



Needham Board of Health



AGENDA

Friday, November 20, 2015

7:00 a.m. – 9:30 a.m.

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

- **7:00 to 7:05 - Welcome & Review of Minutes**
- **7:05 to 7:25 - Director and Staff Reports**
- **7:25 to 7:30 - Update on Bodyworks Implementation**
- **7:30 to 7:35 - Human Services and Community Support**
- **7:35 to 7:45 - FY 2017 Public Health Department Budget Submission**
- **7:45 to 8:00 - Discussion of MetroWest Adolescent Health Survey**

Board of Health Public Hearing

- **8:00 to 8:30 - Administrative Hearing about Tobacco Regulation
(Article #1) Violations—Sale to Underage Persons**
- **8:30 to 9:00 - Public Hearing on Draft Medical Marijuana Regulations**
- **9:00 to 9:30 - Public Hearing about Draft Tanning Regulations**

* * * * *

- **Next Meeting Scheduled for TBD**
- **Adjournment**

(Please note that all times are approximate)



Board of Health

Timothy McDonald, MPA
Director of Public Health

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ARTICLE 20 **REGULATION TO ENSURE THE SANITARY AND SAFE OPERATIONS OF REGISTERED MARIJUANA DISPENSARIES AND THE SALE OF MARIJUANA TO PERSONS WITH DOCUMENTED MEDICAL NEEDS**

SECTION 20.1 **AUTHORITY**

This regulation is promulgated under the authority granted to the Needham Board of Health under Massachusetts General Laws Chapter 111, Section 31 which states that "boards of health may make reasonable health regulations," and pursuant to Chapter 369 of the Acts of 2012 An Act for the Humanitarian Medical Use of Marijuana ("The Act") and Massachusetts Department of Public Health Regulations 105 CMR 725.000.

SECTION 20.2 **PURPOSE**

The primary purpose of this regulation is to provide for local oversight and inspection of Registered Marijuana Dispensaries (RMDs) and hardship cultivation sites within the town by Needham's Board of Health and its agents to ensure the safe and sanitary operation of any such RMD or hardship cultivation site consistent with public health and safety. The regulation is intended to ensure that only people with a documented need will acquire medical marijuana or marijuana-infused products pursuant to the Act. Since the existence of an RMD or hardship cultivation site present a risk of improper diversion and other collateral consequences within the community, it is necessary to regulate this activity at the local level.

SECTION 20.3 **DEFINITIONS**

Unless otherwise indicated, terms used throughout this regulation shall be defined in the same way as they are in [105 CMR 725.004](#).

For ease of reference, 105 CMR 725.000 in its entirety may be downloaded or printed from the Massachusetts Department of Public Health (DPH) website at <http://www.mass.gov/dph/>. These DPH regulations and any relevant amendments, directives, memorandums or notifications from DPH are incorporated fully into this local regulation. These provisions must be read in conjunction with and as part of this regulation.

Board of Health: Town of Needham Board of Health and its designated agents. Those agents include the Director of Public Health and his/her staff, as well as other municipal officials designated by the Director or the Board including, but not limited to, law enforcement officers, fire officials, code enforcement officials, and other public and private consultants.

Board of Health Agent: The Director of Public Health and any town employee designated in writing by the Board of Health or the Director, which may include Health department staff, law enforcement officers, fire officials, and code enforcement officials

Business Agent: A Dispensary Agent who has been designated by the RMD Permit Holder to be a manager in charge of the RMD facility and its operations.

Director: The Director of Public Health, acting on behalf of the Needham Board of Health.

Home Permit: Issued by the Board of Health, to be renewed annually, to the holder of a hardship cultivation registration issued by the Massachusetts Department of Public Health (DPH) in 105 CMR 725.000, which registration is for a specific location within the town.

Non-Residential Roll-Your-Own (RYO) Machine: A mechanical device made available for use (including to an individual who produces rolled marijuana products solely for the individual's own personal consumption or use) that is capable of making rolled marijuana products. RYO machines located in private homes used for solely personal consumption are not Non-Residential RYO machines.

RMD Permit: A Registered Marijuana Dispensary Permit, to be renewed annually, which may be issued by the Board of Health to a non-profit corporation holding a Certificate of Registration issued by the Massachusetts Department of Public Health (DPH) pursuant to 105 CMR 725.000, which permits a RMD to operate within the town.

Self-Service Display: Any display from which customers may select marijuana or a marijuana-infused product without assistance from a Dispensary Agent or store personnel.

Town: The Town of Needham, Massachusetts.

Vending Machine: Any automated or mechanical self-service device, which upon

insertion of money, tokens or any other form of payment, dispenses or makes marijuana products.

SECTION 20.4 PERMIT TO OPERATE A REGISTERED MARIJUANA DISPENSARY

20.4.1 – Permits

- A) No person shall sell or otherwise distribute marijuana or marijuana-infused products within the Town of Needham without first obtaining a RMD Permit. A RMD Permit may only be issued to a nonprofit corporation which:
- (i) has a current Certificate of Registration issued by the Massachusetts Department of Public Health (DPH) pursuant to 105 CMR 725.000; and
 - (ii) has a permanent, non-mobile location in Needham approved by the DPH for use as an RMD); and
 - (iii) is in compliance with all applicable zoning requirements.
- And which provides satisfactory documentation of compliance with those requirements to the Board of Health.
- B) The applicant shall also submit to the Board of Health a copy of the operating policies and procedures for the RMD which was submitted to DPH pursuant to 105 CMR 725.000 and any other relevant DPH directives, memorandums or notifications.
- C) The applicant shall sign a statement declaring that the applicant understands that, under this local regulation:
- (i) all Dispensary Agents are responsible for complying with all local and state regulations pertaining to the operation of the RMD. Specifically, a violation of any provision of 105 CMR 725.000 or other applicable state regulations constitutes a violation of this regulation, which may be enforced by the Board of Health; and
 - (ii) the applicant is responsible for providing instruction and training in all applicable local and state regulations; and
 - (iii) the fact that a Dispensary Agent, vendor, or other person associated with the RMD is unaware of a regulation or lacks understanding of its content, shall not be a defense to any violation; and
 - (iv) the Board of Health and its designated agents may conduct

periodic, unannounced inspections of the RMD premises.

- D) The fee for a RMD Permit shall be two thousand five hundred dollars (\$2,500.00) annually or at the level determined in the Needham Board of Health's Fee Schedule. All RMD Permits expire on July 1 annually, regardless of the year or day and month on which they were issued.
- E) The initial plan review for marijuana-infused product facilities (see section 20.5) shall result in a fee of one thousand dollars (\$1,000.00) or at the level determined in the Needham Board of Health's Fee Schedule. The initial plan review for trash collection and the safe and sanitary disposal of waste (see section 20.6) shall result in a fee of one thousand dollars (\$1,000.00) or at the level determined in the Needham Board of Health's Fee Schedule.
- F) Following suspension, revocation or modification, a RMD permit may be renewed or re-issued, at the Board of Health's discretion, only upon the filing of a new application and fee. If necessary, the plan reviews mentioned in section (D) above may also be required along with their requisite fees. If renewed or re-issued, the RMD Permit shall be renewed in the usual course with the usual fee mentioned in sections (D) and (E) above.
- G) A separate RMD Permit is required for each RMD retail establishment selling marijuana or marijuana-infused products within the Town.
- H) Each RMD Permit shall be displayed at the RMD retail establishment in a conspicuous place.
- I) A RMD Permit is non-transferable.
- J) A RMD Permit will not be renewed if the RMD Permit Holder has failed to pay any outstanding fines or failed to satisfy any other penalties or conditions lawfully imposed by the Town.
- K) A RMD may not open for business before 9:00 A.M. and shall close no later than 7:00 P.M., on each day the RMD is open. The hours and days when the RMD is open must be posted conspicuously on the front entrance door.
- L) Acceptance of a RMD Permit constitutes an agreement by the RMD that it will adhere to the practices, policies, and procedures described or submitted with its application, as well as the relevant laws, state and local regulations, and conditions imposed by the Board of Health as part of the permit process.

20.4.2 – Inspections and Compliance

- A) Dispensary Agents must present their Registration Card on request by any Board of Health agent.

- B) Issuance and maintaining a RMD Permit shall be conditioned on the RMD Permit Holder's ongoing consent to periodic, unannounced inspections of the RMD premises by the Board of Health and its designated agents. The applicant also consents to abide by the provisions relating to inspections found in 105 CMR 725.300 and related sections including, but not limited to, "deficiency statements" and "plans of correction."
- C) There must be a designated Business Agent on the premises at all times that the RMD is open for business.
- D) The Board of Health and its designated agents, as well as the Needham Police Department, shall be provided with an updated phone list through which a Business Agent may be reached on a 24 hour basis.
- E) Issuance and maintaining a RMD Permit shall be conditioned on the RMD Permit Holder's ongoing consent to provide the Board of Health with copies of the Registration Cards for all Dispensary Agents working at the RMD, and the names of all Business Agents of the RMD, and to submit any changes in staffing and registration information within five (5) business days. The notification and information about changes in staffing and registration shall be submitted in both paper copy via courier or certified mail and electronically in PDF format.
- F) No RMD Permit Holder shall permit any disorder, disturbance, or illegality of any kind to take place in or on the licensed premises. The term "illegality" includes, but is not limited to, any violation of 105 CMR 725.000 and related directives, memoranda or notifications; and any violation of these regulations promulgated by the Board of Health. The Permit Holder shall be responsible for any disorder, disturbance or illegality of any kind whether present or not.
- G) Failure or refusal of an RMD or Home Permit holder to cooperate with the Board of Health or its agent shall be a violation of these regulations.

20.4.3 – Records Retention

- A) A RMD Permit Holder shall notify the Needham Public Health Department and the Board of Health orally and in writing within 24 hours of a visit to the premises or request for information by any representative of DPH acting in an official capacity. The RMD Permit Holder has a duty to provide the Board with any reports, correspondence, emails or other information from DPH on demand or, in any case, no later than five (5) business days after receipt by the RMD.
- B) Video surveillance shall conform to the requirements of 105 CMR 725.110(D) and any other related regulations, directives, memorandums or notifications from DPH. In addition, as conditions of issuing or maintaining its RMD Permit, the Board of

Health may require other, reasonable surveillance operations and security (e.g., an off-site backup system). Furthermore, the RMD must allow for immediate viewing of video surveillance by the Board of Health or its designated agents, upon request. A copy of a requested recording shall be provided as soon as practicable to these officials. All video recordings shall be retained for a minimum of 180 days. Furthermore, as soon as the RMD is aware of any recording that might relate to a criminal, civil or administrative investigation or legal proceeding of any kind, the RMD shall not alter or destroy the recording without the written permission of the Board of Health or its designated agent.

- C) Issuance and maintaining a RMD Permit is conditioned on maintaining all records outlined in 105 CMR 725.105(I) and other DPH regulations, directives, memorandum and notifications, along with any other documents reasonably required by the Board of Health in writing. Following closure of an RMD, all records must be kept for at least two (2) years at the expense of the RMD and in a form and location acceptable to the Board of Health. Moreover, as a condition of issuing and maintaining a RMD Permit, the Board of Health may reasonably require that the new owner of a RMD retain records generated by the previous RMD at the expense of the new RMD.

20.4.5 – Other Restrictions

- A) For RMDs that cultivate marijuana, the cultivation and processing facility shall not adversely affect the health or safety of the nearby residents or businesses by creating dust, glare, heat, noise, noxious gases, materials, processes, products or wastes. Growing areas shall be within a self-contained, locked structure, with a 1-hour firewall assembly made of green board, well ventilated with odor control, and shall not create humidity or mold issues within the establishment.
- B) No RMD is permitted to sell or distribute alcoholic beverages or tobacco products and must not be in possession of either a tobacco sales permit or a liquor license.
- C) No RMD is permitted to hold a Common Victualler license issued by the Town for on-premises food consumption.
- D) No RMD is permitted to be a Massachusetts lottery dealer or to engage in any other legal or illegal gaming activities.
- E) Failure or refusal of an RMD or Home Permit holder to cooperate with the Board of Health or its agent shall be a violation of these regulations.

SECTION 20.5

PLAN REVIEW OF MARIJUANA-INFUSED PRODUCTS OR TRASH COLLECTION & WASTE DISPOSAL

20.5.1 – An applicant who wishes to sell or produce edible marijuana-infused products (MIPs) at a RMD must, prior to beginning operations, undergo a plan review of any food processing and preparation facilities, regardless of their location, for any MIP that will, at some point, be sold, stored, or produced within the Town. The Board of Health and its designated agents will conduct the plan review, which may include a facilities inspection, to ensure sanitary handling and processing conditions and practices.

20.5.2 – An applicant for a RMD Permit shall develop a plan for the safe and secure storage and disposal of any waste, refuse, or damaged marijuana products. Such a plan will be subject to review and approval by the Board of Health and its designated agents prior to the RMD beginning operations.

SECTION 20.6 MARIJUANA SALES BY REGISTERED MARIJUANA DISPENSARY

20.6.1 – No person shall sell marijuana or marijuana-infused products from any location other than at a RMD that possesses a valid RMD Permit.

