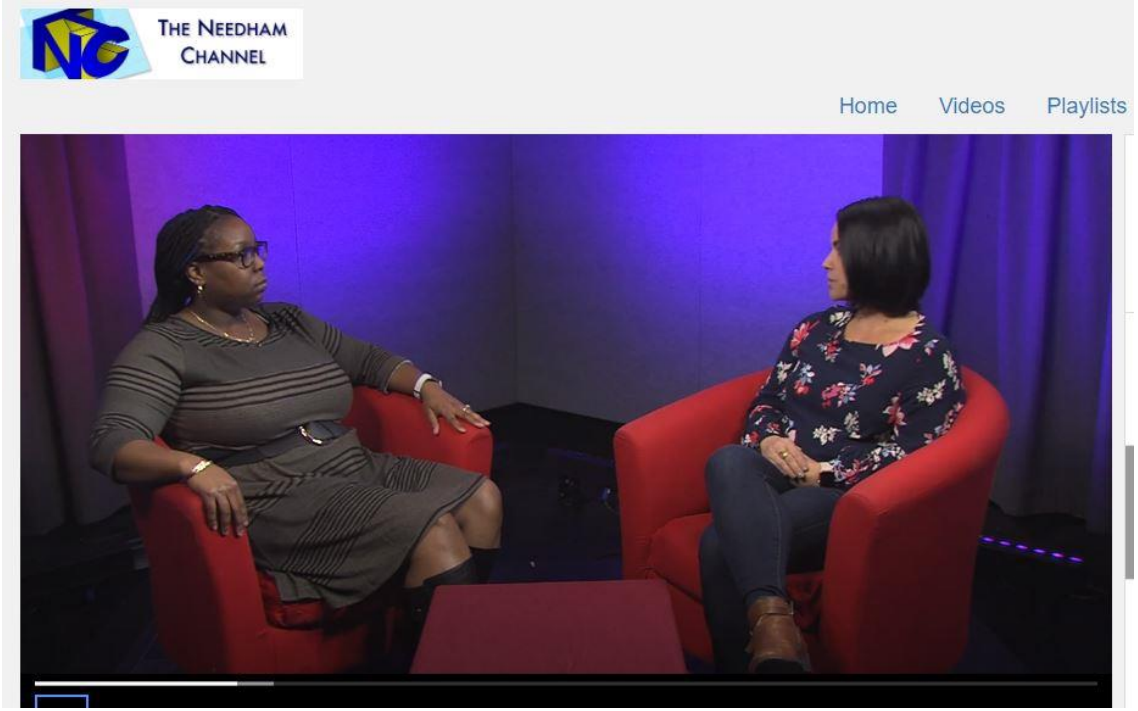
....that breaks the family

- Harvest & Street Fair
- RAD Training
- Mother's Day Donation Drive
- Cable Network Series & 3 articles
- Monthly Meetings

SAPC SUBSTANCE ABUSE PREVENTION COLLABORATIVE
Dedham | Needham | Norwood | Westwood

- Monthly Meetings
- TIPs Training
- Photo Voice Project

Preventing Domestic Violence Cable Series



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- 5 episodes plus Senior Safety Seminar, RAD, And Violence in the Workplace

COA Collaborations

- MAPC
  - Grant to educate vulnerable populations about emergent effects of climate change
- Matter of Balance
  - 8 Week Course
  - Teaches balance and helps understand and fight the fear of falling
- Lunch and Learns
  - Flu, diabetes, women's health, summer safety
- Safety at Home Program
  - Help Seniors with aging at home

Town Participation, Policies, Procedures, Regulations

- Volunteer Deployment Policy
- Concussion regulations
  - Website
  - Policy and Procedures
  - SOP
- Solutions Group
  - Onboarding
  - Communications
- Leadership Training
  - 7 class course series

Board of Health
TOWN OF NEEDHAM
AGENDA FACT SHEET

Needham Public Health
Prevent. Promote. Protect.

MEETING DATE: 01/1/2019

Agenda Item	Vaping Task Force
Presenter(s)	Catherine Delano

1.	**BRIEF DESCRIPTION OF TOPIC TO BE DISCUSSED**

Brief oral presentation focusing on inception of Vaping Task Force, progress to date, and future initiatives and goals.

2.	**VOTE REQUIRED BY SELECT BOARD**

No specific vote is required, nor is one expected.

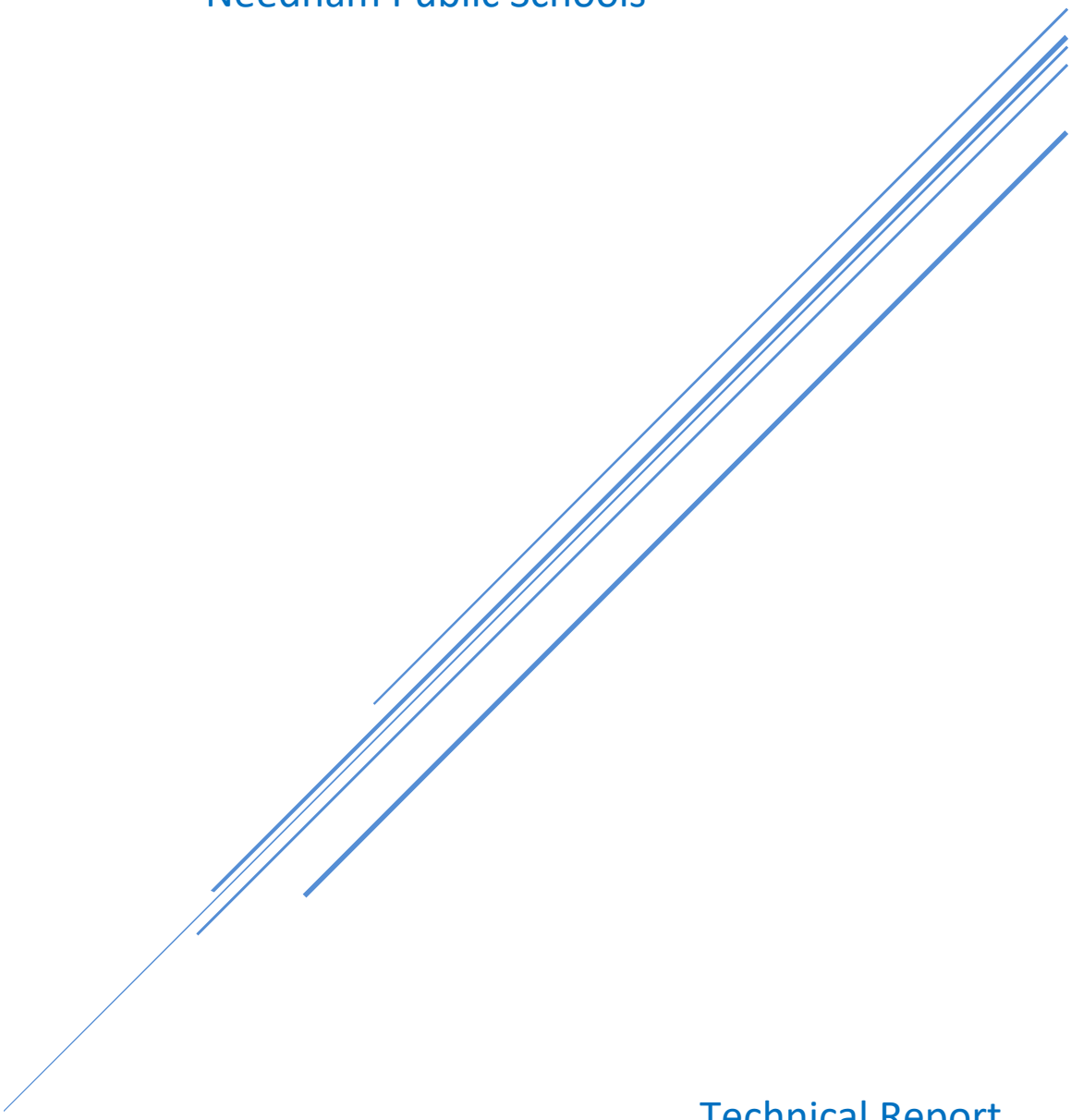
3.	**BACK UP INFORMATION ATTACHED**

Brief review of Needham Survey about Electronic Vapor Products, a survey and report by Needham SALSA (Students Advocating Life without Substance Abuse) and the Substance Prevention Alliance of Needham (SPAN).

Brief update and discussion about an inter-disciplinary Vaping Task Force beginning work this fall.

NEEDHAM SURVEY ABOUT ELECTRONIC VAPOR PRODUCTS

Students Advocating Life without Substance Abuse (SALSA)
Substance Abuse Prevention Alliance of Needham (SPAN)
Needham Public Schools



Technical Report
June 2019

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BACKGROUND

The Needham Survey About Electronic Vapor Products was designed by the Students Advocating Life without Substance Abuse (SALSA) group at Needham High School with guidance and assistance from the Substance Abuse Prevention Alliance of Needham (SPAN) and an external research and evaluation consultant.

The purpose of this survey was to collect data to support the development of prevention messages in the 2019-2020 academic year to prevent the use of electronic vapor products among Needham Public School students.

The survey was administered as an anonymous online instrument during homeroom period on June 6, 2019. Students accessed the survey through school computers or through their own laptops or mobile devices. The survey was administered to 8th, 9th, 10th, and 11th graders so that it would be reflective of the high school population in the coming school year.

Approximately two-thirds of students enrolled in 8th, 9th, 10th, and 11th grade took part in the survey. This ranged from a high of 74% of 9th graders to a low of 49% of 11th graders. A larger number of female students (55%) than male students (43%) participated.

	8th	9th	10th	11th	Total
Completed Surveys	250	332	256	194	1,032
% of Completed Surveys	24%	32%	25%	19%	
Enrolled Students	392	450	423	400	1,665
Response Rate	64%	74%	61%	49%	62%

	Male	Female	Other[1]
Gender Identity	43% (448)	55% (569)	1.5% (15)

[1] Includes gender non-conforming (0.5%, n=5), non-binary (0.7%, n=7), not listed (0.1%, n=1), and not sure (0.2%, n=2).

The findings from this survey are only generalizable to the students who were present on the day of the survey and who opted to take part.

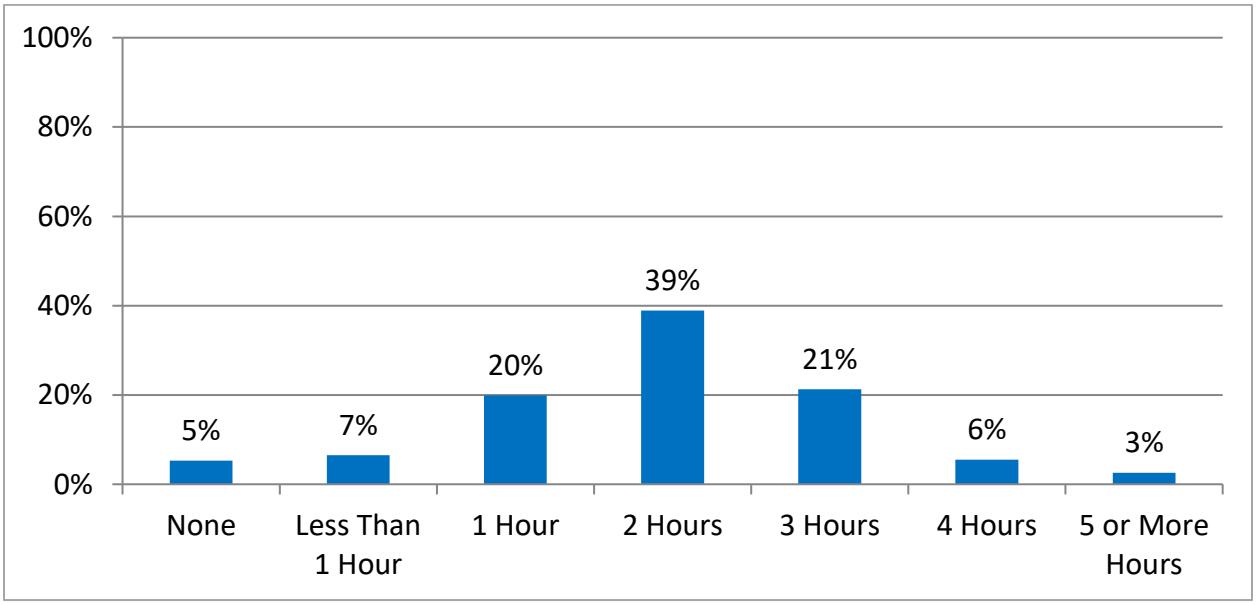
These results are **not** directly comparable to the more comprehensive MetroWest Adolescent Health Survey (MWAHS) due to differences in timing, response rate, method of administration and other factors. The findings from the MWAHS related to electronic vapor products should take prominence over these data. This survey was designed to assist the SALSA students obtain more in-depth information on vaping behaviors to design their prevention messages; this project is **not** intended to generate population-level estimates for the District.