20.6.2 – A sign shall be conspicuously posted at all entrances to the RMD, indicating that the entry to persons who do not possess a valid Registration Card is prohibited. The Board of Health shall provide the sign, which shall be posted conspicuously on the exterior of the establishment so that it may be readily seen by any person approaching the entrance to the RMD. The sign shall remain unobstructed, secured to the building at a height of no less than four (4) feet or greater than seven (7) feet from the ground, and maintained in good condition.

20.6.3 – Dispensary Agents shall verify the Registration Card of the Card Holder in accordance with the procedures outlined in 105 CMR 725.000 and any other directives, memorandums or notifications from DPH. In addition, the Registration Card shall be verified for each and every Card Holder, on each and every occasion that he/she enters the RMD, without exception. The failure to verify, regardless of the prior history of the Card Holder at the RMD, constitutes a violation of this regulation.

20.6.4 – All retail sales of marijuana and marijuana-infused products must be face-to-face between the Dispensary Agent and the Card Holder on the premises of the RMD, unless the Card Holder is the proper recipient of home delivery in accordance with all applicable DPH regulations.

20.6.5 – No person shall:

- A) Distribute, or cause to be distributed, any free samples of marijuana or marijuana-infused products; or
- B) Accept or redeem, offer to accept or redeem, or cause or hire any person to accept

or redeem, or offer to accept or redeem, through any coupon or other method, any marijuana or marijuana-infused product for less than the listed or non-discounted price; or

- C) Sell marijuana or a marijuana-infused product through any discounts (e.g., “buy-two-get-one-free”) or otherwise provide any marijuana or marijuana-infused product for less than the listed or non-discounted price in exchange for the purchase of any other product.
- D) This provision of 20.6.5 shall not prohibit dispensing of free or discounted marijuana or marijuana-infused products to card holders whose ability to pay for a product deemed medically necessary is limited by demonstrable financial hardship.

20.6.6 – RMDs are prohibited from using self-service displays.

20.6.7 – RMDs are prohibited from using vending machines.

20.6.8 – RMDs are prohibited from using Non-Residential Roll-Your-Own machines.

20.6.9 – Dispensary agents or any other personnel associated with an RMD are prohibited from making any statement that:

- (i) encourages the use of marijuana for any purpose other than to treat a debilitating medical condition or related symptoms. This includes, but is not limited to, statements encouraging the recreational use of marijuana; or
- (ii) is false or misleading in any material way about the products for sale, their medical or scientific properties, or the manner in which the RMD conducts business.

SECTION 20.7 HOME CULTIVATION

20.7.1 – All marijuana cultivation or processing of any kind is illegal in the town without a RMD Permit or Home Permit issued by the Needham Board of Health. There are no exceptions.

20.7.2 – Prior to any home cultivation taking place within the town, even by a qualifying patient or caregiver under 105 CMR 725.000, the respective individual must obtain a Home Permit.

20.7.3 – A Home Permit shall not be granted if it is determined by the Board of Health that: (1) the applicant has access to free or low cost medical marijuana from a RMD; and (2) the RMD will deliver this low cost or free marijuana to the applicant, or the applicant has a method of transportation to reasonably access the RMD.

Applicants who meet this standard will not receive a Home Permit and will be informed, in

a written statement, that any marijuana cultivation within the town is outside the coverage of the medical marijuana program and is subject to prosecution as a crime under Massachusetts General Laws, Chapter 94C.

20.7.4 – In the event that section 20.7.3 is inapplicable to the applicant, the Board of Health may issue a Home Permit authorizing cultivation activities at a specified address within the town, provided that the applicant:

- A) Submits to a pre-approval inspection by the Board of Health or its designated agents, which may include law enforcement officers and fire officials, to ensure that the location specified in the application meets all of the requirements of this regulation; and
- B) Meets all the requirements for home cultivation contained in 105 CMR 725.000 and any related directives, memorandums or notifications. These include, but are not limited to, an enclosed, locked space, not viewable from a public location, in which cultivation and storage takes place in accordance with “industry best practices”; and
- C) Meets all applicable local regulations within the town including, but not limited, fire safety and building code provisions; and
- D) Has informed, if applicable, the registered public or private property owner of the specified address, and obtained from that owner consent to alter the property’s fixtures or structure, and/or arrived at a cost-sharing agreement concerning any increased utility costs likely to result from cultivation activities; and
- E) Grows only enough marijuana to maintain a sixty (60) day supply, which has been determined to be ten (10) ounces by DPH. The Board of Health or the Director may specifically designate the number and type of plants that may be possessed at any time by the applicant in order to meet this standard; and
- F) Submits to reasonable inspections by the Board of Health or its designated agents, which may include law enforcement officers, to ensure compliance with all of the requirements in this regulation; and
- G) Agrees that a Home Permit only allows for the cultivation and processing of marijuana without the use of any fire, heat source, or gas, except for cooking on a conventional stove originally supplied with the dwelling; and
- H) In any case, agrees that a Home Permit does not allow any method for processing marijuana that presents a risk of explosion or other property damage by any means; and
- I) Renews his/her Permit on an annual basis prior to July 1 but, in no case, shall a

Home Permit applicant be charged a fee to obtain a permit.

SECTION 20.8 VIOLATIONS

20.8.1 – Based on a determination by the Board of Health, after a duly noticed hearing at which the RMD or Home Permit holder has had an opportunity to be heard, of a violation of these regulations by the RMD or Home Permit holder, the Board may, by written decision, fine the RMD or Home Permit Holder up to \$300 per violation, and may suspend, modify, or revoke the RMD Permit or Home Permit. The minimum suspension schedule shall be as follows:

- A) In the case of a first violation, the RMD Permit or Home Permit shall be suspended for seven (7) consecutive business days.
- B) In the case of a second violation, the RMD Permit or Home Permit shall be suspended for six (6) months.
- C) In the case of three or more violations, the RMD Permit or Home Permit shall be suspended for twelve (12) months and may, at the Board of Health's discretion, be permanently revoked.
- D) Refusal to cooperate with the Board of Health or its designated agents shall result in the suspension of the RMD Permit or Home Permit for ninety (90) consecutive business days. This shall be in addition to any other penalty imposed for a violation.
- E) Any RMD Permit Holder or Home Permit Holder who engages in or allows the sale, distribution or cultivation of marijuana or marijuana-infused products while his or her permit is suspended shall be subject to permanent revocation.

20.8.2 - The penalties mentioned in 20.8.1 represent the minimum guidelines for action to be taken by the Board of Health for violations, and do not preclude the licensing authority from taking additional action after a duly noticed hearing at which the RMD Permit or Home Permit holder has had an opportunity to be heard.

Nothing contained in this Regulation is meant to restrict the authority of the local licensing authority from imposing different penalties in a specific case where, in the opinion of the licensing authority, the circumstances warrant.

20.8.3 – If an RMD permit is suspended, the permit holder shall cease sale and distribution of marijuana or marijuana-infused products, and close and secure the RMD premises to the satisfaction of the Director or his agents for the period of the suspension. Additionally, notice of the suspension must be publicly posted on the RMD to the satisfaction of the Director or his agents.

20.8.4 – If an RMD permit is revoked, the permit holder shall cease all sale, distribution or cultivation of marijuana or marijuana-infused products, and shall close and secure the RMD premises to the satisfaction of the Director or his agents, and the RMD shall submit subject to the approval of the Board or its designated agents, or the Board may order, implementation of a plan for the removal of marijuana and marijuana-infused products and related implements and equipment from the RMD retail establishment. Additionally, notice of the revocation must be publicly posted on the RMD to the satisfaction of the Director or his agents.

20.8.5 – In the case of a suspension or revocation of a Home Permit, the Board may order that marijuana or marijuana-infused products and related implements and equipment be removed from the specified Home Permit location. The method for removal and storage, and the deadline for compliance, may be specified in the Board's order. In the case of a Home Permit, the Board may authorize immediate confiscation of all the items previously mentioned prior to the hearing, provided that any removed items are not damaged or destroyed prior to the conclusion of all administrative actions and appeals.

20.8.6 - All fines must be paid within twenty-one (21) days of assessment. The failure to do so may be the subject of a separate criminal proceeding.

20.8.7 - In the event that a RMD or Home permit is suspended or modified, the Permit Holder may be ordered to submit a remediation plan addressing all causes for the suspension or modification and all appropriate changes to business practices and operations. That remediation plan is subject to review and approval by the Board of Health prior to reinstating the Permit.

SECTION 20.9 ENFORCEMENT

20.9.1 - Enforcement of this Regulation shall be by the Board of Health and its designated agents.

20.9.2 - Whoever violates any provision of this regulation may be penalized by the non-criminal method of disposition as provided in General Laws, Chapter 40, Section 21D and Town of Needham By Laws, or by filing a criminal complaint.

20.9.3 - Each day any violation exists shall be deemed to be a separate offense.

20.9.4 - Any resident who desires to register a complaint pursuant to this Regulation may do so by contacting the Board of Health, the Public Health Department, or the Needham Police Department.

SECTION 20.10 SEVERABILITY

If any provision of these regulations is declared invalid or unenforceable, the other

provisions shall not be affected thereby but shall continue in full force and effect.

SECTION 20.11 EFFECTIVE DATE

This regulation shall take effect upon December 31, 2015. Public meetings regarding this regulation were conducted on November 20, 2015 and December TBD, 2015. This regulation was voted by a majority of the Board of Health on XYZ, 2015.

DRAFT



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To: Timothy McDonald, Director, and the Needham Board of Health

From: John Sofis Scheft, Esq.

Date: October 12, 2015

Re: In Areas Where RMDs Deliver Low Cost or Free Marijuana, DPH Must Reject All Medical Marijuana Cultivation Registrations

Summary of argument. The intent of the medical marijuana law was to allow a patient or his caregiver to grow marijuana only in cases where the patient is indigent¹ or lacks access to a registered marijuana dispensary (RMD). Once an RMD delivers low cost or free marijuana, the patient lacks a legal jurisdiction for home cultivation.

Homegrows are risky. Of all the provisions of the medical marijuana law, home cultivation presents the greatest risk to public health and safety.^{2, 3} The security requirements for homegrows are not nearly as extensive as those mandated for RMDs, which creates great potential for the diversion of marijuana plants or products away from patients and caregivers.⁴

¹ A "verified financial hardship" means that an individual is a recipient of MassHealth, or Supplemental Security Income, or the individual's income does not exceed 300% of the federal poverty level, adjusted for family size. 105 CMR 725.004.

² Current regulations require that homegrowers "adhere to industry best practices in the cultivation of marijuana plants and storage of the finished product." 105 CMR 725.035(I). Ironically, these same regulations do not make homegrowers responsible for the detailed testing and cultivation requirements applied to RMDs, even though this activity occurs inside inhabited residences — often housing children!

³ While homegrowers may only cultivate up to a 60 day supply of marijuana [105 CMR 725.035(G)], DPH has not specified how many plants constitute a 60 day supply. This has left a gaping, regulatory hole allowing homegrowers to grow more than they need.

⁴ Existing regulations only require that home cultivation occur indoors, out of public view, in an enclosed and locked area. 105 CMR 725.035(H) and 725.650.

Moreover, when not conducted properly with appropriate equipment, home cultivation creates a risk of mold growth and fire due to marijuana extraction methods and overtaxed utilities. Communities in other states have experienced increased electrical fires, explosions, water damage, overall property damage, infestation, and collateral crime and disorder (e.g., home invasions; drug dealing; etc.) Massachusetts is starting to experience these issues too.⁵

Because of these obvious risks, DPH regulators intended to radically reduce homegrows. To properly implement the Medical Marijuana Act⁶, former DPH Commissioner Lauren Smith and the Members of the Public Health Council created the Medical Marijuana Working Group to promulgate regulations. Their work resulted in the current version of 105 CMR 725.000.

In a memorandum dated May 8, 2013, this 14-member group of experts declared:

“In order to avoid the diversion and security complications associated with widespread home cultivation, DPH intends to minimize hardship cultivation by optimizing access through a variety of approaches, including: 1) mandating the provision of low-income subsidies at all [RMDs], 2) allowing secure home delivery where necessary, and 3) encouraging personal caregivers to pick up product in lieu of cultivation.”⁷

For these reasons, the final version of the regulations drafted by these experts permit home cultivation *only if* a patient has:

1. **A verified financial hardship;**⁸ *or*
2. **An inability to access an RMD** because he cannot use public transportation or drive, *or* lacks a caregiver with transportation, *or* lacks an RMD that delivers to his or his caregiver’s primary address. 105 CMR 725.035(A).

In short, home cultivation is not an option once an applicant has financial and physical access to marijuana.

⁵ “Medfield Man Arraigned on Marijuana Charges” (Rebecca Fiore, Boston Globe, May 20, 2015) (article explains how police and fire responded to an explosion at 6 a.m. due to marijuana extraction in a home).

⁶ Chapter 369 of the Acts of 2012.

⁷ Medical Marijuana Working Group Memorandum (May 8, 2013; re: “Request for Approval for Promulgation of Regulations at 105 CMR 725.000”), at page 7. See Attachment A for pages 6-8 of this memorandum.

⁸ See note 1 for a definition of “verified financial hardship.”

Financial hardship evaporates as soon as an indigent patient has an RMD willing to provide free or low cost marijuana. At present, all RMDs *must* provide reduced cost or free marijuana to patients with a documented financial hardship. 105 CMR 725.100(A)(6).

Similarly, the lack-of-access justification goes away as soon as a patient confirms that he or his caregiver has transport to an RMD, or has an RMD that will deliver marijuana. DPH regulations permit RMDs to engage in home delivery after receiving orders by telephone or the internet. 105 CMR 725.105(N)(5) and (6).

Logically, if an RMD makes free or low cost marijuana available to patients who cannot afford it, those patients no longer have a financial hardship requiring them to cultivate at home. And if an RMD is willing and able to deliver to a patient, lack of physical access to an RMD cannot constitute a hardship requiring the patient or caregiver to engage in home cultivation.

DPH must reject all applications that fall into these two categories.

It then follows that municipalities, through their own Boards of Health, may also reject “hardship cultivation” permits for these same reasons. See G.L. c. 111, § 31.

Board of Health regulations that do so will not conflict with the regulatory scheme established by DPH in 105 CMR 725.000.⁹ This means that the Town of Needham, and other like-minded municipalities, could and should adopt this approach to reduce the collateral damage to public health and safety caused by unwarranted homegrows.

⁹ A local regulation will not be invalidated unless the court finds a “sharp conflict” between the local and State provisions. *Doe v. City of Lynn*, 472 Mass. 521, 526 (2015) citing *Easthampton Savings Bank v. Springfield*, 470 Mass. 284, 289 (2014).

Attachment

A



The Commonwealth of Massachusetts
Executive Office of Health and Human Services
Department of Public Health
250 Washington Street, Boston, MA 02108-4619

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TO: Interim Commissioner Lauren Smith and Members of the Public Health Council

FROM: DPH Medical Marijuana Work Group¹

DATE: May 8, 2013

RE: Request for Approval for Promulgation of Regulations at 105 CMR 725.000:
Implementation of An Act for Humanitarian Medical Use of Marijuana (Chapter 369 of the Acts of 2012)

INTRODUCTION

The purpose of this memorandum is to request approval for promulgation of 105 CMR 725.000, *Implementation of An Act for Humanitarian Medical Use of Marijuana*. The proposed regulation implements requirements enacted in Chapter 369 of the Acts of 2012.

BACKGROUND

On November 6, 2012, Ballot Question 3, "*An Initiative Petition for a Law for Humanitarian Medical Use of Marijuana*" passed with a 63.3% vote (and with a majority in 349 of 351 communities), making Massachusetts the 18th state in the nation in addition to the District of Columbia to approve the use of marijuana for medical purposes.

This measure, now Chapter 369 of the Acts of 2012 (the Act), became law on January 1, 2013 and allows qualifying patients with certain defined medical conditions or debilitating symptoms to obtain and use marijuana for medicinal use. Additionally, the law requires the Department of Public Health (Department or DPH) to issue regulations providing critical implementation and policy framework by May 2013. The Act eliminates state criminal and civil penalties for the medical use of marijuana by qualifying patients. In order to qualify, a patient must have been diagnosed with a "debilitating medical condition" as defined in the statute² and have obtained a written certification from a physician with whom the patient has a *bona fide* physician-patient

¹ DPH Medical Marijuana Work Group: Cheryl Bartlett, Alice Byrd, Dr. Madeleine Biondolillo, Julian Cyr, Dr. Alfred DeMaria, Andy Epstein, Priscilla Fox, Donna Levin, Alison Mehlman, Kara Murray, Jenny Nathans, Lydie Ultimo, Iyah Romm, Dr. Lauren Smith, and Jay Youmans.

² "...[C]ancer, glaucoma, AIDS or HIV, Hepatitis C, ALS, Crohn's disease, Parkinson's disease, Multiple Sclerosis, and other conditions as determined in writing by a qualifying patient's physician."

- **Initial Draft Regulation:** DPH recommended allowing up to 10 ounces of finished product in leaf form (or equivalent) as a 60-day supply for the purposes of defining a maximum amount of medical marijuana that can legally be possessed at a given time. This amount of supply was based on a review and comparison of dispensing across states as well as stakeholder feedback. DPH proposed describing only a cap so that the certifying physician can use his or her best judgment in describing the needs of his/her individual patient. DPH further recommended that a physician's certification for a debilitating condition must indicate the time period for which such certification is valid; however, this physician determination may not exceed one year. The amount of medical marijuana that a patient may be dispensed would be in direct proportion to the period of time indicated in the certification; up to 10 ounces for a 60-day supply (e.g. certification for 15 days would allow dispensing of up to 2.5 ounces).
- **Comment Received and Response:** DPH received extensive comment on the 60-day supply, including many who testified that the supply was insufficient, and many others who indicated that 10 ounces is too much for this period of time. Many of the former indicated support for the provision allowing physicians to override the 10 ounce cap where extenuating circumstances indicate additional supply is necessary. Recognizing the balance struck by the initial proposed regulation between the perspectives of many stakeholders, and between the legitimate needs of patients and concerns for safety and security of our communities, DPH recommends no revision to this provision.

4. Defining a Bona-Fide Physician-Patient Relationship

- **Initial Draft Regulation:** Based upon the framework provided by BORiM, DPH recommended the following definition: "*Bona Fide Patient Relationship* means a relationship between a physician, acting in the usual course of his or her professional practice, and a patient in which the physician has conducted a clinical visit, completed and documented a full assessment of the patient's medical history and current medical condition, has explained the potential benefits and risks of marijuana use, and has a role in the ongoing care and treatment of the patient."
- **Comment Received and Response:** Comments indicated widespread support for the definition of bona-fide physician-patient relationship. Comment was provided by several professional associations and by patient advocates that mid-level practitioners should be allowed to diagnose patients with debilitating medical conditions and provide written certifications accordingly. DPH recognizes M.G.L. c. 112, s. 80I, and has added a stipulation that nothing in this regulation shall be construed to limit the scope of practice of nurse practitioners.

Additionally, subsequent to a request by a professional association, DPH has adopted a prohibition on allowing physicians to certify immediate family members. The association recommended that DPH align this requirement with the prescribing guidelines and regulation of BORiM for Schedule II medications, in which such a prescription can only be written in an emergency situation. DPH does not contemplate such emergencies being applicable to marijuana and therefore has prohibited this practice entirely. Where renewal certifications may occur remotely, DPH believes that any urgent need for accessing marijuana for medical use will be accounted for by the current model.

5. Hardship Cultivation

- **Initial Draft Regulation:** Those states that allow home cultivation permit patients to select this approach without additional administrative process. A patient's ability to cultivate at home is not dependent on financial, physical, or geographic hardship in those states. Pursuant to the Act, Massachusetts would be the first state to develop such criteria. In order to avoid the diversion and security complications associated with widespread home cultivation, DPH intends to minimize hardship cultivation by optimizing access through a variety of approaches, including: 1) mandating the provision of low-income subsidies at all MMTCs, 2) allowing secure home delivery where necessary, and 3) encouraging personal caregivers to pick up product in lieu of cultivation. DPH therefore previously recommended the following criteria and definitions:

Physical incapacity to access reasonable transportation:

An inability to use public transportation or drive oneself; and
Does not have a personal caregiver with a reliable source of transportation; and
Does not have a MMTC that will deliver medical marijuana to the patient's or personal caregiver's primary address.

Verified financial hardship:

A patient who submits satisfactory evidence of being a recipient of MassHealth, Supplemental Security Income, or the applicant's income does not exceed 133% of the federal poverty line, adjusted for family size.

Lack of treatment center within a reasonable distance of the qualifying patient's residence:

Lacks a treatment center within a reasonable distance from the qualifying patient's residence; and
Does not have a MMTC that will deliver medical marijuana to the patient's or personal caregiver's primary address.

- **Comment Received and Response:** Extensive comment was received on various elements of hardship cultivation.
 - Many proposed that DPH should not limit home cultivation to cases of hardship and that each registered qualifying patient should accordingly be allowed to cultivate at-will. The statute clearly stipulates that home cultivation can only occur pursuant to a hardship cultivation registration granted by the Department, based upon the factors of geographic, financial, or physical hardship.
 - Another comment challenged the proposed requirement that only one personal caregiver be allowed to cultivate on behalf of his or her registered qualifying patient. DPH has clarified this requirement to stipulate that hardship cultivation may occur at only one location, either at the primary residence of the patient or of one of the allowable personal caregivers. This revision allows a second personal caregiver, if any, to participate in cultivation, facilitating ongoing support of patients during times such as vacation, work-related travel, etc.
 - Further comment questioned the requirement that cultivation only occur at the registered qualifying patient's or personal caregiver's primary place of residence. DPH recognizes the challenge posed to individuals with a hardship cultivation registration who rent property and are unable to use that place of primary residence to cultivate. However, recognizing the limitations on hardship cultivation in and of itself imposed by the Act, the availability of personal caregivers, delivery models offered by MMTCs, and the significant concerns for security presented by cultivation at alternate locations, we believe that the

provision should remain as written. The waiver provision in the regulation would allow for modification on a case-by-case basis should no other means of accessing marijuana be available to a given patient.

- DPH received comment that Department staff should not have the right to enter the home of registered qualifying patients and their personal caregiver(s), if any. DPH believes that a request for and acceptance of a hardship cultivation registration constitutes permission for the Department to conduct such inspections, as is consistent with MMTCs or health care facilities.
- DPH received comment from patients and patient advocates that the proposed definition of verified financial hardship, 133% of federal poverty level (FPL), adjusted for family size, was too low, presenting access barriers to low income patients. As Massachusetts Health Care Reform provides for partial health insurance subsidization for people with income of up to 300% of FPL, DPH has amended this provision and adopted the standard of 300% of FPL adjusted for family size.
- DPH also received comment that a patient's enrollment in Social Security Disability Insurance (SSDI) should be accepted as a demonstration of financial hardship. DPH agrees that many patient's enrolled in SSDI may qualify for verifiable financial hardship under these regulations, however, SSDI is not a means-tested benefit. Therefore, in and of itself, SSDI is not an indication of financial hardship. Patients enrolled in SSDI may apply for consideration of a verifiable financial hardship, for which a variety of factors would be considered.
- DPH received questions as to whether a registered qualifying patient with a hardship cultivation registration could purchase marijuana from a MMTC as well. As the demonstration of hardship for a cultivation registration explicitly includes factors that would preclude acquiring marijuana from an MMTC, DPH has included provisions stipulating that patients with hardship cultivation registrations may not purchase products, other than seeds, from MMTCs.
- Further comment was received suggesting that hardship cultivation be banned entirely. The Act explicitly protects individual cultivation within the defined parameters of financial, physical, or geographic hardship and cannot be banned by the Department.
- DPH received comment that municipal governments and law enforcement agencies should be notified of the location of any registered qualifying patient who receives a hardship cultivation registration, or their personal caregiver, if any. DPH intends for law enforcement to have easy, real-time access to appropriate information in the Department's interoperable database. However, the generation of such lists would pose privacy and security concerns and would not be appropriate.

6. Laboratory Testing

- **Initial Draft Regulation:** While a clear need has been articulated, because there are as yet no established, widely accepted, and available tests for medical marijuana, DPH recommended requiring a quality assurance and periodic testing plan in the application for approval as a treatment center, and DPH would use responses in evaluating applications. DPH further recommended specifying a requirement that the MMTC must test for contaminants as specified by the Department, including at least pests, mold, mildew, heavy metals and the presence of pesticides, while including provisions such that the Department may require additional testing without regulatory change.

Developing Public Health Regulations for Marijuana: Lessons From Alcohol and Tobacco

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Until November 2012, no modern jurisdiction had removed the prohibition on the commercial production, distribution, and sale of marijuana for nonmedical purposes—not even the Netherlands. Government agencies in Colorado and Washington are now charged with granting production and processing licenses and developing regulations for legal marijuana, and other states and countries may follow. Our goal is not to address whether marijuana legalization is a good or bad idea but, rather, to help policymakers understand the decisions they face and some lessons learned from research on public health approaches to regulating alcohol and tobacco over the past century. (*Am J Public Health.* 2014;104:1021–1028. doi:10.2105/AJPH.2013.301766)

Marijuana legalization is no longer an abstract notion. In November 2012, voters in Colorado and Washington passed initiatives that not only made it legal to possess up to an ounce of marijuana for nonmedical purposes but also allow for-profit firms to supply the market. Colorado's initiative additionally allows home production. Although marijuana remains illegal under federal law, policymakers in these states are now developing regulatory regimes that will allow licensees to produce and sell marijuana and other cannabis products, including infused candies and other edibles, to anyone who is aged 21 years or older. ("Marijuana" is an American term, customarily applied to the dried leaves and flowers of the cannabis plant. There are other cannabis plant products, including resin, which is referred to in the United States as "hashish." The majority of cannabis consumed in the United States is in the form of marijuana, which is probably why initial state legalization statutes that have passed are specifically about "marijuana" although even these laws do not mean to be restrictive in their terms. For example, Washington speaks of "marijuana-infused" drinks and edibles, and Colorado's Amendment 64 defines "marijuana" to be all possible products of the plant except industrial hemp.) Bills to legalize marijuana are being introduced in other states, and we will likely see more ballot initiatives in future elections.