Findings are color coded in a manner such that protective factors are presented in blue and risk factors are presented in red. The header on each page identifies the population on which the percentages were calculated.

FINDINGS – EXTRACURRICULAR ACTIVITIES

All respondents (n=1,032) were asked, "On an average school day, how many hours do you spend on extracurricular activities outside of school, like sports, clubs, and music lessons, or other nonacademic activities?" The majority of respondents (80%) reported 1-3 hours.

Figure 1: Hours Spent on Extracurricular Activities on an Average School Day



There were no significant differences in the number of hours respondents reported spending on extracurricular activities on an average school day based on whether they have ever used an electronic vapor product (e.g., Juul), their gender identity, or their age/grade.

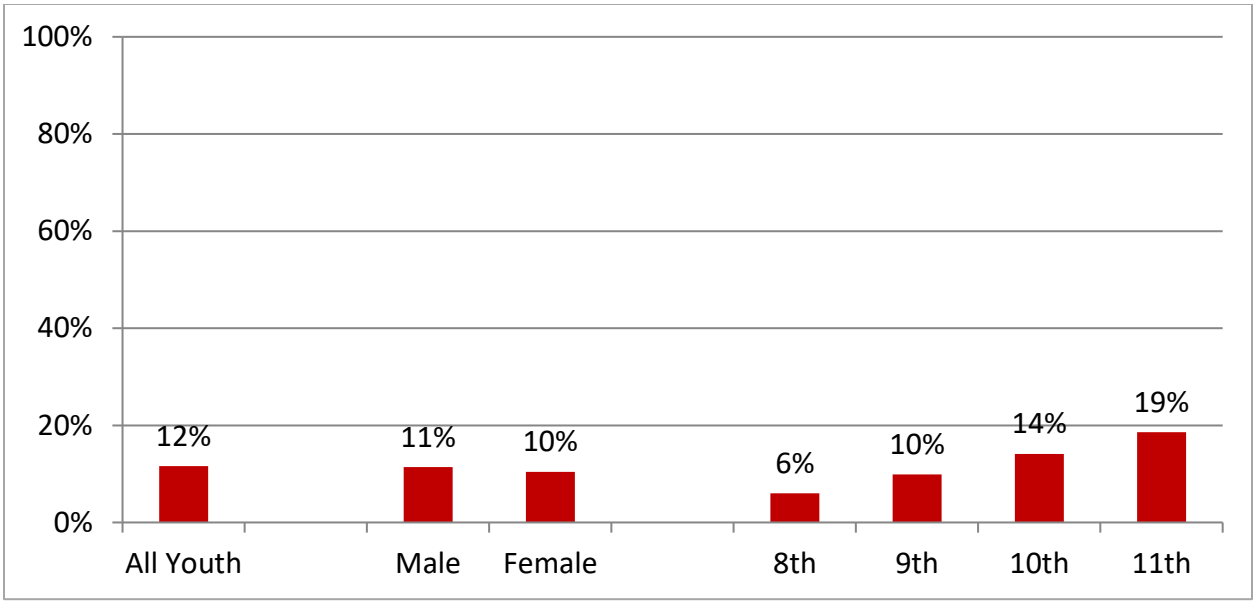
	All Youth	Never Vaped	Ever Vaped	Male	Female	8th Grade	9th Grade	10th Grade	11th Grade
None	5.3%	4.5%	8.4%	7.1%	3.7%	6.8%	3.9%	7.0%	3.6%
Under 1 hour	6.5%	6.2%	7.6%	5.6%	7.4%	7.2%	6.0%	5.9%	7.2%
1 Hour	19.9%	19.8%	20.0%	19.9%	20.4%	19.6%	22.9%	18.0%	17.5%
2 Hours	38.9%	40.5%	32.9%	41.3%	36.9%	35.6%	39.2%	39.1%	42.3%
3 Hours	21.3%	20.9%	22.7%	17.4%	24.3%	22.4%	21.4%	21.5%	19.6%
4 Hours	5.5%	5.7%	4.9%	6.5%	4.9%	5.6%	4.5%	7.0%	5.2%
5+ Hours	2.6%	2.4%	3.6%	2.2%	2.5%	2.8%	2.1%	1.6%	4.6%

FINDINGS – CIGARETTE USE

Lifetime Use of Cigarettes

All respondents (n=1,032) were asked, "Have you ever tried cigarette smoking, even one or two puffs?" Overall, 12% of respondents reported that they had ever tried cigarette smoking (lifetime use).

Figure 2: Lifetime Use of Cigarettes



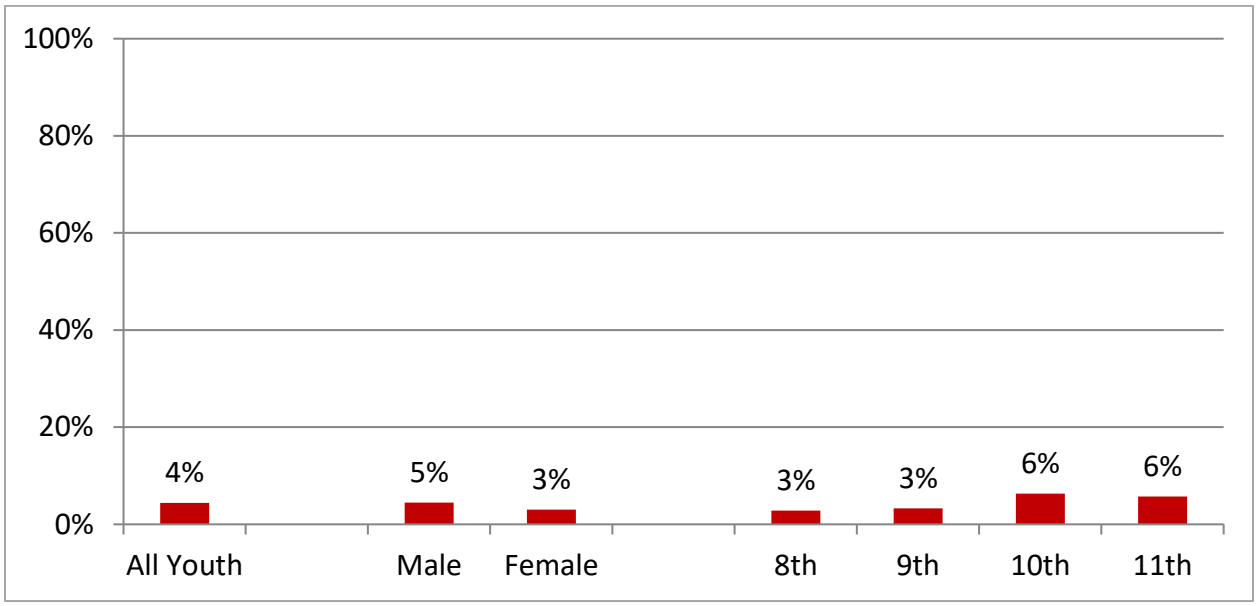
Respondents who reported that they had ever used an electronic vapor product (e.g., Juul) were significantly more likely than their peers to report that they had also used cigarettes in their lifetime – 33% of those who ever used an electronic vapor product had also used cigarettes in their lifetime. There were no significant differences in lifetime use of cigarettes by gender identity. Lifetime use of cigarettes increased significantly by the age/grade of the respondent.

	All Youth	Never Vaped	Ever Vaped	Male	Female	8th Grade	9th Grade	10th Grade	11th Grade
No	88.4%	94.4%	66.7%	88.6%	89.6%	94.0%	90.1%	85.9%	91.4%
Yes	11.6%	5.6%	33.3%	11.4%	10.4%	6.0%	9.9%	14.1%	18.6%

Current Use of Cigarettes

All respondents (n=1,032) were asked, "During the past 30 days, on how many days did you smoke cigarettes?" Overall, 4% of respondents reported that they had used cigarette in the 30 days prior to the survey (current use).

Figure 3: Current Use of Cigarettes



Respondents who reported that they had ever used an electronic vapor product (e.g., Juul) were significantly more likely than their peers to report that they had also used cigarettes in the past 30 days – 17% of those who ever used an electronic vapor product had also used cigarettes in the past 30 days. There were no significant differences in current use of cigarettes by gender identity or by the age/grade of the respondent.

	All Youth	Never Vaped	Ever Vaped	Male	Female	8th Grade	9th Grade	10th Grade	11th Grade
No	95.6%	99.3%	82.7%	95.5%	97.0%	97.2%	96.7%	93.8%	94.3%
Yes	4.4%	0.7%	17.3%	4.5%	3.0%	2.8%	3.3%	6.3%	5.7%

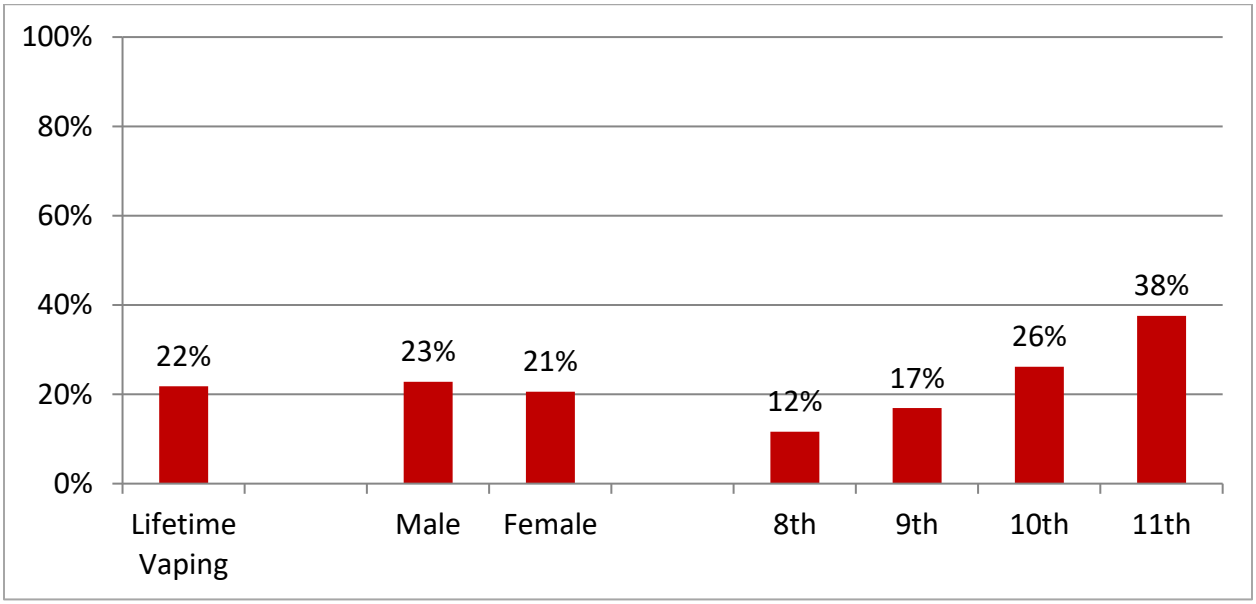
FINDINGS – ELECTRONIC VAPOR PRODUCT USE

Lifetime Use of Electronic Vapor Products

Respondents were asked about the use of electronic vapor products, such as Juul, Phix, Vuse, MarkTen, and blu. Electronic vapor products include e-cigarettes, vapes, vape pens, e-cigars, e-hookahs, Hookah pens, and mods.