Although many jurisdictions have experimented with alternatives to strict marijuana prohibition, including decriminalization, medical marijuana, and the Dutch "coffee shops," no industrialized nation has legalized the cultivation, processing, distribution, and supply of marijuana for recreational purposes in the modern era—not even the Netherlands. In the Netherlands, de facto legalization extends only to retail sales of up to 5 grams; wholesale distribution of marijuana to coffee shops remains illegal and is actively enforced. That is not to say that it has never been legal; in fact, marijuana was a legal commodity in the United States until the early 1900s. But regulatory policy on the cultivation, processing, distribution, and sale of marijuana and its derivative products is unprecedented in the modern era.

Because there are no modern examples of marijuana regulation, policymakers are confronting many new questions about how to manage a marijuana market. Should the number of licensees be restricted, and, if so, how should those scarce licenses be allocated? Should vertical integration be allowed, or should there be separate licenses for growing, processing, and selling marijuana? What product safety requirements should be considered (in terms of specific ingredients allowed or disallowed), and who will be responsible for testing the product? How restrictive should licenses be in terms of permitted quantity and potency? Should taxes be assessed per unit

weight, as a percentage of value (ad valorem), or on some other basis, such as Δ -9-tetrahydrocannabinol (THC) content? Should marijuana be sold in conventional stores alongside other products or only in specialized venues? What about within-state Internet sales? Although the questions are new for marijuana, policymakers have grappled with similar questions pertaining to alcohol and tobacco, raising the question of what lessons can be learned from these 2 substances and applied to marijuana policy.

We have summarized insights and ideas that grew out of a meeting of alcohol, tobacco, and illicit drug policy experts hosted by the RAND Drug Policy Research Center on February 11, 2013, to foster discussions about how one might regulate marijuana to promote public health objectives assuming a decision to legalize has already been made. The arguments here do not necessarily reflect the opinions of every coauthor but, instead, reflect a general consensus of ideas that grew out of those discussions. The conference was filmed by C-SPAN.¹

WHY PUBLIC HEALTH REGULATIONS ARE NEEDED

Marijuana has been used for thousands of years. Similar to alcohol, most adults who use marijuana continue to perform their expected social roles and do not exhibit serious problems. Millions of people have derived pleasure from the plant, and there is evidence that some cannabinoids have important medical benefits.^{2,3} It is for these and other reasons interested parties have pursued legalization.

Legalization does not imply a lack of regulation, however. Essentially all markets in modern societies are subject to at least some regulation. Although different perspectives and philosophies favor more or less regulation, we have presented the public health perspective

favoring certain types of regulations in light of documented harms associated with marijuana use, particularly for youths.^{4,5} Although the magnitude of the various health harms is debated, there are certain acute effects and consequences of chronic use for which the evidence of adverse effects is fairly strong, including panic attacks and increased anxiety, impaired judgment and reaction time, increased probability of experiencing psychotic symptoms, and risk of dependence.^{4,6–11} Moreover, the correlation between frequent marijuana use among adolescents and a wide range of adverse outcomes, such as poor educational attainment, is strong although it is difficult to disentangle the effects of use versus other unobservable third factors.^{12–14}

Discussions of policy alternatives to prohibition either implicitly or explicitly involve both public health and other objectives, many of which conflict. For example, minimizing consumption by dependent users conflicts with the goal of maximizing tax revenue because the minority of very heavy users account for the majority of consumption and, hence, tax revenues. Thus, it is important to start any discussion of possible regulatory approaches with agreement on common objectives. We have assumed the following objectives, because they are frequently raised in legalization debates as areas of common ground among reformers and those opposed to legalization:

1. minimizing access, availability, and use by youths,
2. minimizing drugged driving,
3. minimizing dependence and addiction,
4. minimizing consumption of marijuana products with unwanted contaminants and uncertain potency, and
5. minimizing concurrent use of marijuana and alcohol, particularly in public settings.

The last objective is motivated by epidemiological and health services research suggesting that concurrent use of alcohol and marijuana may increase the risk of traffic crashes, acute health effects, and other harms relative to using either substance alone.^{15–18} However, for some individuals concurrent use could also reduce alcohol consumption and possibly some of the consequences associated with heavy drinking (e.g., aggression). It is impossible to predict how concurrent use will influence social welfare

under legalization, and we urge researchers to pay close attention to this relationship. But because of the existing evidence, it seems appropriate, at least initially, to minimize the concurrent use of marijuana and alcohol in public.

Of course, these are not the only public health or policy objectives that one could consider. Some people may want to reduce overall smoking of marijuana (out of concern about adverse effects on the respiratory system) or overall consumption of THC (to reduce impairment). Similarly, some might consider minimizing use in public to reduce perceived normative acceptance and to prevent second-hand smoke exposure, as for tobacco. However, those in favor of legalization may want to allow use in public places and not have restrictions on use or products consumed, should be on the grounds that consumption makes users feel good and such, this consumption makes them feel good, and such policies increase personal liberties. Because of the obvious contention in trying to find common ground on restrictions or limitations on adult use, we have chosen not to include it as an explicit objective, although we recognize there are public health arguments for making reduction in overall use a main goal.

This is not the first time the public health community has struggled to balance competing objectives concerning dependence-inducing products or activities. Obvious analogies include drinking and gambling.^{19–23} Lessons can be learned from the repeal of alcohol prohibition. Importantly, the Twenty-First Amendment did not specify a particular form of a regulated market but, rather, left it to the states to experiment with different models, including the option to retain the prohibition. Although no US state today retains a strict prohibition, it is also true that no single regulatory model has emerged, suggesting that there may not be 1 perfect model. Although examples from numerous US states, Russia, Finland, and Sweden demonstrate that state-run monopolies with control of wholesale or retail off-premise sales, prices, locations of outlets, hours of operation, and advertising help control problems associated with excessive drinking,^{24–28} such state monopoly controls have gradually decreased within the United States since Prohibition, with most alcoholic beverages in most states now

distributed via licensing systems. As noted by Fosdick and Scott, a fundamental characteristic of licensing systems is that they retain the profit motive and, hence, the incentive to increase sales.²⁰ Evidence from privatization experiments in the United States and abroad has shown that such transitions lead to more outlets, longer hours of operation, increased promotions, and, importantly, increased sales and use.^{29–33} Other regulatory strategies have emerged to try to counter the harms created by the licensing system. We have reviewed some approaches that the literature suggests can minimize the threats posed to public health by alcohol and tobacco.

INSIGHTS FROM ALCOHOL AND TOBACCO

What can be done if policymakers are interested in developing regulations that help reduce (1) access, availability, and use by youths; (2) drugged driving; (3) the risk of dependency and addiction; (4) consumption of marijuana products with unwanted contaminants and uncertain potency; and (5) concurrent use of marijuana and alcohol, particularly in public settings? Below are some key insights that can be gleaned from the alcohol and tobacco literature.

Keep Prices Artificially High

Hundreds of studies on tobacco and alcohol show that raising prices reduces consumption and a long list of related health and social harms. Many studies show that raising excise taxes on cigarettes is one of the most effective strategies for reducing early initiation and use, discouraging the transition to being a pack-a-day smoker, and increasing quit attempts even among youths.^{34–37} Similarly, higher alcohol taxes and prices have been shown to reduce initiation, binge drinking, drunk driving, and traffic crash rates even among youths.^{38–40} Higher alcohol prices are also associated with lower violence and deaths from chronic diseases such as cirrhosis and certain cancers.^{39,41,42}

Legalization of marijuana would reduce production costs, perhaps substantially, and that would be expected to lead to lower prices to consumers.^{43,44} Although one could try to raise the price of regulated marijuana all the way back to its illegal underground market

price through taxation or fees, such a strategy encourages current illegal producers and sellers to remain in the market or for gray market arbitrage between low- and high-tax jurisdictions. Underground markets have emerged across states, and even across nations, in response to much smaller economic gains per unit weight or volume when smuggling tobacco,^{35,45,46} and “home growing” marijuana is easier than home growing tobacco.

Any strategy that involves keeping the price of regulated marijuana high will need to include mechanisms that reduce the incentive for tax-evading underground markets. That can be done in at least 2 ways: (1) designing the regulatory structure around tax collection (e.g., by banning home production and issuing few production licenses), and (2) having strong enforcement and sanctions for those operating outside the regulatory structure. The potential and limitations of such strategies might be inferred from the cases of tobacco and alcohol, in which the underground markets account for variable sizes of the total market in different countries despite designated agencies explicitly charged with providing oversight over, monitoring of, and enforcement in the industry. Thus, there is no guarantee that an underground market in marijuana will not continue to exist, particularly if the legal market imposes significant taxes or restricts the types of marijuana goods that can be sold.

Adopt a State Monopoly

One way to keep price artificially high and reduce underground market competition is a state-run monopoly on production, distribution, and sale. (Note that this model could still allow privatized production and, in the case of marijuana, cultivation and processing if the state monopoly focused entirely on distribution and retail sales.) Research on state alcohol monopolies, and monopolies more generally, have shown that monopolies help keep the price of a good higher through reduced competition, reduce access to alcohol by youths, and reduce overall levels of use.^{19,28–30,47,48} State monopolies would be impossible to implement currently in the United States because of continuing federal prohibition. However, it is worth discussing the public health advantages of a tightly controlled state monopoly in case the federal legal landscape changes, either

through repeal or amendment of the Controlled Substances Act or with some sort of waivers system.⁴⁹

State stores often sell only the commodity in question—marijuana in this case. That is not unique to a state store model; private stores could also be similarly restricted. And it is not without drawbacks, notably a smaller number of outlets reducing customer convenience. Inconvenience is a cost that helps constrain consumption, and single-purpose stores discourage using the intoxicating substance as a loss leader, effectively cross-subsidizing its consumption with profits from the sale of other substances. The problem of using intoxicants as loss leaders is evident in the case of alcohol, generating considerable policy debate in the United Kingdom and elsewhere, with some movement toward imposing minimum per dose pricing in addition to conventional product taxes to maintain higher prices.^{50,51}

As the sole distributor and retailer of marijuana, the state government could more aggressively pursue violators who pretend to be legitimate distributors or retailers because they could be more easily identified as nongovernment employees. With aggressive deterrence against underground market suppliers, the government can set prices at levels higher than otherwise possible. Competition would not push prices lower, as there would be a single supplier. Moreover, having monopoly control of marijuana distribution would facilitate messaging concerning the quality and content of the marijuana product sold, warnings about risks of use, and adherence to point-of-sale advertising restrictions. If the government store sold only unbranded “generic” forms, it would eliminate altogether the incentive for producers to promote their product. Finally, considerable evidence from both the alcohol and tobacco literature suggests that monitoring and frequent enforcement checks of sellers can reduce sales to minors.^{52–54} This is easier to accomplish with state-owned stores.

Restrict and Carefully Monitor Licenses and Licensees

If a government monopoly is not possible, the next most preferred option is a strong licensing system in which licenses are required to participate in any part of the supply chain: grower, producer or processor, wholesaler or

distributor, and retailer. (One could also require that individual users receive a license to consume.^{55–57}) Setting up licensing systems is justified mainly because it allows the government to trace all products and ensure that they meet some minimum quality standards required by law and because the sale of the products can be monitored in terms of excess or insufficient supply. (It is important to note that licensing is necessary but not sufficient for supply to be effectively monitored.) In the case of intoxicating or addictive substances like alcohol and tobacco, however, it can also limit competition (which can keep prices high), enable effective tax collection, limit the density of retail outlets, and reduce the potential for diversion, particularly if licenses are restricted.

Currently, there is no strong evidence about the impact of licensing tobacco retailers on tobacco use, partly because tobacco outlets are so pervasive and policies in this area are just beginning to take shape. The density of tobacco outlets is positively associated with smoking rates, particularly among youths,^{58–60} but causality has yet to be definitively ascertained. There is clearer evidence in the tobacco literature that strong licensing provisions that are actively enforced (through regular random compliance checks and imposition of penalties) are effective at limiting sales to minors because of the potential for license revocations or suspensions for violators.^{61–63} Moreover, fees collected through the licensing systems provide steady revenues to support active oversight and enforcement by regulatory agencies.⁶²

The alcohol literature demonstrates the benefits of outlet licensing more clearly; studies from various disciplines converge in showing a strong positive relationship between alcohol outlet density and alcohol misuse as well as unintentional injuries and crime.^{28,64–66} The evidence is so strong that several national and regional health organizations, including the European Commission,⁶⁷ the World Health Organization,⁶⁸ and the US Department of Health and Human Services,⁶⁹ have included recommendations related to licensing restrictions in prevention plans.

Keeping the number of licenses small also helps control the cost of regulating these new businesses and enforcing compliance (because there are fewer entities to oversee). Fewer

licenses make it easier for the government to keep close records on each licensee, making it easier to discover anomalies in their books that could indicate diversion to underground markets.

Rules—even arbitrary, meddlesome, and pointless rules—can also create inefficiency in the industry, keeping costs and hence prices higher. Although normally this is viewed as a cost, not a benefit, of regulation, the welfare effects of higher prices are ambiguous when consumption of that good creates externalities. One could view the 3-tier alcohol supply system, which restricts those with a specific form of license (production, distribution, retail sale) from engaging in the business activities of the other licensees, in this light. This allows states to impose fees (or taxes) at different points in the supply chain and keep the industry from realizing efficiencies that would otherwise emerge from vertical integration.