All respondents (n=1,032) were asked, "Have you ever used an electronic vapor product?" Overall, 22% of respondents reported that they had ever used an electronic vapor product (lifetime use).

Figure 4: Lifetime Use of Electronic Vapor Products



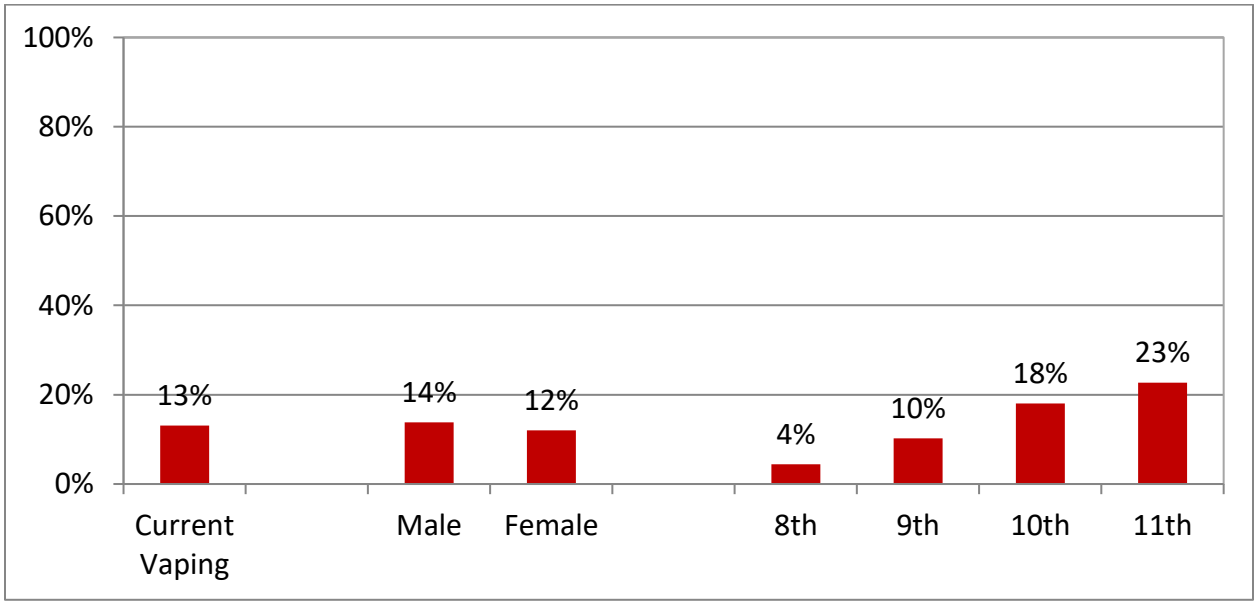
There were no significant differences in reports of lifetime use of electronic vapor products by gender identity. Lifetime use of electronic vapor products increased significantly with the age/grade of the respondent. Specifically, lifetime use of electronic vapor products increased from 12% among 8th grade respondents to 38% among 12th grade respondents.

	All Youth	Male	Female	8th Grade	9th Grade	10th Grade	11th Grade
No	78.2%	77.2%	79.4%	88.4%	83.1%	73.8%	62.4%
Yes	21.8%	22.8%	20.6%	11.6%	16.9%	26.2%	37.6%

Current Use of Electronic Vapor Products

All respondents (n=1,032) were asked, "During the past 30 days, on how many days did you use an electronic vapor product?" Overall, 13% of respondents reported that they had used an electronic vapor product in the 30 days prior to the survey (current use).

Figure 5: Current Use of Electronic Vapor Products



There were no significant differences in reports of current use of electronic vapor products by gender identity. Current use of electronic vapor products increased significantly with the age/grade of the respondent. Specifically, current use of electronic vapor products increased from 4% among 8th grade respondents to 23% among 12th grade respondents.

	All Youth	Male	Female	8th Grade	9th Grade	10th Grade	11th Grade
No	86.9%	86.2%	88.0%	95.6%	89.8%	82.0%	77.3%
Yes	13.1%	13.8%	12.0%	4.4%	10.2%	18.0%	22.7%

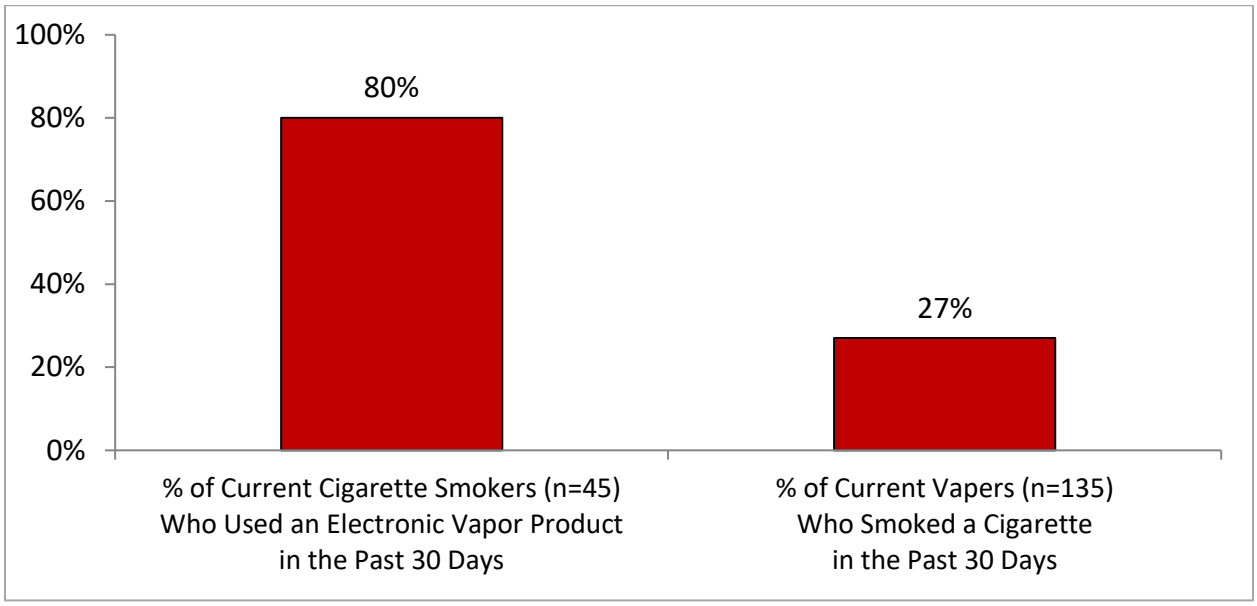
Co-Occurrence of Use of Electronic Vapor Products and Cigarettes

Of the 1,032 respondents to the survey, 45 individuals reported that they had smoked a cigarette in the 30 days prior to they survey (4.4%) and 135 individuals reported that they had used an electronic vapor product in the past 30 days (13.1%)

Most individuals who smoked a cigarette in the past 30 days *also* used an electronic vapor product in the 30 days prior to the survey (80%, n=36 of 45).

Approximately one of every three individuals who used an electronic vapor product in the past 30 days *also* smoked a cigarette in the 30 days prior to the survey (27%, n=36 of 135).

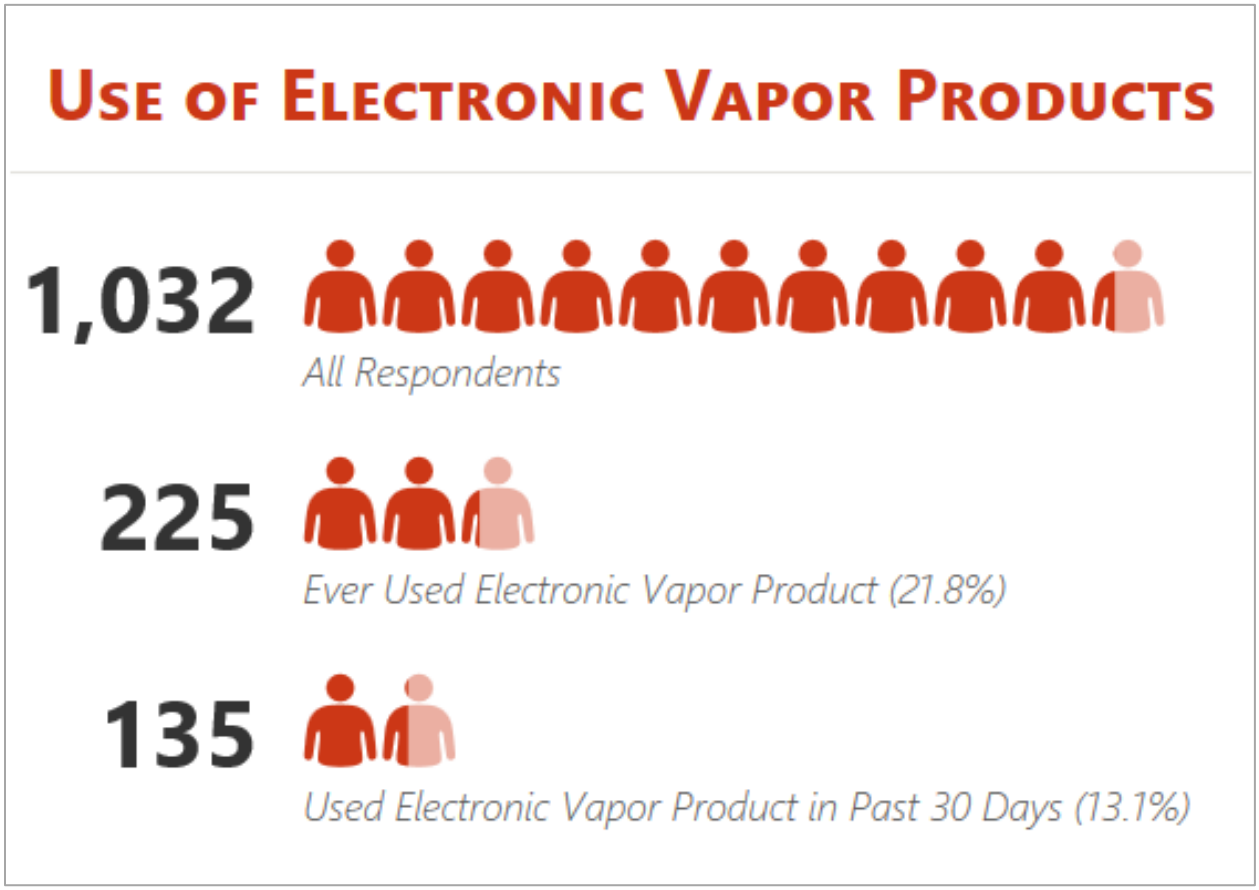
Figure 6: Co-Occurrence of Cigarette Use and Use of Electronic Vapor Products



Summary of Findings on Electronic Vapor Products

Among all respondents to the survey (n=1,032), 225 individuals reported that they had ever used an electronic vapor product in their lifetime (21.8%) and 135 individuals reported that they had used an electronic vapor product in the 30 days prior to the survey (13.1%).