Licensing retailers who engage in direct to consumer sales can be restricted in a variety of ways, as evidenced by existing alcohol and tobacco restrictions. For example, in the case of tobacco, licensing restricts the type of businesses that can sell tobacco, location of retailers (e.g., distance from schools, parks, and other youth venues), density of retailers (on the basis of, e.g., population and geography), and modes of sales (e.g., bans on vending machines and self-service). Similarly there are many restrictions on retailers of alcohol, including restrictions on locations, modes and hours of sale, and goods that can be sold.

Limit the Types of Products Sold

Although limiting the types of products sold are tied to licensing, regulators can easily overlook its value. An important lesson comes from tobacco policy, however. Although public health warnings have been posted on cigarette cartons since the 1960s, the government was unable to pass legislation allowing the US Federal Drug Administration to regulate the constituents of tobacco products until 2009. It has literally taken decades of scientific evidence for there to be enough political will for the government to step in, and just how the US Federal Drug Administration will use that power remains unclear.⁷⁰

The lesson for marijuana may be to establish authorities' rights to impose regulations from the outset because of how difficult it can be to

expand regulatory scope *ex post*. Subjects for regulation might include what is allowed to be in the product (e.g., additives, flavorings), methods of production (e.g., to reduce pesticides, mold, or other contaminants), “bundling” of marijuana with other inputs (e.g., edibles, nicotine), and limits on THC content. It might also be useful to consider whether high levels of THC can and should be allowed if accompanied by high levels of cannabinoids that are believed to offset some of the effects of THC, like cannabidiol. If governments wait to try to impose such product restrictions or leave the industry to regulate this itself, the outcome could be problematic, as profit motive will likely dominate decisions rather than consumer safety.

Both the alcohol and tobacco industry have developed products that are particularly appealing to youths. Examples include candy and gum cigarettes, alcohol pops, and wine coolers. It seems valuable to impose restrictions on marijuana products targeting youths similar to those imposed on the alcohol and tobacco industry. Although it may be impossible to think in advance of every possible product that could appeal to youths, examining current products would be a useful place to start. The medical marijuana industry already sells THC-infused chocolate bars, peanut butter cups, Rice Krispies treats, hard candies, and lollipops.

Attempt to Limit Marketing

The US doctrine of commercial free speech makes it difficult to limit advertising. However, bans on advertising, promotion, and sponsorship have been achieved in some areas (and in other countries) at times when significant harms were identified (e.g., tobacco and, to a lesser extent, hard liquor and sugary drinks). If the goal is to maintain antismoking norms and keep risk perceptions high to reduce youths' initiation and use of marijuana, comprehensive marketing restrictions can be justified. Moreover, if the federal ban on marijuana legalization remains, market restrictions may in fact be possible because of threat of sanctions from the federal government. (An August 29, 2013, memorandum from the US Department of Justice listed 8 enforcement priorities for federal prosecutors making decisions about marijuana cases in states that have legalized marijuana. One of the priorities is to target firms that not only sell marijuana to children but also market in

a manner that is appealing to youths.) The alcohol and tobacco literature have demonstrated positive relationships between tobacco and alcohol advertising, promotion and sponsorship, and youths' use, including product placements in movies and on television and radio.^{48,71–74} There is no reason to believe that marijuana marketing would not be equally appealing.

In light of evidence showing that partial restrictions on marketing are largely ineffective at reducing tobacco use because they just lead to a shift of expenditures to other forms of nonbanned marketing,⁷³ a comprehensive ban on all forms of marijuana marketing might be the ideal. Such an approach would encompass all forms of advertising (e.g., print, television, radio, transit, billboards, point-of-sale, Internet, and social media outlets), promotion (e.g., price discounting, coupons, free sample distribution), sponsorships, and other indirect forms of marketing (e.g., brand stretching, branded merchandise). Approaches for doing this are described in the World Health Organization Framework Convention on Tobacco Control Article 13 guidelines.⁷⁵ Additional restrictions recently placed on tobacco in other countries that might be considered for marijuana include complete bans on the retail display (as done in all Canadian provinces and territories, all Australian states and territories, Norway, the United Kingdom, and Iceland) and plain packaging policies (as done in Australia, effectively eliminating the use of the pack as a marketing tool). Such steps, which would arguably appear very restrictive for a relatively harmless product that had already been freely traded in the marketplace, would be minimal for a new product because of its first chance to be legally traded. Opinions differ on whether such marketing restrictions would withstand legal challenges in the United States, but it is clear that efforts to restrict marijuana marketing should be initiated before or at the time marijuana is legalized. Options may exist at that point that will no longer be possible after marijuana sales have become well established.

Restrict Public Consumption

Limiting consumption in public serves 2 purposes: it reduces secondhand exposure to smoked marijuana, and it reduces the extent to which marijuana use is seen by youths as

socially acceptable or normative. The value of reducing secondhand exposure to marijuana smoking is not something that science has clearly established in the way that reducing exposure to secondhand smoke from tobacco has been shown.⁷⁶ Nonetheless, nonusers are exposed through secondhand smoke and heavy passive exposure to marijuana can result in measurable THC concentrations in the nonusers' blood serum and urine.^{77,78} However, the passive exposure is unlikely to lead to a failed urine test.⁷⁹ But for some, exposure to marijuana smoke is as offensive as exposure to tobacco smoke—regardless of the health implications of that exposure.

The second justification for limiting marijuana consumption in public places is the beneficial effect on youths' initiation. The tobacco literature shows that clean indoor air laws targeting public places that youths tend to congregate (e.g., concerts, sporting events, malls, and public transportation) are associated with reduced initiation and self-reported use of cigarettes among children and adolescents.^{72,80} Even broad workplace clean indoor air laws (affecting restaurants and the like) have been shown to influence the smoking behavior of youths by influencing antismoking norms.³⁶ By limiting where marijuana can be consumed, regulators can reduce the exposure youths have to marijuana, perhaps making it less normative and more likely that youths delay initiation or never start at all.

Restrictions on where marijuana can be consumed could also reduce the probability that marijuana and alcohol be used concurrently. Because of the evidence on how concurrent use increases the risk of a traffic crash, restricting place of consumption could have important implications for impaired driving. For example, use could be restricted to establishments that do not allow alcohol to be consumed or to private residences. However, if concurrent use leads to a decrease in alcohol consumption for some individuals, this could also produce some benefits (e.g., reduction in aggression). We cannot predict how concurrent use will influence social welfare under legalization; researchers should pay close attention to this relationship.

Measure and Prevent Impaired Driving

Driving under the influence of marijuana can be dangerous. Even the National

Organization for the Reform of Marijuana Laws includes “no driving” in its *Principles of Responsible Cannabis Use*.⁸¹ In their review of research, Room et al. argue that the

better controlled epidemiological studies have recently provided credible evidence that cannabis users who drive while intoxicated are at increased risk of motor-vehicle crashes.^{82(p18)}

More recent literature reviews and meta-analyses reached the same conclusion.^{10,83}

Although driving under the influence of marijuana can adversely affect psychomotor performance, the effect is much greater for those driving under the influence of alcohol.^{16,84} Research has found that those under the influence of both marijuana and alcohol are at a much greater risk of a crash than are those under the influence of either by itself.⁸⁵ Some have argued that THC-impaired drivers compensate by driving more cautiously, but it is also true that it is very difficult to ascertain true impairment because impairment can be affected by a number of individual specific factors, including tolerance, amount of THC consumed, and mode of consumption.^{11,86}

Part of the problem of measuring impairment relates to the substance itself and how it is metabolized in the body. The main psychoactive constituent in marijuana is THC, and although its acute psychoactive effects often last only a few hours, it remains detectable in blood for several hours and, for some chronic users, up to 7 days after use.⁸⁷ Furthermore, metabolites typically included in specific tests of urine are detectable for even longer.^{85,87} Therefore, detection of use can occur well outside the window of impairment.

Although measurement of THC in blood concentration is broadly viewed as the gold standard because it correlates more closely with impairment,^{87–89} obtaining blood is invasive and requires transporting the individual to a place where blood can be safely drawn. Urine samples are easier to collect but also a bit invasive, and they correlate less well with true impairment, particularly for cannabis. Oral fluid testing is the least invasive, but until recently these tests have not generated estimates that are as reliable when done in the field as when done in the lab.⁹⁰ Tool development continues, but it is a developing field.^{88–89}

There is also the problem of determining what level of THC concentration in the blood is

a reasonable level at which to say that someone is likely to be impaired. In the only study of its kind, an international team of scientists conducted a meta-analysis of the experimental and epidemiological research to develop a per se limit for THC in blood that would indicate comparable impairment to a blood alcohol concentration of 0.05%.¹¹ They concluded that a THC concentration in blood serum of 7 to 10 nanograms per milliliter (equivalent to a range of 3.5–5.0 ng/ml in whole blood) is comparable. Both Washington and Colorado set legal limits of THC for driving impairment to 5 nanograms per milliliter as measured in whole blood. Some toxicologists argue attempting to set legal limits for THC that approximate alcohol limits is a mistake.¹¹ The policy question is whether the allowable level should permit significant impairment for drivers (as the current case for alcohol, allowing driving at modest impairment levels below 0.08) or whether the legally allowable level for THC should be set at a very low level approximating zero impairment (currently in place for alcohol in the United States for drivers younger than 21 years).

If a serious campaign to reduce marijuana-impaired driving is to be undertaken, lessons can be learned from the alcohol literature, in which a variety of strategies have been tried, evaluated, and modified on the basis of prior experience, including alcohol-specific controls (e.g., per se laws, higher prices, higher minimum legal drinking age), enforcement (mandatory fines and jail times for offenders, sobriety check points), transportation (graduated licensing and safety belt laws), and media campaigns. Reviews have been conducted identifying successful and cost-effective strategies, such as raising beer prices and driving under the influence per se laws.^{91–92} Reviews have also identified core elements of specific approaches that increase the likelihood of success, such as the meta-analysis by Elder et al.⁹³ that identified the following: careful planning, solid execution, significant audience exposure, concurrent ongoing prevention activities, and active and visible enforcement of drunk driving laws.

KEY INSIGHTS AND AREAS FOR FUTURE RESEARCH

Reasonable people can disagree about the merits of legalizing marijuana. There is

tremendous uncertainty about its consequences, and individuals hold different beliefs about the value of tangible outcomes (e.g., dependence and psychotic symptoms) and other outcomes such as greater intoxication and personal freedom. We have not taken a position about whether marijuana legalization is a good or bad idea or whether a particular perspective is more or less relevant. Rather, we have provided a starting point for the public health community to start thinking about how specific public and safety goals might be approached under a legal regime and the range of policy options that could be considered in light of them. We have focused on 5 objectives that we hear frequently discussed in legalization debates, and we discussed various regulatory approaches that have been shown to contribute to achieving similar objectives for tobacco and alcohol.

Table 1 summarizes the discussion in “Insights From Alcohol and Tobacco,” linking specific regulatory approaches (in terms of evidence of effectiveness) to each of the 5 public health goals. The approaches are not necessarily mutually exclusive. Furthermore, not all of these approaches influence specific goals in the same way or to the same magnitude. Some regulations target a particular behavior directly (e.g., higher prices to decrease youths’ use and dependence and impaired driving regulations to reduce drugged driving), whereas others do so indirectly (limits on products sold to reduce the appeal of products

to children and, hence, youths’ use and future dependence). It is expected that larger effects will be observed when the links are direct or coupled with strong monitoring of compliance and enforcement.

The alcohol and tobacco literature are germane to other issues raised by legalization, such as the design of an overall prevention strategy and strategies for minimizing the criminalization of youths. In some cases, lessons may translate easily because of similarities in the nature of the behaviors or substances (e.g., the continuum of lower risk to higher risk behavior with alcohol consumption or specific alcohol products). However, in other cases the parallels are imperfect. For example, the strategy of reaching a cooperative agreement with the industry self-restricting advertising is greatly complicated because the marijuana industry is highly fragmented, with many small firms instead of a few dominant players. So, although it is valuable to look to the tobacco and alcohol control models, one must be mindful of how the substances’ markets differ in terms of the behavior of users and the behavior of suppliers. Society has cycled through different policy approaches with alcohol and tobacco, with times of unregulated free markets, prohibition on production and sales (in the case of alcohol), and proactive regulation; so much can be learned from the experiences of regulating these substances.

However, researchers and agencies must exert greater effort to help evaluate alternative

strategies. In particular, more research is needed—and soon—on the relationship between alcohol and marijuana. Notably, one can find studies that support the conclusion that the goods are economic substitutes or that they are complements; the fact is that scientists are still grappling with this question and have not reached a consensus. Furthermore, past research simply does not address the current circumstance, as legalization of commercial marijuana production is unprecedented and could bring many changes (e.g., a substantial decline in marijuana price) that has not been part of the equation when evaluating previous policy changes.

Greater effort needs to be given to data collection in states adopting legalization to assess the impact of regulations and how they are enforced on the use of intoxicating substances. Data tracking marijuana prices, marijuana potency, other cannabinoid constituents, methods of consumption (e.g., smoking a marijuana cigarette vs using e-cigarette-like devices with hash oil), youths’ exposure to advertising, commerce among youths, and the like, can provide valuable information for understanding the effects of these policies. Nevertheless, another lesson from the tobacco and alcohol experience is that the full implications of policy changes may not manifest within the first 10 years—let alone the first few years. There can be important consequences that accumulate slowly over time, through generational replacement and industry adaptation.