Figure 7: Summary of Findings on Electronic Vapor Products

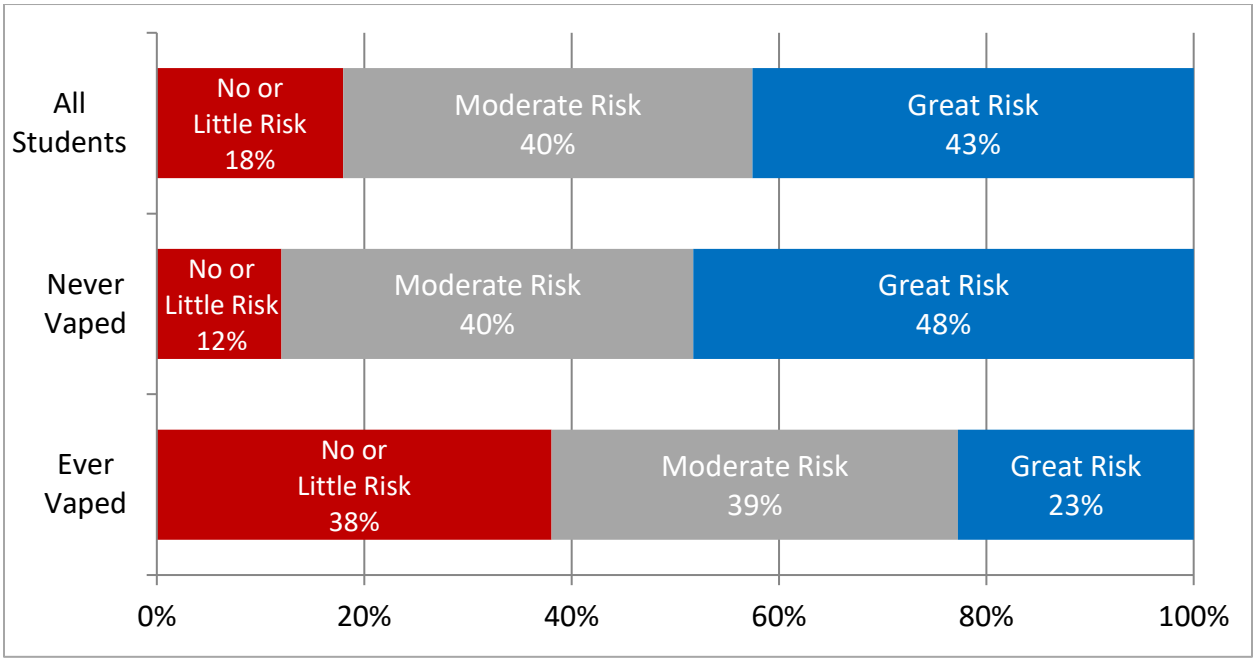


FINDINGS – ATTITUDES, OPINIONS, AND PERCEPTIONS

Perceived Risk of Harm of Using Electronic Vapor Products

All respondents (n=1,032) were asked, "How much do you think people risk harming themselves (physically or in other ways) if they use electronic vapor products?" Among all respondents, 4% reported *no risk* associated with use of electronic vapor products, 14% reported *slight risk*, 40% reported *moderate risk*, and 43% reported *great risk*.

Figure 8: Perceived Risk of Harm of Using Electronic Vapor Products



Respondents who reported that they had ever used an electronic vapor product perceived significantly *less* risk of using electronic vapor products than their peers. Female respondents perceived significantly *more* risk of using electronic vapor products than males. Perceived risk of using electronic vapor products *decreased* with the age/grade of the respondent. Specifically, the proportion of respondents who reported *great risk* associated with use of electronic vapor products declined from 51% in 8th grade to 26% in 12th grade.

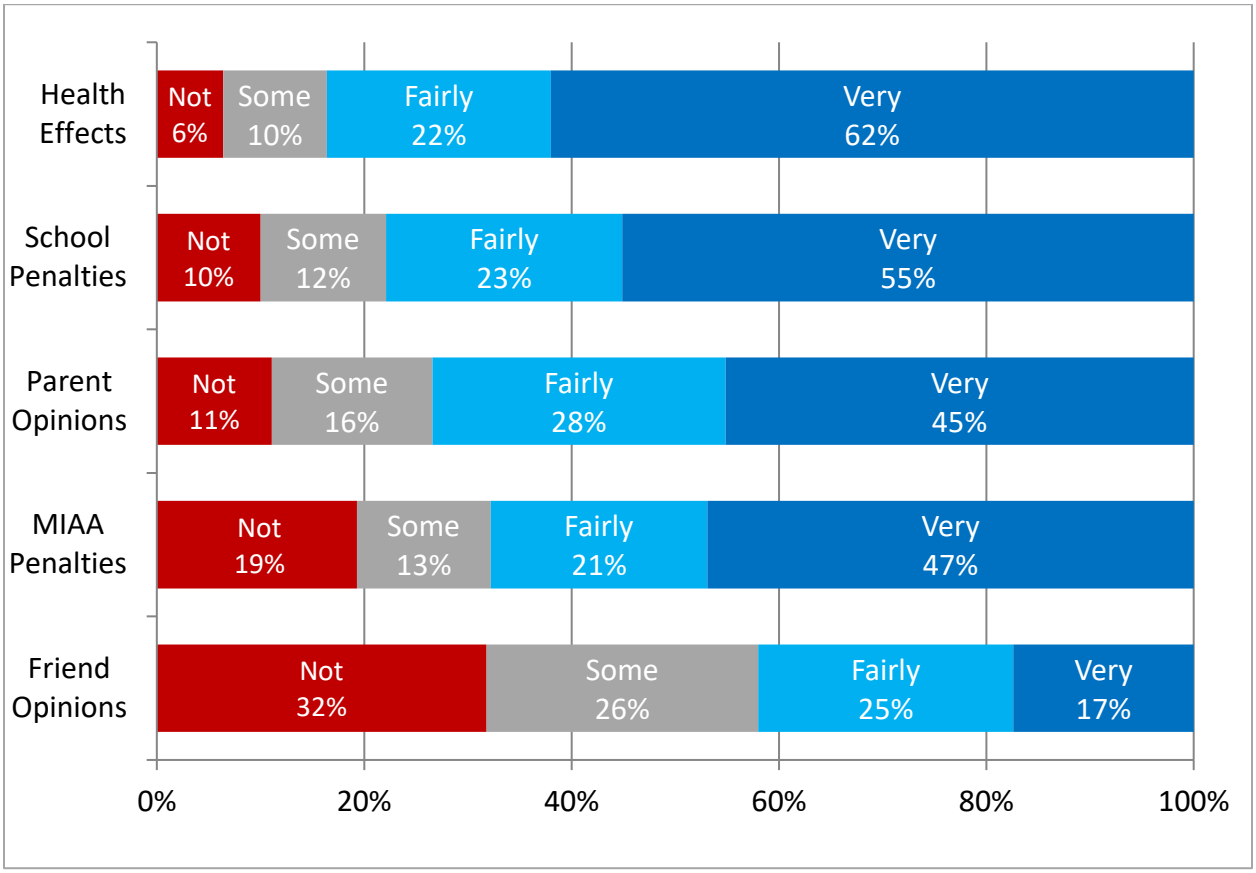
	All Youth	Never Vaped	Ever Vaped	Male	Female	8th Grade	9th Grade	10th Grade	11th Grade
No Risk	3.9%	1.7%	11.6%	4.9%	3.0%	4.4%	1.5%	4.7%	6.2%
Slight Risk	14.0%	10.4%	26.7%	18.3%	10.2%	8.0%	14.2%	14.5%	20.6%
Moderate Risk	39.5%	39.7%	39.1%	37.9%	41.1%	36.8%	36.7%	40.2%	46.9%
Great Risk	42.6%	48.2%	22.7%	38.8%	45.7%	50.8%	47.6%	40.6%	26.3%

Influences on Decisions About Using Electronic Vapor Products

All respondents (n=1,032) were asked, "How important are each of the following factors in your decision about whether to use an electronic vapor product?" The list of factors provided was: (1) what your parents would think, (2) what your friends would think, (3) potential school penalties, (4) school sports zero tolerance rules, and (5) how it might affect your health.

Among all respondents, 84% reported that potential health effects were *fairly* or *very important* to their decision, followed by potential school penalties (78% *fairly/very important*), what their parents would think (73% *fairly/very important*), school sports zero tolerance rules (68% *fairly/very important*), and what their friends would think (42% *fairly/very important*).

Figure 9: Importance of Different Factors on Decisions About Vaping



Respondents who had ever used an electronic vapor product provided significantly *lower* importance ratings than their peers to all five factors. Male respondents provided significantly *lower* importance ratings than females to all five factors. The importance of all five factors decreased significantly with age/grade. For example, 72% of 8th graders indicated that potential health effects were *very* important in their decision compared to 51% of 11th graders.

Importance of health effects in decisions about vaping

	All Youth	Never Vaped	Ever Vaped	Male	Female	8th Grade	9th Grade	10th Grade	11th Grade
Not at All	3.5%	1.2%	11.6%	4.7%	2.3%	3.2%	2.7%	4.3%	4.1%
Not Very	2.9%	1.1%	9.3%	4.2%	1.9%	2.8%	1.8%	4.7%	2.6%
Somewhat	10.0%	6.9%	20.9%	11.6%	8.6%	8.8%	9.3%	9.8%	12.9%
Fairly	21.6%	20.4%	25.8%	21.7%	21.3%	13.6%	20.5%	25.0%	29.4%
Very	62.0%	70.3%	32.4%	57.8%	65.9%	71.6%	65.7%	56.3%	51.0%

Importance of potential school penalties in decisions about vaping

	All Youth	Never Vaped	Ever Vaped	Male	Female	8th Grade	9th Grade	10th Grade	11th Grade
Not at All	4.1%	2.2%	10.7%	5.8%	2.6%	3.2%	2.7%	5.9%	5.2%
Not Very	5.9%	5.1%	8.9%	7.6%	4.2%	3.2%	6.3%	6.3%	8.2%
Somewhat	12.1%	11.8%	13.3%	13.8%	10.7%	9.2%	9.9%	10.5%	21.6%
Fairly	22.8%	22.6%	23.6%	23.9%	22.1%	22.8%	22.6%	21.5%	24.7%
Very	55.1%	58.4%	43.6%	48.9%	60.3%	61.5%	58.4%	55.9%	40.2%

Importance of parent opinions in decisions about vaping

	All Youth	Never Vaped	Ever Vaped	Male	Female	8th Grade	9th Grade	10th Grade	11th Grade
Not at All	4.6%	2.0%	13.8%	6.3%	3.0%	4.4%	3.3%	3.9%	7.7%
Not Very	6.5%	4.7%	12.9%	6.7%	6.3%	2.8%	6.0%	8.2%	9.8%
Somewhat	15.5%	12.6%	25.8%	18.3%	13.2%	11.6%	11.1%	17.6%	25.3%
Fairly	28.3%	29.1%	25.3%	27.5%	29.0%	24.4%	28.3%	30.5%	30.4%
Very	45.2%	51.5%	22.2%	41.3%	48.5%	56.8%	51.2%	39.8%	26.8%

Importance of school sports zero tolerance rules in decisions about vaping

	All Youth	Never Vaped	Ever Vaped	Male	Female	8th Grade	9th Grade	10th Grade	11th Grade
Not at All	11.8%	9.0%	21.8%	13.4%	10.2%	5.2%	9.9%	14.8%	19.6%
Not Very	7.5%	7.2%	8.4%	8.3%	6.9%	4.4%	6.9%	8.6%	10.8%
Somewhat	12.9%	12.6%	13.8%	15.0%	11.4%	8.8%	12.7%	13.3%	18.0%
Fairly	20.9%	20.3%	23.1%	21.2%	20.9%	18.4%	20.8%	21.1%	24.2%
Very	46.9%	50.8%	32.9%	42.2%	50.6%	63.2%	49.7%	42.2%	27.3%