Finally, even though the current science does not suggest marijuana is as harmful as alcohol or tobacco, there is general agreement among us that if a jurisdiction is going to experiment with something other than prohibition, a restrictive regulatory approach is preferred. (Note that it is possible to regulate while only allowing nonprofit producers and sellers. Jurisdictions have a choice about whether they want to allow for-profit companies to supply the market.) On the basis of the US experience with alcohol and tobacco, in which products were directly marketed and promoted to children, new products were developed to entice young users, and high outlet density led to normalized beliefs and increased use, it seems more prudent from a public health perspective to open up the marijuana market slowly, with tight controls to test the waters and prevent

TABLE 1—Linking Regulatory Approaches to Public Health Objectives

Regulatory Choices	Public Health Objective to Minimize				
	Youths’ Access and Use	Drugged Driving	Dependence and Addiction	Unwanted Contaminants and Uncertain Potency	Concurrent Use of Marijuana and Alcohol ^a
Increase prices	X	X	X		?
Create state monopoly	X	X	X	X	X
Restrict and monitor licenses and licensees	X	X	X	X	X
Limit products sold	X	X	X	X	
Limit marketing	X	X	X		X
Restrict public consumption	X	X	X		X
Measure and prevent impaired driving		X			X

^aIt is impossible to predict how concurrent use will influence social welfare under legalization, but because of the existing evidence it seems appropriate, at least initially, to minimize the concurrent use of marijuana and alcohol in public.

gross commercialization of the good too soon. If history is any guide, a laissez-faire approach could generate a large increase in misuse and consequent health and social problems. ■

About the Authors

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This article was accepted October 13, 2013.

Contributors

R. L. Pacula coordinated and managed this project. All authors contributed significant intellectual content and were involved in conceptualizing, drafting, and revising the article.

Acknowledgments

This article was supported through an honorarium from the Robert Wood Johnson Foundation's Public Health Law Research Program and by internal funds from the RAND Corporation.

Note. Opinions expressed herein are those of the authors and do not necessarily reflect the opinions of either of the funding organizations.

Human Participant Protection

Institutional review board approval was not needed because this research did not involve human participants.

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Memorandum

To: Needham Board of Health
From: Donna Carmichael, R.N., Public Health Nurse
Rachel Massar, Program Evaluation & Communications Coordinator
CC: Timothy Muir McDonald, Public Health Director
Date: November 6, 2015
Re: Proposed Indoor Tanning Regulation

Scientific research demonstrates that indoor tanning poses a serious health threat to the public by enhancing the risk for developing skin cancer, including melanoma, by up to 75%¹. The World Health Organization (WHO) and the U.S. Department of Health and Human Services agree that tanning devices are a human carcinogen comparable to tobacco. Teenagers are especially vulnerable to the effects of ultraviolet radiation since their skin cells are dividing and changing more rapidly than adults. Statistics show that skin cancer rates are rising, both nationally² and in the Town of Needham. From 2006-2010 there were significantly more melanoma cases than expected in Needham, with 36 male cases (SIR=167, 95% CI 116.9-231.2) and 19 female cases (SIR=104.9, 95% CI 63.1-163.8).³

Limiting access to tanning facilities for minors will substantially reduce the long-term health consequences of indoor tanning. The Massachusetts tanning facility regulations ([105 CMR 123.000](#)), however, are not sufficient in reducing the long-term health consequences of indoor tanning. Those state regulations allow young people to both access and operate indoor tanning facilities freely; there is no age requirement for operators of tanning devices under the state regulations. Additionally, under the existing state regulations:

- persons 14 years of age to 17 years of age may use a tanning device with prior written consent of a parent or legal guardian;
- persons under 14 years of age may use a tanning device if they are accompanied by a parent or legal guardian; and
- there is no restriction for persons 18 years and older for using a tanning.

It is critical to reduce access to indoor tanning for teenagers, whose developing skin cells are more vulnerable to the effects of harmful radiation from indoor tanning devices. Furthermore, tanning is most popular among teenagers, meaning that the most at-risk group is also the highest user group of indoor

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1. 2006 IARC, World Health Organization, International Agency for Research on Cancer, Exposure to Artificial UV Radiation and Skin Cancer
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 3. MDPH Mass Cancer Registry Cancer Incidence Report, City & Town Series 2006-2010. Available from: <http://www.mass.gov/eohhs/docs/dph/cancer/city/2006-2010/registry-city-06-10-leverett-new-salem.pdf>
 4. Skin Cancer Foundation. Quick Facts about Teen Tanning. Available from: <http://www.skincancer.org/prevention/tanning/quick-facts-about-teen-tanning>

tanning. According to the Skin Cancer Foundation, 37% of white female adolescents and over 11% of white male adolescents between 13 and 19 years of age in the U.S. have used tanning booths.⁴ Without regulations to restrict access to indoor tanning, teenagers will use tanning booths, leading to potentially devastating health outcomes.

There is an opportunity to strengthen the regulatory framework governing tanning facilities, as there are currently no operating tanning facilities in the Town of Needham. Specifically, restricting the minimum age for the operation and use of tanning devices to 21 years is proposed to remain consistent with the Town's legal age for purchase of alcohol and tobacco products. Attached is the proposed Needham Board of Health Regulation of Indoor Tanning Facilities which includes revisions to 105 CMR 123.003 Sections C and D.

Sincerely,



Donna Carmichael, R.N.
Public Health Nurse
Public Health Department



Rachel Massar
Program Evaluation and Communications Coordinator
Public Health Department

*Attachments: Draft Needham Board of Health Tanning Regulations
Massachusetts Tanning Regulation ([105 CMR 123.000](#)) with Needham Edits*



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ARTICLE 21

REGULATION OF INDOOR TANNING FACILITIES

SECTION 21.1

AUTHORITY

This regulation is promulgated under the authority granted to the Needham Board of Health under Massachusetts General Law Chapter 111, Section 31, which states that “boards of health may make reasonable health regulations.”

SECTION 21.2

RATIONALE/PURPOSE

The purpose of this Regulation is to complement the Massachusetts Radiation Control Program regulation entitled “Tanning Facilities”, [105 CMR 123.000](#), to allow for local oversight and inspection of indoor tanning facilities to ensure the facilities are closely monitored to meet the requirements set forth by the Town of Needham’s Board of Health.

The Needham Board of Health finds that sound and reasonable scientific evidence exists, evidence which demonstrates the dangers of tanning. Further, the Needham Board of Health has concluded that limiting access to tanning facilities for individuals under 21 years of age is necessary to protect public health.

SECTION 21.3

ADOPTION OF 105 CMR 123

The Massachusetts Radiation Control Program regulation entitled “Tanning Facilities” ([105 CMR 123.000](#)) is hereby adopted.

SECTION 21.4 **OPERATORS**

Section 105 CMR 123.003 (C) is hereby amended by adding the following sentence:

No tanning facility shall employ a person under 21 years of age as an operator or permit an employee under 21 years of age to operate a tanning device.

SECTION 21.5 **PROHIBITION OF YOUTH TANNING**

Section 105 CMR 123.003(D) (2) and (3) is stricken and replaced (as Section 2) with the following sentence:

No person under the age of 21 shall use a tanning device.

SECTION 21.6 **NOTICE**

The Operator of a tanning facility must post notice of such prohibition and such notice shall be provided by the Board of Health and shall be posted conspicuously by the operator.

SECTION 21.7 **VIOLATIONS**

It shall be the responsibility of the operator to ensure compliance with all sections of this regulation. Violations shall be enforced in accordance with the provisions of 105 CMR 123 and the Town of Needham By-Laws entitled Non-Criminal Disposition of Certain Violations.

SECTION 21.8 **EFFECTIVE DATE**

Upon approval by the Board of Health, a copy shall be filed with the Massachusetts DEP and with the Needham Town Clerk. The regulation shall also be published in a newspaper in circulation with the Town of Needham. The Regulation shall become effective on January 1, 2016.

105 CMR 123.000: TANNING FACILITIES

Section

- 123.001: Purpose and Scope
- 123.002: Definitions
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- 123.010: Grounds for Suspension of a License
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- 123.014: Penalties
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123.001: Purpose and Scope

(A) The purpose of 105 CMR 123.000 is to set forth the licensure procedures and the requirements for the maintenance and operation of tanning facilities.

(B) 105 CMR 123.000 applies to all tanning facilities, except for those facilities having a phototherapy device used by or under the supervision of a licensed physician who is trained in the use of such phototherapy device in which patients are intentionally exposed to ultraviolet radiation for the purpose of treatment of disease by licensed health care professionals.

123.002: Definitions

Applicant means any person who applies to the Board of Health for a license to maintain and operate a tanning facility.

Board of Health or Board means the Board of Health which has jurisdiction in the community in which a tanning facility is located including the Board or officer having like powers and duties in towns where there is no Board of Health.

Customer means any member of the public who is provided access to a tanning facility in exchange for a fee or other compensation, or any individual who is afforded use of a tanning facility as a condition or benefit of membership or access.

Department means the Radiation Control Program of the Massachusetts Department

of Public Health.

Facility means tanning facility.

Injury means bodily harm resulting from the use of a tanning device which requires medical attention.

Inspection means an official examination or observation by the Department or Board, which includes but is not limited to tests, surveys, and monitoring to determine compliance with rules, regulations, orders, requirements and conditions of the Board or Department.

Jeopardy means a situation or condition which the Board has determined presents an imminent threat to the health or safety of a customer.

123.002: continued

License means a license to operate a tanning facility issued by the Board in accordance with 105 CMR 123.000.

Licensee means any person who is licensed by the Board in accordance with 105 CMR 123.000.

Operator means an individual designated by the licensee to control the operation of a tanning facility and to instruct and assist the customer in the proper operation of tanning devices.

Person means any natural person, corporation, partnership, firm, association, society, trust, estate, public or private institution, group, agency, political subdivision of this Commonwealth, any other State or political subdivision or agency thereof, and any legal successor, representative, agent, or agency of the foregoing.

Phototherapy device means equipment that emits ultraviolet radiation and is used by health care professionals in the treatment of disease.

Radiation means ultraviolet radiation.

Radiation machine means any device capable of producing radiation.

Tanning device means any equipment used for tanning the skin that emits ultraviolet radiation, including, but not limited to, a tanning booth, tanning bed or sunlamp which includes high pressure tanning lamps. Tanning devices also include any accompanying equipment, including, but not limited to, protective eyewear, timers and handrails.

Tanning facility means any location, place, area, structure or business which provides access to tanning devices.

Ultraviolet radiation means electromagnetic radiation with wavelengths in the air between 200 nanometers and 400 nanometers.

123.003: Operation of Tanning Facilities

Unless otherwise ordered or approved by the Board or Department, each tanning facility shall be constructed, operated, and maintained to meet the following minimum requirements:

(A) Physical plant:

(1) Warning sign

- (a) A warning sign shall be posted within three feet of each tanning device;
- (b) The warning sign shall be readily legible, clearly visible, and not obstructed by any barrier, equipment, or other item so that the user of the tanning device can easily view the warning sign before energizing the ultraviolet light generating device;
- (c) The warning sign shall be printed in white on a red background;
- (d) The lettering on each warning sign shall be at least $\frac{1}{2}$ inch high for all words shown in capital letters and at least $\frac{3}{16}$ inch high for all lower case letters;
- (e) The warning sign shall be at least 8½ inches wide by 11 inches long;
- (f) The warning sign shall contain the following information:

DANGER - ULTRAVIOLET RADIATION

- 1. Follow instructions.
- 2. Avoid too frequent or lengthy exposure. As with natural sunlight, exposure to a sunlamp may cause eye and skin injury and allergic reaction. Repeated exposure may cause chronic damage characterized by wrinkling, dryness, fragility, bruising of the skin and skin cancer.
- 3. Wear protective eyewear. **FAILURE TO USE PROTECTIVE EYEWEAR MAY RESULT IN SEVERE BURNS OR LONG TERM INJURY TO THE EYES.**

123.003: continued

- 4. Ultraviolet radiation from sunlamps aggravates the effects of sun. Do not sunbathe before or after exposure to ultraviolet radiation.
- 5. Abnormal or increased skin sensitivity or burning may be caused by certain foods, cosmetics or medications, including but not limited to, tranquilizers, diuretics, antibiotics, high blood pressure medication, birth control pills and skin creams. Consult a physician before using a sunlamp if you are using medication, have a history of skin problems, or believe you are especially sensitive to sunlight. Pregnant women or women on birth control pills who use a tanning device may develop discolored skin.

6. IF YOU DO NOT TAN IN THE SUN YOU WILL NOT TAN FROM USE OF THIS DEVICE. Use of a tanning device does not provide a substantial protective base against the effects of the sun.

(2) Requirements for Tanning Devices

(a) Only tanning devices manufactured and certified to comply with the Code of Federal Regulations (CFR) 21 CFR 1040.20, "Sunlamp products and ultraviolet lamps intended for use in sunlamp products," as amended from time to time, shall be used in tanning facilities. Compliance shall be based on the standard in effect at the time of manufacture as shown on the device identification label required by 21 CFR 1010.3, as amended from time to time.

(b) Each tanning device shall have a timer which complies with the requirements of 21 CFR 1040.20(c)(2), as amended from time to time. The maximum timer interval shall not exceed the manufacturer's maximum recommended exposure time. No timer interval shall have an error greater than plus or minus 10% of the maximum time interval for the product.