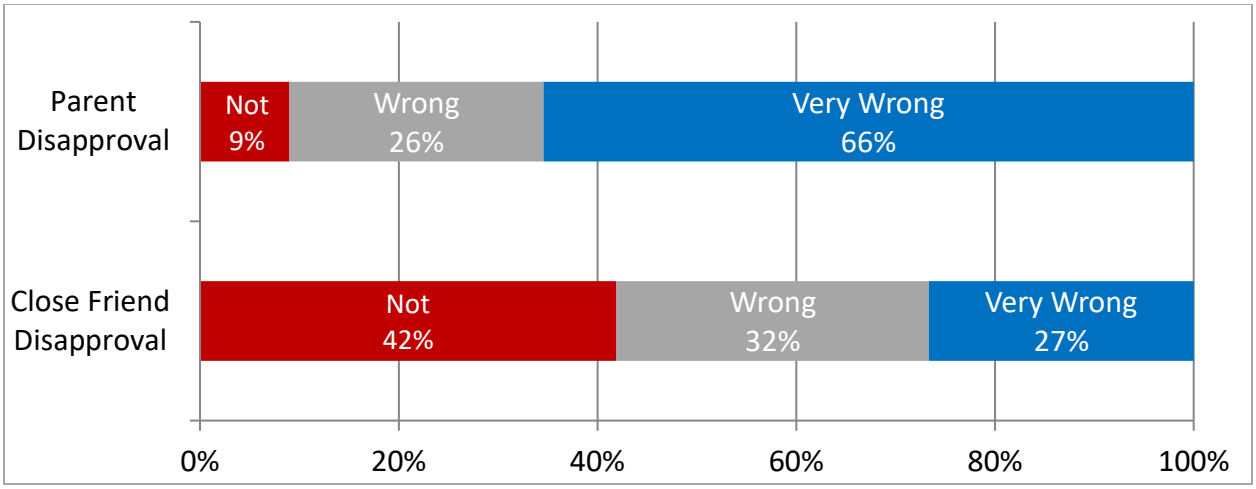
Importance of friend opinions in decisions about vaping

	All Youth	Never Vaped	Ever Vaped	Male	Female	8th Grade	9th Grade	10th Grade	11th Grade
Not at All	11.7%	9.2%	20.9%	16.3%	7.9%	8.8%	7.5%	16.4%	16.5%
Not Very	20.1%	17.6%	28.9%	22.3%	18.3%	14.8%	19.9%	19.9%	27.3%
Somewhat	26.2%	26.1%	26.2%	28.1%	24.8%	25.2%	24.7%	27.3%	28.4%
Fairly	24.6%	27.5%	14.2%	19.4%	28.8%	28.4%	29.2%	20.3%	17.5%
Very	17.4%	19.6%	9.8%	13.8%	20.2%	22.8%	18.7%	16.0%	10.3%

Perception of Parental and Peer Disapproval of Using Electronic Vapor Products

All respondents (n=1,032) were asked, "How wrong do other people in your life feel it would be for you to use an electronic vapor product?" Respondents were asked how their PARENTS/ GUARDIANS would feel and how their CLOSE FRIENDS would feel. Among all respondents, 92% think their parents would feel it was *wrong* or *very wrong* for them to use an electronic vapor product compared to 59% who thought their close friends would feel similarly.

Figure 10: Perceived Parental and Peer Disapproval of Vaping



Respondents who had ever vaped perceived significantly *less* parental and peer disapproval than their peers. Male respondents perceived significantly *less* disapproval from both groups than females. Perceived parental and peer disapproval *decreased* significantly with age/grade.

Perceived PARENTAL disapproval of using an electronic vapor product

	All Youth	Never Vaped	Ever Vaped	Male	Female	8th Grade	9th Grade	10th Grade	11th Grade
Not at All	2.4%	1.6%	5.3%	2.7%	1.9%	2.4%	2.1%	2.3%	3.1%
A Little	6.5%	3.6%	16.9%	7.6%	5.4%	2.4%	7.2%	7.8%	8.8%
Wrong	25.6%	24.9%	28.0%	29.0%	22.8%	21.6%	27.7%	23.8%	29.4%
Very Wrong	65.5%	69.9%	49.8%	60.7%	69.8%	73.6%	63.0%	66.0%	58.8%

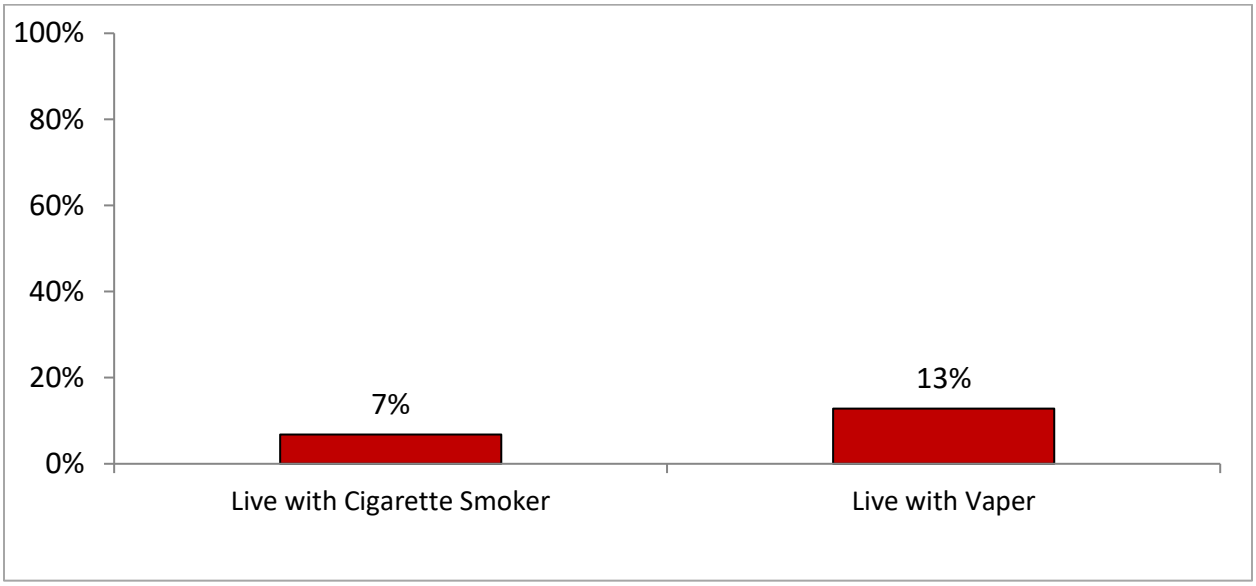
Perceived CLOSE FRIEND disapproval of using an electronic vapor product

	All Youth	Never Vaped	Ever Vaped	Male	Female	8th Grade	9th Grade	10th Grade	11th Grade
Not at All	15.4%	7.3%	44.4%	17.0%	13.9%	6.4%	12.7%	17.2%	29.4%
A Little	26.4%	23.7%	36.0%	28.3%	24.8%	20.0%	24.1%	28.9%	35.1%
Wrong	31.5%	37.3%	10.7%	31.0%	32.2%	35.2%	33.1%	34.0%	20.6%
Very Wrong	26.7%	31.7%	8.9%	23.7%	29.2%	38.4%	30.1%	19.9%	14.9%

FINDINGS – ENVIRONMENTAL EXPOSURE TO VAPING AND CIGARETTES

All respondents (n=1,032) were asked whether there is anyone (other than them) living in their household who (a) smokes cigarettes and (b) uses an electronic vapor product. Among all respondents, 7% indicated that they live with someone who smokes cigarettes and 13% live with someone who uses an electronic vapor product.

Figure 11: Environmental Exposure to Cigarettes and Electronic Vapor Products



Respondents who reported that they had ever used an electronic vapor product (e.g., Juul) were significantly more likely than their peers to report that they live with someone who smokes cigarettes and to report that they live with someone who vapes. Overall, 14% of those who had ever vaped reported that they live with someone who smokes cigarettes (compared to 5% of their peers) and 32% of those who ever vaped reported that they live with someone who vapes (compared to 7% of their peers).

Live with someone who smokes cigarettes

	All Youth	Never Vaped	Ever Vaped	Male	Female	8th Grade	9th Grade	10th Grade	11th Grade
No	93.2%	95.3%	85.8%	91.5%	94.7%	93.2%	94.9%	93.0%	90.7%
Yes	6.8%	4.7%	14.2%	8.5%	5.3%	6.8%	5.1%	7.0%	9.3%

Live with someone who uses an electronic vapor product

	All Youth	Never Vaped	Ever Vaped	Male	Female	8th Grade	9th Grade	10th Grade	11th Grade
No	87.2%	92.7%	67.6%	86.8%	88.4%	90.8%	86.1%	84.4%	88.1%
Yes	12.8%	7.3%	32.4%	13.2%	11.6%	9.2%	13.9%	15.6%	11.9%

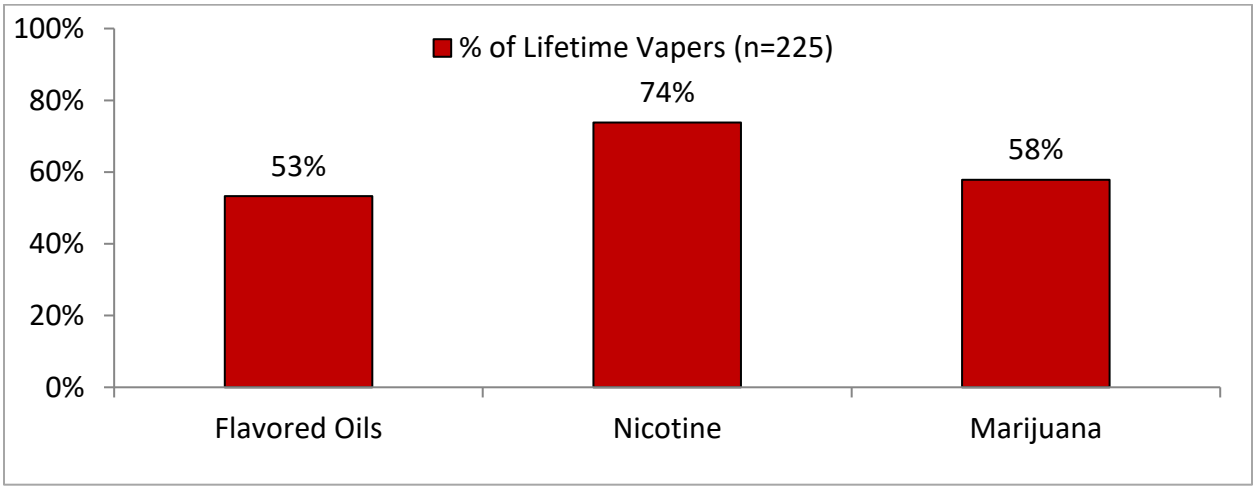
Note: The findings in this section of the report focus on the 225 respondents who report that they had ever used an electronic vapor product in their lifetime. The percentages are based on this subset of 225 respondents, **not** all 1,032 respondents who took part in the survey.

FINDINGS – VAPING BEHAVIORS AND ATTITUDES AMONG THOSE WHO EVER VAPED

Substances Vaped by Those Who Ever Vaped

Respondents who had vaped in their lifetime (n=225) were asked whether they had ever vaped: (a) nicotine-free substances such as flavored oils, (b) oils containing nicotine, and (c) marijuana. Among individuals who ever vaped in their lifetime, 53% had vaped nicotine-free flavored oils, 74% had vaped nicotine, and 58% had vaped marijuana.