(c) Tanning devices shall meet the requirements of the relevant sections of the National Fire Protection Association's National Electrical Code and shall have been inspected and have satisfied all the local electrical code requirements.

(d) There shall be physical barriers in tanning facilities to protect customers from injury induced by touching or breaking the lamps.

(e) Additional requirements for stand-up booths:

1. There shall be physical barriers or other methods, such as handrails or floor markings, to indicate the proper exposure distance between ultraviolet lamps and the customer's skin.

2. The construction of the booth shall be such that it will withstand the stress of use and the impact of a falling person.

3. Access to the booth shall be of rigid construction; doors shall open outwardly. Handrails or non-slip floors shall be provided.

(f) Defective or burned-out lamps or filters shall be replaced with a type intended for use in that tanning device which is specified on the product label or with lamps or filters that are "equivalent" under the U.S.F.D.A. regulations and policies applicable at the time of lamp manufacture.

(g) The licensee shall maintain records of the recommended exposure time established by the manufacturer of the tanning device. Such records shall be available to each operator. The operator shall follow the recommended exposure times and limit each customer to the maximum exposure established by such records.

(h) The interior temperature of the tanning device shall not exceed 100°F.

(B) Protective Eyewear.

(1) Protective eyewear which meets the requirements of 21 CFR 1040.20(c)(4), as amended from time to time, shall be made available to the customer before each tanning session with instructions for its mandatory use.

(2) The licensee shall maintain in the facility manufacturer's eyewear literature

which documents compliance with 21 CFR 1040.20(c)(4), as amended from time to time.

(3) Protective eyewear, other than eyewear designed for one-time use only, shall be properly sanitized before each use, using a sanitizing agent which is registered by the United States Environmental Protection Agency (U.S.E.P.A.) and which is specifically manufactured for use with protective eyewear. Exposure to the ultraviolet radiation produced by the tanning device itself is not considered a sanitizing agent.

123.003: continued

(C) Operators.

(1) No tanning facility shall employ a person under 21 years of age as an operator or permit an employee under 21 years of age to operate a tanning device.

(24) Each operator must be trained and sufficiently knowledgeable in the correct operation of tanning devices used at a facility. That knowledge shall include:

- (a) the requirements of 105 CMR 123.000 and of 21 CFR 1040.20, as amended from time to time;
- (b) proper use of U.S.F.D.A. Recommended Exposure Schedule;
- (c) photosensitizing agents such as: foods, cosmetics, and medications that may produce an abnormal or increased skin sensitivity;
- (d) skin type determination;
- (e) recognition of injuries from overexposure to ultraviolet radiation;
- (f) manufacturer's procedures for the correct operation and maintenance of the tanning device;
- (g) use of protective eyewear;
- (h) emergency procedures in case of injury;
- (i) effects of ultraviolet radiation, acute and chronic exposure, biological effects, and health risks;
- (j) electromagnetic spectrum with emphasis on the photobiology and physics within the 200-400 nanometer range;

(32) A list of the facility's operators who have been trained in accordance with 105 CMR 123.003(C)(1) shall be maintained and available at the facility.

(43) A trained operator must be present at a tanning facility at all times during operating hours.

(D) Records.

(1) Each time a customer uses a tanning facility, or each time a customer executes or renews a contract to use a tanning facility, such customer shall be given a written statement of warning as described in 105 CMR 123.003(A)(1) and sign a written statement acknowledging that he/she has read and has understood the warning statement. For illiterate or visually handicapped persons, the warning statement shall be read by the operator to the customer in the presence of a witness. Both the witness and the operator shall sign the statement indicating it has been read to the customer.

(2) No person under 21 years of age shall use a tanning device.

~~(2) No person 14 years of age to 17 years of age, inclusive, shall use a tanning device without the prior written consent of a parent or legal guardian who shall indicate therein that such parent or guardian has read and understood the warnings required under the provisions of 105 CMR 123.003(A)(1). The operator must sign the consent form as a witness to the signing by the parent or legal guardian.~~

~~(3) No person under 14 years of age shall use a tanning device unless accompanied by a parent or legal guardian. The parent or legal guardian accompanying the person under 14 years of age shall sign a consent form indicating to the operator that such parent or guardian has read and understood the warnings required under 105 CMR 123.003(A)(1).~~

(3) A record shall be kept by the facility operator of each customer's total number of tanning visits and tanning times. Such records shall be maintained for at least 12 months from the date of that customer's last tanning session.

(4) Copies of all applications and the license information outlined in 105 CMR 123.005(C)(1) through (7), must be maintained at the tanning facility and be available for review by inspectors and tanning facility customers upon request.

(E) Injury Reports.

(1) A written report of any tanning injury to a customer or complaint of injury shall be forwarded by the facility's operator or licensee to the Board which issued the license and to the Department with a copy to the complainant or injured person within five working days of its occurrence or knowledge thereof. The report shall include:

- (a) the name of the affected individual;
- (b) the name and location of the tanning facility involved;
- (c) the nature of the injury;
- (d) the name and address of the affected individual's health care provider, if any;
- (e) any other information considered relevant to the situation.

123.003: continued

(F) Sanitation.

(1) The operator shall provide to customers of the tanning facility access to toilet and hand washing facilities. Such facilities shall meet the following requirements:

- (a) they shall be cleaned and disinfected at least once every 24 hours, and
- (b) they shall contain liquid soap, paper towels, and a receptacle for used paper towels.

(2) Each customer shall have access at all times to a safe and sanitary supply of drinking water.

(3) Each facility shall provide to its customers paper or cloth towels which may not be shared. Cloth towels must be washed and sanitized after each use.

(4) All surfaces with which customers have contact within tanning devices shall be disinfected after each customer's use. Disinfection shall be carried out using

an U.S.E.P.A. registered disinfectant.

(5) Each tanning device shall be capable of being ventilated so that there is a minimum of 20 cubic feet per minute (cfm) of fresh air per occupant.

(6) If showers are provided:

(a) hot water shall be at a temperature between 110 - 130°F;

(b) shower floors shall be constructed of non-absorbent, non-slippery materials, and sloped toward a properly installed floor drain. The use of duckboards or rubber mats in the shower is not permitted; and

(c) shower floors and walls shall be cleaned and disinfected at least once every 24 hours.

(7) The interior of the facility shall be maintained in good repair and in a safe, clean, sanitary condition, free from all accumulation of dirt and rubbish.

(8) All equipment and fixtures in the facility, if appropriate, shall be installed in accordance with accepted plumbing, gas fitting, and electrical wiring standards.

(G) No tanning facility shall claim, or distribute promotional material that claims, that the use of a tanning device is safe and free from risk.

123.004: Inspections

(A) The Board of Health shall inspect each tanning facility within 30 days of licensure, every six months thereafter, and upon receipt of any written complaint.

(B) The Board of Health, local health agent, or Department shall have access at all reasonable times to any tanning facility for the purpose of inspecting said facility.

123.005: Application for a License

(A) No person shall maintain or operate a tanning facility unless he/she is the holder of a valid license granted by the Board of Health.

(B) Applications for licensure shall be made on forms prescribed by and available from the Board. Each applicant shall submit all the information required by the form and the accompanying instructions. The term "application" as used herein shall include original and renewal applications.

(C) The Board shall require that the applicant provide at least the following information in order to be issued a license to operate a tanning facility:

(1) Name, address and telephone number of the following:

(a) The tanning facility;

(b) The owner(s) of the tanning facility;

(2) The manufacturer, model number, model year, serial number (if available) and type of each ultraviolet lamp or tanning device located within the facility;

123.005: continued

(3) The geographic areas within the Board's jurisdiction to be covered, if the

facility is mobile;

(4) The name and address of the tanning device supplier, installer, date of installation of each tanning device, and service agent;

(5) A signed and dated certification that the applicant has received, read and understood the requirements of 105 CMR 123.000;

(6) A copy of the consent form to be used by the facility in fulfilling the requirements of 105 CMR 123.003(D)(2) and (3);

(7) A copy of the operating and safety procedures to be followed in the operation of the facility and tanning devices.

(D) Each applicant shall provide such additional information as the Board may reasonably require.

(E) Each applicant shall submit the appropriate license fee. The fee for a license and annual renewal thereof shall be determined by each Board.

123.006: Issuance of a License

(A) Upon a determination by the Board that an applicant meets the requirements of 105 CMR 123.005, the Board shall issue a license to maintain and operate a tanning facility.

(B) The Board may incorporate in the license at the time of issuance or thereafter by appropriate rule, regulation or order, such additional requirements and conditions with respect to the licensee's receipt, possession and use of the license to operate tanning facilities as it deems appropriate or necessary.

(C) A license shall expire no later than one year from the date of its issue.

(D) Each tanning facility's license must be displayed in a conspicuous place in the facility.

123.007: Renewal of a License

(A) An application to renew a license shall be filed in accordance with the requirements of the Board.

(B) In order to renew a license, a licensee shall file an application with the Board in proper form for renewal not less than 30 days prior to the expiration of his/her license, whereupon the licensee's existing license shall not expire until the renewal application status has been finally determined by the Board.

123.008: Report of Changes

All information required by 105 CMR 123.005 and otherwise required by the Board shall be kept current by each licensee. The licensee shall notify the Board in

writing before making any change which would render the information reported pursuant to 105 CMR 123.005 and contained in the application for license no longer accurate. This requirement shall not apply to changes involving replacement of the original lamp types which have been certified with the United States Food and Drug Administration (U.S.F.D.A.) as "equivalent" lamps under the U.S.F.D.A. regulations and policies applicable at the time of replacement of the lamps. The facility owner shall maintain at the facility manufacturer's literature demonstrating the equivalency of any replacement lamp.

123.009: Non-Transferability of License

No license shall be transferable from one person to another or from one tanning facility to another.

123.010: Grounds for Suspension of a License

The Board or its authorized agent may summarily suspend a license pending a hearing whenever the Board finds that there is a situation causing jeopardy to customers at a tanning facility. A facility may not operate during the period of a suspension of its license.

123.011: Grounds for Denial, Revocation or Refusal to Renew a License

(A) The Board may deny, revoke or refuse to renew a license sought or issued pursuant to 105 CMR 123.000 for any one of the following reasons:

- (1) The applicant or licensee has failed to submit the information required under 105 CMR 123.005 which demonstrates that the facility will be operated and maintained in accordance with the requirements of 105 CMR 123.000;
- (2) The applicant or licensee has submitted incorrect, false or misleading information in the documents required under 105 CMR 123.005;
- (3) The applicant or licensee has failed to operate or maintain the tanning facility in accordance with the specifications approved by the Board except as such maintenance may involve the replacement of lamps by "equivalent" lamps which have been defined in 105 CMR 123.008;
- (4) The tanning facility is operated in a way that causes or creates a nuisance or hazard to the public health or safety;
- (5) The applicant or licensee has violated any condition upon which the license was issued by the Board;
- (6) The applicant or licensee has failed to allow duly authorized agents of the Board or Department to conduct inspections of the facility at reasonable hours and in a reasonable manner;
- (7) The applicant or licensee has failed to pay license fees;
- (8) The tanning facility has been found to be in violation of M.G.L. c. 111, §§ 207 through 214 or 105 CMR 123.000, or any additional requirements adopted by the Board and has not complied within seven days of written notice of said violations by the Board.
- (9) The applicant or licensee has failed to pay fines or penalties imposed for

violations of M.G.L. c. 111, §§ 207 through 214 or 105 CMR 123.000 or local rules, regulations, or orders respecting tanning facilities.

(B) The Board shall notify an applicant or licensee in writing of any violation of 105 CMR 123.000 for which the Board intends to deny, revoke or refuse to renew a license. The applicant or licensee shall have seven days after receipt of such written notice in which to comply with 105 CMR 123.000. The Board may deny, revoke or refuse to renew a license of a tanning facility which fails to comply after said seven days.

123.012: Procedure for Hearings

(A) Suspension of a License.

(1) Upon written request to the Board, the licensee shall be afforded an opportunity to be heard concerning the suspension of a license by the Board.

(2) Such a hearing shall be initiated pursuant to 801 CMR 1.00 *et seq.* no later than 21 calendar days after the effective date of the suspension.

(3) In cases of suspension of a license, the hearing officer shall determine whether the Board has proved by a preponderance of the evidence that there existed immediately prior to or at the time of the suspension a jeopardy situation at a tanning facility. The hearing officer shall issue a written decision which contains a summary of the testimony and evidence considered and the reasons for the decision.

(B) Denial, Revocation, or Refusal to Renew a License.

(1) A license may be denied, revoked or refused renewal only after a hearing conducted by the Board of Health;

(2) If the Board determines that a license shall be denied, revoked or not renewed pursuant to 105 CMR 123.011, the Board shall initiate a hearing in accordance with 801 CMR 1.00 *et seq.*

123.012: continued

(3) Following the hearing, the hearing officer shall issue a written decision which contains a summary of the testimony and evidence considered and the reasons for the decision.

123.013: Procedure for Appeal

Following a hearing by the Board, any applicant or licensee aggrieved by a determination of the Board pursuant to 105 CMR 123.012 may appeal in writing to the Department within 20 days of said determination. Any applicant or licensee or the Board, if aggrieved by a determination of the Department, may appeal said decision pursuant to the provisions of M.G.L. c. 30A § 14.