Figure 12: Substances Vaped by Those Who Ever Vaped



Among respondents who ever vaped in their lifetime, those who vaped within the past 30 days were significantly *more* likely than their peers to report that they ever vaped nicotine (82% vs. 61%) and marijuana (74% vs. 33%). Ninth graders who ever vaped in their lifetime were significantly *less* likely than their peers who ever vaped in their lifetime to report that they had ever vaped nicotine-free flavored oils.

	Ever Vaped	Vaped in the Last 30 Days		Male	Female	8th Grade	9th Grade	10th Grade	11th Grade
		No	Yes						
Ever Vaped Flavored Oils	53.3%	46.7%	57.8%	54.9%	53.0%	65.5%	35.7%	55.2%	60.3%
Ever Vaped Nicotine	73.8%	61.1%	82.2%	74.5%	74.4%	69.0%	69.6%	73.1%	79.5%
Ever Vaped Marijuana	57.8%	33.3%	74.1%	58.8%	55.6%	37.9%	64.3%	53.7%	64.4%

Reasons for Vaping Among Those Who Ever Vaped

Respondents who had vaped in their lifetime (n=225) were asked to identify what have been the most important reason(s) for their using an electronic vapor product[1].

Among individuals who ever vaped in their lifetime, the top 5 reason(s) for vaping were: to experiment – see what it's like (60%), to have a good time with friends (45%), to feel good or get high (41%), to relax or relieve tension (35%), and because it looks cool (23%).

Figure 13: Reason(s) for Vaping Among Those Who Ever Vaped

[1] Patrick, M.E., Miech, R.A., Carlier, C., O'Malley, P.M., Johnston, L.D., & Schulenberg, J.E. (2016). Self-reported reasons for vaping among 8th, 10th, and 12th graders in the US: Nationally representative results. *Drug and Alcohol Dependence*, 165: 275-278.

Among individuals who ever vaped in their lifetime, those who did not vape within the last 30 days were significantly more likely than their peers to indicate that they vaped to experiment and see what it was like (71% vs. 52%). Respondents who did vape within the last 30 days were significantly more likely than their peers to provide all of the other reasons. Male respondents were significantly more likely than females to indicate that they vaped because they are hooked and have to have it (21% vs. 7%). There were no other differences in the reasons provided by gender identity or age/grade.

	Ever Vaped	Vaped in the Last 30 Days		Male	Female	8th Grade	9th Grade	10th Grade	11th Grade
		No	Yes						
To experiment / see what it is like	59.6%	71.1%	51.9%	57.8%	61.5%	72.4%	51.8%	58.2%	61.6%
To have a good time with friends	44.9%	27.8%	56.3%	44.1%	47.9%	31.0%	48.2%	41.8%	50.7%
To feel good or to get high	41.3%	21.1%	54.8%	40.2%	42.7%	17.2%	41.1%	44.8%	47.9%
To relax or relieve tension	34.7%	13.3%	48.9%	40.2%	29.9%	17.2%	37.5%	34.3%	39.7%
Because it looks cool	23.1%	12.2%	30.4%	27.5%	17.9%	17.2%	25.0%	23.9%	23.3%
Boredom / nothing else to do	17.3%	5.6%	25.2%	15.7%	18.8%	6.9%	14.3%	20.9%	20.5%
Because it tastes good	16.9%	7.8%	23.0%	18.6%	14.5%	13.8%	17.9%	19.4%	15.1%
Hooked / have to have it	13.3%	3.3%	20.0%	20.6%	6.8%	6.9%	17.9%	11.9%	13.7%
To help quit regular cigarettes	6.2%	2.2%	8.9%	8.8%	4.3%	3.4%	7.1%	1.5%	11.0%

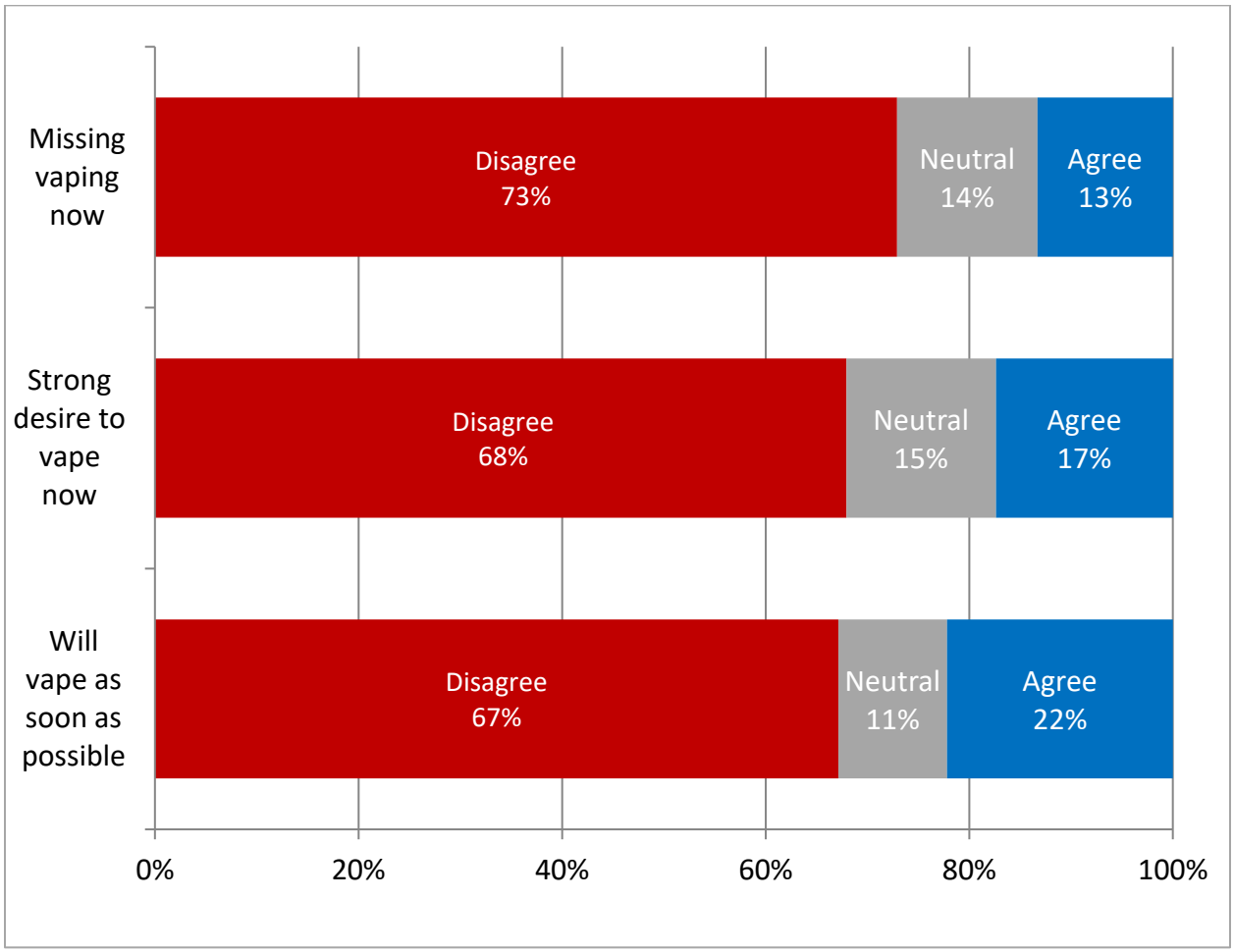
FINDINGS – CRAVINGS AND DESIRE TO VAPE AMONG THOSE WHO EVER VAPED

Cravings and Desire to Vape Among Those Who Ever Vaped

Respondents who had vaped in their lifetime (n=225) were asked three questions about vaping craving: (a) I have a strong desire to vape right now, (b) I am missing vaping right now, and (c) I will vape as soon as I get the chance. Endorsement of these questions has been associated in the peer reviewed literature with dependence, level of use, and lower confidence in ability to quit vaping[2].

Among individuals who ever vaped in their lifetime, 13% reported that they were missing vaping right now, 17% indicated a strong desire to vape right now, and 22% agreed that they will vape as soon as they get the chance.

Figure 14: Cravings and Desire to Vape Among Those Who Ever Vaped



[2] Dowd, A.N., Motschman, C.A., & Tiffany, S.T. (2019). Development and Validation of the Questionnaire of Vaping Craving. *Nicotine & Tobacco Research*, 21(1): 63-70.

Among respondents who ever vaped in their lifetime, those who vaped within the past 30 days were significantly *more* likely than their peers to positively endorse (agree) with the three questions about craving. There were no differences by gender identity or age/grade of the respondent.

I am missing vaping right now

	Ever Vaped	Vaped in the Last 30 Days		Male	Female	8th Grade	9th Grade	10th Grade	11th Grade
		No	Yes						
Strongly Disagree	55.6%	85.6%	35.6%	56.9%	55.6%	62.1%	50.0%	58.2%	54.8%
Disagree	17.3%	10.0%	22.2%	15.7%	19.7%	10.3%	17.9%	20.9%	16.4%
Neutral	13.8%	2.2%	21.5%	11.8%	15.4%	3.4%	16.1%	13.4%	16.4%
Agree	4.4%	1.1%	6.7%	5.9%	1.7%	3.4%	8.9%	0.0%	5.5%
Strongly Agree	8.9%	1.1%	14.1%	9.8%	7.7%	20.7%	7.1%	7.5%	6.8%

I have a strong desire to vape right now

	Ever Vaped	Vaped in the Last 30 Days		Male	Female	8th Grade	9th Grade	10th Grade	11th Grade
		No	Yes						
Strongly Disagree	49.8%	82.2%	28.1%	51.0%	51.3%	55.2%	46.4%	50.7%	49.8%
Disagree	18.2%	12.2%	22.2%	14.7%	21.4%	13.8%	16.1%	19.2%	18.2%
Neutral	14.7%	2.2%	23.0%	16.7%	12.8%	6.9%	14.3%	16.4%	14.7%
Agree	6.7%	2.2%	9.6%	6.9%	5.1%	3.4%	14.3%	5.5%	6.7%
Strongly Agree	10.7%	1.1%	17.0%	10.8%	9.4%	20.7%	8.9%	8.2%	10.7%

I will vape as soon as I get the chance

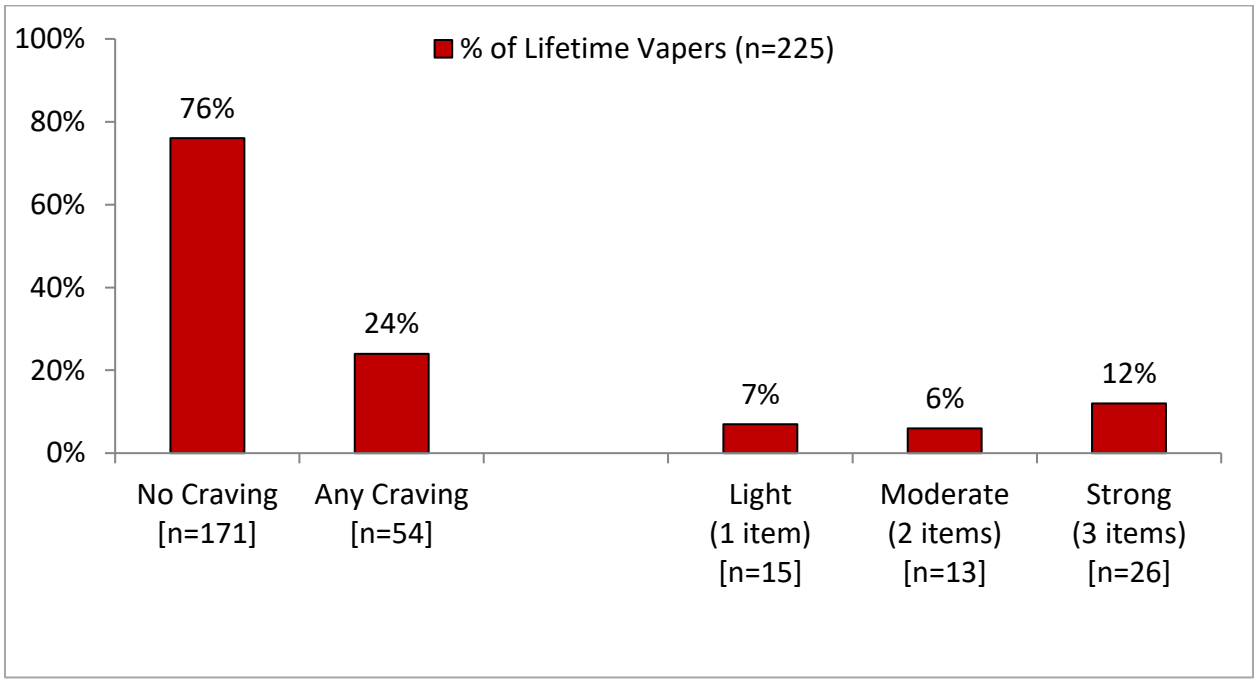
	Ever Vaped	Vaped in the Last 30 Days		Male	Female	8th Grade	9th Grade	10th Grade	11th Grade
		No	Yes						
Strongly Disagree	43.6%	74.4%	23.0%	45.1%	44.4%	41.4%	41.1%	41.8%	47.9%
Disagree	23.6%	17.8%	27.4%	20.6%	25.6%	20.7%	28.6%	23.9%	20.5%
Neutral	10.7%	5.6%	14.1%	8.8%	12.0%	3.4%	8.9%	10.4%	15.1%
Agree	9.8%	1.1%	15.6%	11.8%	8.5%	13.8%	5.4%	11.9%	9.6%
Strongly Agree	12.4%	1.1%	20.0%	13.7%	9.4%	20.7%	16.1%	11.9%	6.8%

Degree of Craving Among Those Who Ever Vaped

The degree of craving was calculated by adding together the number of craving questions where the respondent indicated that they either *agreed* or *strongly agreed* with the question. For example, if the respondent *agreed* that they have a strong desire to vape right now, they would receive a value of '1' on the scale. If they *agreed* that they have a strong desire to vape right now and *agreed* that they are missing vaping right now, they would receive a value of '2' on the scale, and so forth. Individuals that *agreed* or *strongly agreed* with one question were categorized as *Light Craving*, those who agreed with two questions were categorized as *Moderate Craving*, and those who agreed with all three questions on the craving scale were categorized as *Strong Craving*.

Among individuals who ever vaped in their lifetime, 24% (n=54) reported some level of craving: 7% (n=15) experienced light craving, 6% (n=13) experienced moderate craving, and 12% (n=26) experienced strong craving.

Figure 15: Degree of Craving Among Those Who Ever Vaped



Note: The findings in this section of the report focus on the 135 respondents who report that they used an electronic vapor product in the 30 days prior to the survey. The percentages are based on this subset of 135 respondents, **not** all 1,032 respondents who took part in the survey.

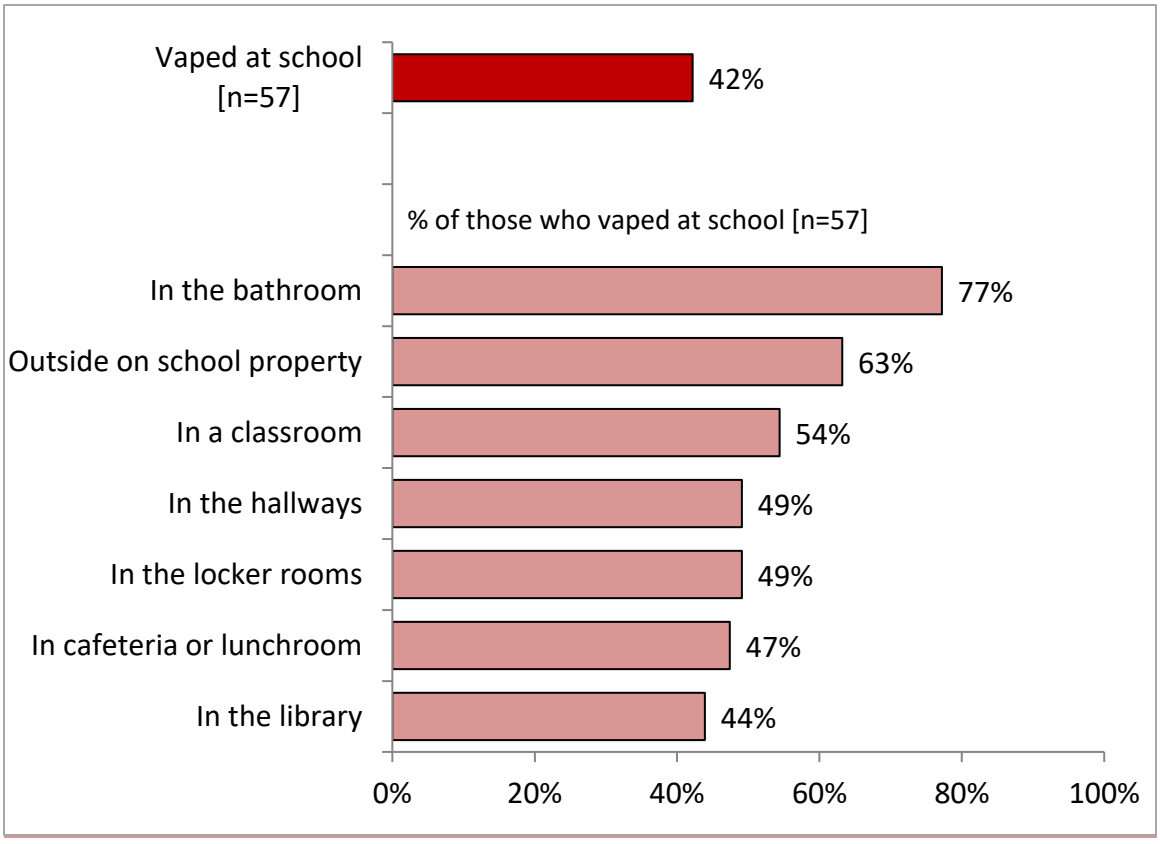
FINDINGS – VAPING BEHAVIORS AT SCHOOL IN THE PAST 30 DAYS

Vaping at School in the Past 30 Days and Location of Vaping

Respondents who used an electronic vapor product in the past 30 days (n=135) were asked whether they had vaped on school property in that time period. Among individuals who vaped in the past 30 days, 42% (n=57) reported that they vaped on school property at least one time during that time period.

Among respondents who vaped on school property (n=57), the largest proportion reported that they vaped in the bathroom (77.2%, n=44), followed by outside the building on school property (63.2%, n=36), in a classroom (54.4%, n=31), in the hallways (49.1%, n=28), in the locker rooms (49.1%, n=28), in the cafeteria or lunchroom (47.4%, n=27), and in the library (43.9%, n=25).

Figure 16: Vaping on School Property in the Past 30 Days



Overall, respondents reported vaping an average of four different places on school property – suggesting that this behavior is not isolated to a specific location for any given individual.

FINDINGS – DESIRE TO QUIT VAPING AMONG THOSE WHO VAPED IN THE PAST 30 DAYS

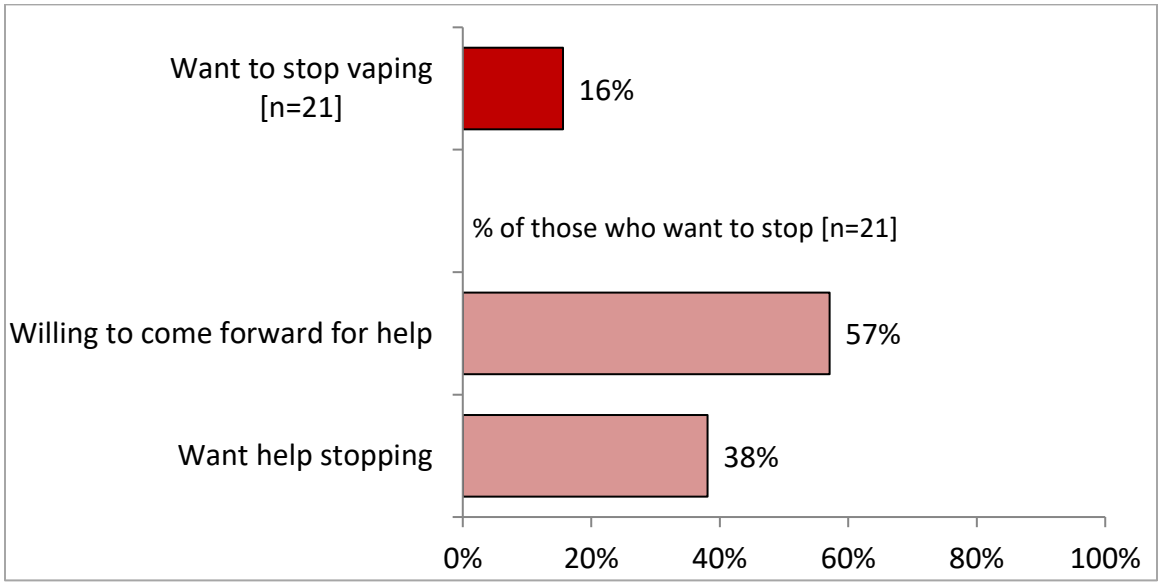
Desire to Quit Vaping Among Those Who Vaped in the Past 30 Days

Respondents who used an electronic vapor product in the past 30 days (n=135) were asked whether they ever felt like they wanted to stop using an electronic vapor product but couldn't stop on their own. Among individuals who vaped in the past 30 days, 16% (n=21) reported that they wanted to stop vaping but couldn't stop on their own.

Among the respondents who wanted to stop vaping (n=21), over half (57%, n=12) indicated that they would be willing to come forward or ask for help to stop vaping if there were no risk of consequences (school, sports, etc.).

Among the respondents who wanted to stop vaping (n=21), one-third (38%, n=8) reported that they want help to stop using an electronic vapor product.

Figure 17: Desire to Quit Vaping Among Those Who Vaped in the Past 30 Days



FINDINGS – PREVENTION MESSAGES

Respondents were asked what they would say to someone to convince them to not start vaping. Overall, 498 respondents provided one or more comments.

The open-ended comments fell into seven broad categories:

(1) Health effects and consequences (340 comments)
(2) Don't start vaping (117 comments)
(3) Consider the future (52 comments)
(4) Potential penalties from using (49 comments)
(5) Costs of using (49 comments)
(6) Friends, family, and relationships (41 comments)
(7) Seek Help (27 comments)

Representative comments from each of these areas are provided below.

Health Effects and Consequences

There were 340 comments about health effects and consequences of vaping (e.g., it's bad for you; not safer than cigarettes; you could get addicted).

"Vaping is hardly better than smoking a cigarette. You still get nicotine and get addicted."

"One e-cigarette has the same amount of nicotine as 20 packs of cigarettes."

"Vaping is exactly like smoking a normal cigarette. It has the same amount of nicotine even though it might not seem like it."

"Vaping is a very bad habit. You should never even start vaping because you will not want to stop."

"Why would you try something if you know it's bad for you and you may not be able to stop?"

"It's easy to get hooked. Also, there is not enough long-term research to say that it isn't dangerous."

"E-cigarettes have dangerous levels of nicotine and are highly addictive. All types of cigarettes/vapes are unhealthy and the consequences of using these substances/devices are grave."

"It's addictive. There is nicotine in many of the solutions they put in the pens. You can never be sure what it is you're smoking."

"Smoking might be something you'd never engage in now, but after you start vaping, there's no telling what you will do when addicted and offered a cigarette; the chances of getting addicted to real smoking is too high a danger to your health to risk now."

"Vaping is not a healthy alternative, it is just as dangerous as any cigarette, and can cause damage to your body."

"Vaping is still hurting your health, even if it's not considered as bad as cigarettes. Your health should be your priority, and there are so many other ways to stay happy without the use of drugs or vaping."

Don’t Start Vaping

There were 117 comments about not starting to vape and quitting if you are already using electronic vapor products.

“Don't smoke it's a joke.”

“I wouldn't try to talk about how bad vaping is (that will make them mad and more likely not to listen) but rather talk about how much better life would be when not using it.”

“I'd say to them that if you're going to use a vaping product, you're making all of your worst nightmares come true. I hugely recommend that you don't do it.”

“Don't be a Juul fool.”

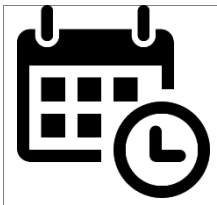
“Don't smoke Juul in my school!”

“Don't start vaping.”

“Please refrain from vaping “Stop vaping.”

Consider the Future

There were 52 comments about considering the future (e.g., you will regret it; don’t ruin your life; it could affect your goals).



“Just don't do it unless you want to sacrifice your future.”

“It can ruin your whole life and once you regret doing it you can't change the past.”

“I would tell them that they are basically ruining the rest of their lives and it will affect them forever.”

“You're throwing away all the work you put into life.”

“If your future kids were vaping what would you say to them?”

“It's a problem and if you care about yourself and your future you should stop.”

“Think about all the opportunities you could lose by vaping.”

“What would your future self say?”

“You will regret it in the future.”

Potential Penalties from Using

There were 49 comments about potential penalties from vaping (e.g., trouble at school; trouble with parents; kicked off sports team).

"I would tell them about how they can be a bad influence on others, that they can violate school and school sports rules as well."

"Think about the big picture and your high school/ athletic career."

"Think of all of the punishment with school activities and sports and how all of that could go wrong."

"It's stupid and can ruin your life because it's not going to get you anywhere. Especially in sports."

"You could be kicked out of any extracurricular activities."

"You really shouldn't do that because you could get kicked off of your sports team."

"It's very bad for your health, you can get in a lot of trouble with your parents and school, and you can lose your spot on the team you're on."

"I would say this isn't good for you. You could get in trouble. Think about what your parents would say if they found out you were smoking; they wouldn't be happy."

Costs of Using

There were 49 comments about the costs of vaping (e.g., it's expensive; there is no benefit; not worth it; waste of time).

"It's really bad for you, it costs money, and you could get in a lot of trouble."

"You will be committed and addicted to this product and will waste lots of money while doing so, and when you try to quit, it will be hard."

"You will start to do it every day and you will lose your money."

"It's overhyped and not very fun. The consequences far outweigh the little enjoyment you may get from it."

"Vaping is not a good investment and a waste of money."

"I would them that it is simply unnecessary to waste time smoking when they could use that time to do literally anything else."

"There are better things to spend your time on."

"It's not worth doing just to fit in with others."

"It's not worth it, it tastes bad anyways and there are better ways to have fun."

Family, Friends, and Relationships

There were 41 comments about family, friends, and relationships (e.g., it could affect your relationships; it's not cool; it's disgusting; bad influence on others).

"It will be very dangerous to your health and affect the relationships that you have with other people very badly."

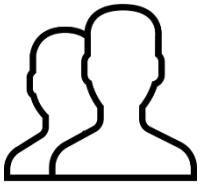
"Don't give yourself an addiction to look cool."

"It literally doesn't make you cool. Have fun being addicted to a flash drive I guess."

"I would explain to them that you don't have to vape to be cool. It is extremely detrimental to your health and addictive."

"It is not impressive or cool to ruin your health."

"Valuing can cause lots of health problems that you don't need at a young age. There's no point in harming yourself just to 'fit in' and be cool."



"Don't be a fool. Juuls aren't cool."

"Put down the Juul because that's not cuul."

Seek Help

There were 27 comments about seeking help to stop vaping (e.g., I care about you; talk to someone).

"I really don't think this is very good for your health. It can really be harmful to your body. I really don't want you getting hurt, and I really don't think anyone else would either. If you need help, I can help you."

"It isn't healthy even though they advertise it that way. I am concerned for your health."

"I care about you and your health and this will severely harm both."

"I'm worried about you, and I want to try to help you. Can you please seek help or allow me to help you."

"Get help from a medical professional if you need nicotine patches or something else to help."

"Get help from a trusted adult."

"Talk to someone you trust "It is not impressive or cool to ruin your health."

APPENDIX A:
Needham Survey About Electronic Vapor Products

2019

NEEDHAM SURVEY ABOUT ELECTRONIC VAPOR PRODUCTS

Students Advocating Life without Substance Abuse (SALSA)
Substance Abuse Prevention Alliance of Needham (SPAN)
Needham Public Schools

Directions

The Students Advocating Life without Substance Abuse (SALSA) group at Needham High School (NHS) is working with the Substance Abuse Prevention Alliance of Needham (SPAN) and NHS administrators to conduct a short survey to learn more about the use of electronic vapor products ("vaping") by students at NHS.

Please answer the following questions honestly. Your answers are private. Do not provide your name anywhere on the survey.

The findings will be used by SALSA students to develop prevention messaging next school year.

After filling out this survey, if you have any questions or concerns, please talk about them with your school nurse, school counselor, teacher, parent/guardian, or other trusted adult.

Thank you very much for answering this survey.

This section is about your personal background. Remember, no one will know your name.

1. What is your current gender identity? Please check the box that *most closely* matches your identity. (Check *one*) [All students]

1 ☐ Male
2 ☐ Female
☐ Gender non-conforming
4 ☐ Non-binary
5 ☐ Not listed
6 ☐ Not sure

2. What grade are you in now? (Check *one*) [All students]

1 ☐ 8th grade 2 ☐ 9th grade 3 ☐ 10th grade 4 ☐ 11th grade

3. On an average school day, how many hours do you spend on extracurricular activities outside of school, like sports, clubs, music lessons, or other nonacademic activities? (Check *one*) [All students]

1 ☐ None
2 ☐ Less than 1 hour per day
3 ☐ 1 hour per day
4 ☐ 2 hours per day
5 ☐ 3 hours per day
6 ☐ 4 hours per day
7 ☐ 5 hours per day

The next questions ask about tobacco use.

4. Have you ever tried cigarette smoking, even one or two puffs? (Check one) [All students]

1 ☐ No 2 ☐ Yes

5. During the past 30 days, on how many days did you smoke cigarettes? (Check one) [All students]

1 ☐ 0 days 2 ☐ 1-2 3 ☐ 3-5 4 ☐ 6-9 5 ☐ 10-19 6 ☐ 20-29 7 ☐ All 30 days

The next questions ask about electronic vapor products, such as Juul, Phix, Vuse, MarkTen, and blu. Electronic vapor products include e-cigarettes, vapes, vape pens, e-cigars, e-hookahs, Hookah pens, and mods.

6. How much do you think people risk harming themselves (physically or in other ways) if they use electronic vapor products? (Check *one*) [All students]

1 ☐ No Risk
1 ☐ Slight Risk
1 ☐ Moderate Risk
1 ☐ Great Risk

7. Have you ever used an electronic vapor product? (Check *one*) [All students]

1 ☐ No 2 ☐ Yes

8. Have you ever vaped any of the following? (Check *one* box on *each* line) [only appears if 7 is yes]

Have you ever…	*Yes*	*No*
a) Vaped nicotine-free substances such as flavored oils	1 ☐	2 ☐
b) Vaped oils containing nicotine	1 ☐	2 ☐
c) Vaped marijuana in any form, including THC/hash oil, etc.	1 ☐	2 ☐

9. During the PAST 30 DAYS, on how many days did you use an electronic vapor product? (Check *one*) [only appears if 7 is yes]

1 ☐ 0 days 2 ☐ 1-2 3 ☐ 3-5 4 ☐ 6-9 5 ☐ 10-19 6 ☐ 20-29 7 ☐ All 30 days

10. During the PAST 30 DAYS, on how many days did you use an electronic vapor product ON SCHOOL PROPERTY? (Check *one*) [only appears if 9 is one or more days]

1 ☐ 0 days 2 ☐ 1-2 3 ☐ 3-5 4 ☐ 6-9 5 ☐ 10-19 6 ☐ 20-29 7 ☐ All 30 days

11. During the PAST 30 DAYS, have you used an electronic vapor product ON SCHOOL PROPERTY in any of the following places? (Check *one* box on *each* line) [only appears if 10 is one or more days]

	No	*Yes*
a) In a classroom	1 ☐	2 ☐
b) In the cafeteria or lunchroom	1 ☐	2 ☐
c) In the locker rooms	1 ☐	2 ☐
d) In the hallways	1 ☐	2 ☐
e) In the bathroom	1 ☐	2 ☐
f) In the library	1 ☐	2 ☐
g) Outside on school property	1 ☐	2 ☐

12. What have been the most important reasons for your using an electronic vapor product? (Check *all* that apply) [only appears if 7 is yes]

1 ☐ To help me quit regular cigarettes
1 ☐ To experiment – see what it's like
1 ☐ To relax or relieve tension
1 ☐ To feel good or get high
1 ☐ Because it looks cool
1 ☐ To have a good time with my friends
1 ☐ Because of boredom, nothing else to do
1 ☐ Because it tastes good
1 ☐ Because I am hooked – I have to have it
1 ☐ Some other reason

13. How important are each of the following factors in your decision about whether to use an electronic vapor product? [All students]

	Not At All Important	*Not Very Important*	*Somewhat Important*	*Fairly Important*	*Very Important*
a) What your parents would think	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
b) What your friends would think	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
c) Potential school penalties	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
d) School sports zero tolerance rules	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
e) How it might affect your health	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐

14. How much do you agree or disagree with each of the following statements? [only appears if 7 is yes]

	Strongly Disagree	*Disagree*	*Neutral*	*Agree*	*Strongly Agree*
a) I have a strong desire to vape right now	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
b) I am missing vaping right now	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
c) I will vape as soon as I get the chance	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐

15. Is there anyone (other than you) living in your household who…? (Check *one* box on *each* line) [all students]

		No	*Yes*
a)	smokes cigarettes?	1☐	2☐
b)	uses an electronic vapor product?	1☐	2☐

16. How wrong do other people in your life feel it would be for you to use an electronic vapor product? [all students]

	Not at All Wrong	*A Little Bit Wrong*	*Wrong*	*Very Wrong*
a) How wrong do your PARENTS/ GUARDIANS think it would be for you to use an electronic vapor product?	1☐	2☐	3☐	4☐
b) How wrong do your CLOSE FRIENDS think it would be for you to use an electronic vapor product?	1☐	2☐	3☐	4☐

17. Do you know where a person could go to get help if they wanted to stop using an electronic vapor product and couldn't do it on their own?
(Check *one*) [All students]
1☐No 2☐Yes

18. Have you ever felt like you wanted to stop using an electronic vapor product but weren't able to stop on your own? (Check *one*) [only appears if 7 is yes]
1☐No 2☐Yes

19. Do you want help to stop using an electronic vapor product? (Check *one*) [only appears if 18 is yes]
1☐No 2☐Yes

20. Would you be willing to come forward/ask for help to stop vaping if there were no risk of consequences (school, sports, etc.)? Check *one*) [only appears if 18 is yes]
1☐No 2☐Yes

21. If you wanted to convince someone not to start vaping, what would you say to them? (type-in)
[All students]

If you want help stopping tell a trusted adult at school, home, athletic coach, faith-based leader, or The Truth Initiative – Text QUIT to 202-804-9884