123.014: Penalties

Whoever violates any provision of M.G.L. c. 111, §§ 207 to 213 inclusive or any rule or regulation promulgated thereunder shall be punished by a fine of not less than \$200 nor more than \$2,000. Each violation shall be considered a separate offense.

123.015: Exemptions

(A) The Board and/or the Department may, upon application therefor or upon its own initiative, grant such exemptions or exceptions from the requirements of 105 CMR 123.000 as it determines are authorized by law and will not result in undue hazard to public health and safety.

(B) Devices intended for purposes other than the deliberate exposure of parts of the living human body to ultraviolet radiation, and which produce or emit ultraviolet radiation incidental to its proper operation are exempt from the provisions of 105 CMR 123.000.

(C) Tanning devices while in transit or storage incidental thereto are exempt from the provisions of 105 CMR 123.000.

(D) Phototherapy devices used by or under the supervision of a licensed physician who is trained in the use of such phototherapy devices are exempt from the provisions of 105 CMR 123.000.

123.016: Severability

If any provision, clause, section, sentence or paragraph of 105 CMR 123.000 or the application thereof to any person shall be held to be invalid, such invalidity shall not affect the remaining provisions or applications of 105 CMR 123.000. The valid part of any provision, clause, section, sentence or paragraph shall be given independence from the invalid provisions or applications, and to this end 105 CMR 123.000 are hereby declared to be severable.

REGULATORY AUTHORITY

105 CMR 123.000: M.G.L. c 111, §§ 207 through 214, inclusive.



Memorandum

To: Chris Coleman, Assistant Town Manager
From: Jamie Brenner Gutner, Executive Director, Council on Aging
Timothy Muir McDonald, Public Health Director
Date: November 6, 2015
Re: Request for Redirection of Salary to Support Social Work Services

Community Needs

The Town of Needham has a proud history—through the collaborative efforts of many departments—of addressing the complex social service and mental health needs of its residents and successfully encouraging ongoing referrals. Since moving into its new building in Needham Heights, the Council on Aging has experienced a boom in both programmatic use and in requests for social support and assistance. The number of meals served in the CATH lunch program has increased by nearly 2,400 meals (72.27% increase from FY14 to FY 15), and appointments with the SHINE Program (Serving the Health Insurance Needs of Everyone) about Medicare, Medicaid, and Prescription Drug coverage more than doubled over the same time period (141.95% increase from FY14 to FY15).

The increased demand for programs and support services should come as no surprise, given that Needham has one of the highest populations of adults age 60 and over in the MetroWest region. According to demographic information maintained by the Needham Town Clerk, in 2015 fully 24% of the town's population (a total of 7,357 residents) are age 60 and above; and this age group represents a great and growing proportion¹ of all Needhamites. After two decades of growth that aligned with the Town's overall population trend, by 2010 Needham's senior population began growing both absolutely and as an ever larger share of the Town's overall population. The number of 60-plus Needham residents has increased by more than 700 over the past two years alone, and that age cohort is projected to grow by 14.9% in Needham over the next five years according to the McCormack School at UMass Boston. By 2020, residents age 60 and older will represent 27.1% of the Town's residents, and a decade later will hit 31%.

¹ McCormack Graduate School of Policy and Global Studies at the University of Massachusetts Boston and its Center for Social and Demographic Research on Aging. Demographic fact sheet available at: https://www.umb.edu/editor_uploads/images/centers_institutes/center_social_demo_research_aging/Dem_Brief_2.pdf And Dataset available at: https://www.umb.edu/editor_uploads/images/centers_institutes/center_social_demo_research_aging/Projections_by_MA_town_2010_2030_1.xlsx

Needham's Over-60 Population²

	1990	2000	2010	2020*	2030*
Total Population	27,557	28,911	28,886	27,759	26,951
Age 60 and over	6,089	6,371	6,498	7,466	8,347
% of Town Age 60+	22%	22%	22%	27%	31%

The growing number of seniors has resulted in not just *more* requests for resources and support but also the requests have increasingly involved *more complex* social service issues for that 60-plus population, as well as additional interventions for more clients and families under the age of 60. The complexity of these cases does not lend itself to service counts, and cannot be conveyed easily in a memo; three representative case studies regarding housekeeping issues, a trash complaint, and an elder-at-risk have been prepared and are attached for your review and consideration.

Requests for social service assistance have increased for both senior and non-senior residents. These requests have been addressed by Council on Aging staff members, as well as the Public Health Nurses who are now based at CATH and support the social work function there. Some of the categories of service provided routinely at CATH include: information and referral to home health care, medical and mental health resources; individualized case management; limited family and individual counseling; protective service and elder-at-risk situations; and emergency intervention work with police, fire, and public health on housing and safety issues.

Many of the requests for support and assistance that are managed by the Council on Aging and the Public Health Department involve overlapping risk factors that accompany aging, including the depression and substance abuse triggers brought on through social isolation or the grief from losing a spouse. Reports of abuse on a parent by an adult child (whether physical, verbal, emotional, or even fiscal) have become far more prevalent in recent years, as have instances of intergenerational family conflict when struggling families move back to Needham and into their parents' homes. As the families become multigenerational, the problems in the home often become complex and multi-layered. These complex cases nearly always have family members—sometimes three generations in one home—who have been affected by chronic mental health illness or substance use disorder and the increasing complexity of mental health and substance use disorder involved cases requires on-going connection and support post referral. The struggling family unit with many different levels of need requires an abundance of services for the family as a system. At the same time, the capacity of existing staff to address these issues is limited by time and by contractual restrictions.

² Data from the previously cited Center for Social and Demographic Research on Aging, as well as data from the U.S. Census and the Needham Town Clerk was used to produce this chart. Population numbers from 2020 and 2030 are projections based upon demographic information and the Town's census profile.

The two highest priority DSR4 funding requests presented to the Town Finance Committee by the combined Health & Human Services Division in January 2015 were for an Administrative Assistant for the Council on Aging and a Social Worker for the Council on Aging. Due to funding constraints, only the first of those requests was supported by Finance Committee and the Town Manager (and, in turn, supported through a vote at the May 2015 Annual Town meeting). As a result, the social work staff members for the Council on Aging, and the Public Health Nurses who support them, continue to struggle with a caseload of increasingly complicated clients.

From October 2009 until September 2014 Needham benefitted from the valuable substance abuse prevention education and advocacy efforts of Ms. Carol Read and the Needham Coalition for Youth Substance Abuse Prevention, which were funded by a 5-year Drug Free Communities (DFC) grant. When Needham's March 2014 application for continued funding was rejected by SAMHSA, Town Meeting committed FY 2015 reserve funding and FY 2016 operating budget dollars to continue supporting Ms. Read's position directing the town's substance abuse prevention and education efforts, and her work promoting substance use education and advocating for policy change.

In addition to her Coalition role, Ms. Read has served as a resource for mental health and substance use disorder assessment for Town residents of all ages, both in person and by phone. She also functions as a resource for referral to assessment, counseling, treatment and peer support services for all age residents. This direct service accounts for approximately 20% of Ms. Read's time (7.5 – 10.0 hours) every week. However, because the Town of Needham was successful in obtaining both DFC funding and a state Substance Abuse Prevention Collaborative grant, effective November 1, 2015, Ms. Read will no longer be available able to dedicate this time to directly supporting Needham's residents. Both grants are to be used exclusively for policy efforts and environmental change activities, and the grant guidelines have strict prohibitions on the provision of any kind of direct client interaction/service.

Opportunity

In mid-September 2015, the Public Health Department received word from the federal Substance Abuse and Mental Health Services Administration (SAMHSA) that the Town of Needham was selected for a five-year Drug Free Communities (DFC) grant. This influx of federal funding presents an opportunity to redirect currently obligated salary dollars to support the provision of social work and support services for Needham residents of all ages at the Center at the Heights (CATH). Because the Public Health Department's federal grant application was approved, the Public Health Department transferred Ms. Read's salary costs to a grant on November 1, 2015. That salary transfer "frees up" nearly \$50,000³ in FY 2016.

Using these existing funds to enhance social support resources in the community aligns with the goals of the Board of Selectmen⁴ to have expanded hours and services at CATH as well as with

³ \$1,409.72 per week for 34 weeks (remaining in fiscal year) for a total of at least \$47,930.52.

⁴ In particular, Goal 1 to "Maximize the use of Town assets and ensure that Town and School services are housed in buildings that provide suitable and effective environments" and Goal 4 to "Maintain and develop amenities that contribute to the desirability of Needham as a place to live and work". Available at:

the mission and programmatic objectives of the Council on Aging and the Public Health Department⁵.

We request your consideration of this proposal to utilize the newly available salary dollars to support a full-time licensed-clinical social worker with an expertise in mental health, domestic violence, and substance use disorders in a position shared across the Health & Human Services Department.

This position will address a pressing gap in the services that the Town provides for its residents. If approved by the Finance Committee and Town Manager, funding in FY 2016 and beyond would be re-purposed to provide additional social support and behavioral health services to the Needham community with an emphasis on social worker based screenings for substance use disorders, depression, and domestic violence (in particular elder abuse). These expanded services may be offered outside of CATH's normal operating hours in an effort to address the needs of the full spectrum of Needham's 60-plus residents, especially those who are otherwise engaged during weekdays. A licensed clinical social worker will be employed to offer a full range of social service including the following evidence-based screening instruments:

- Screening, Brief Intervention, and Referral to Treatment (SBIRT), a recommendation of the US Surgeon General's 2011 National Prevention Strategy. SBIRT is a comprehensive, integrated, public health approach to the delivery of early intervention and treatment services for persons with substance use disorders, as well as those who are at risk of developing these disorders.
- The Patient Health Questionnaire (PHQ9)⁶, a CDC-recommended tool for the behavioral health screening of older adults. The PHQ-9 is a well-validated, reliable screening tool for depression that assesses symptoms, functional impairment, and generates a severity score to help select and monitor treatment.⁷ The PHQ-9 was the preferred screening tool used for the MacArthur Foundation Initiative on Depression and Primary Care.
- The Elder Assessment Instrument (EAI)⁸, a screening instrument to assess mistreatment of older adults including abuse, neglect, financial exploitation, and abandonment. While the EAI will help social workers identify a number of forms of abuse, staff will be particularly cognizant of elder abuse, which is a growing public health challenge. Estimates of its prevalence in the population range from 2% to 10%⁹, but a study¹⁰ by the National Center on Elder Abuse reported that fewer than 20% of cases of abuse are reported to authorities.

<http://www.needhamma.gov/DocumentCenter/View/2467>

⁵ Both goal I (Promote, protect, and Preserve a "Healthy Needham") and goal II (Support Needham Health and Human Services); available at: <http://www.needhamma.gov/DocumentCenter/View/8960>

⁶ CDC Promotes Public Health Approach To Address Depression among Older Adults. 2011. Available at www.cdc.gov/aging

⁷ Kroenke K, Spitzer R L, Williams J B. The PHQ-9: validity of a brief depression severity measure. *Journal of General Internal Medicine* 2001;16(9):606-613

⁸ Fulmer, T. (2003). Elder abuse and neglect assessment. *Journal of Gerontological Nursing*, 29(6), 4-5.

⁹ Lachs MS, Pillemer K. Elder abuse. *Lancet*. 2004;364(9441):1263-72.

¹⁰ National Center on Elder Abuse. Why Should I Care About Elder Abuse? Washington, DC: U.S. Administration on Aging; 2010. Accessed

If you have concerns about the recommendations included in this memo, or if you would like additional information, we are available to meet at your convenience.

Sincerely,



Jamie Brenner Gutner
Executive Director, Council on Aging
Town of Needham



Timothy Muir McDonald
Director, Department of Public Health
Town of Needham

CC: *Needham Board of Health*
 Board of the Needham Council on Aging

Attachments: *Case Study 1—Housekeeping Issues*
 Case Study 2—Trash Complaint
 Case Study 3—Elder-At-Risk, and So Much More



August 2015

Case Vignette: “Housekeeping” Issues

On Tuesday, August 25, the Needham Public Health Department received a call from the Fire Dispatch indicating there was a “housekeeping” issue at a residence in Needham where Needham Police and Needham Fire had responded to an emergency call placed by the property owner. There had been a suicide attempt by a 35 year old tenant, Jack*, who had ingested two bottles of Advil. Jack was transported to a nearby hospital by the Needham Fire Department.

The Town’s Director of Public Health and the Environmental Health Agent arrived at the residence after Jack had been taken away in the ambulance. They met with responding Police Officers and Firefighters and spoke with the landlord, who was very upset about the situation, for approximately an hour and half. Without entering, the landlord showed the Director and Environmental Health Agent the room that Jack was renting. The room was extremely cluttered and filled floor-to-ceiling with pizza boxes, empty soda cans, papers, and trash; it was an apparent case of hoarding behavior.

The Public Health Director and Environmental Health Agent agreed that the room was unsanitary due to the hoarding, and identified what steps would need to occur to clean the premises. They discussed with the landlord, Heather, the necessary steps for cleaning the room out. They also confirmed with Heather that the rights afforded to tenants by the State Sanitary Code ([105 C.M.R. 410](#)) meant that nothing could be done without permission of Jack or someone empowered to make decisions on his behalf.

Primary Goals:

- Notify the hospital and caregivers of the hoarding situation, and that Jack does not have a safe and sanitary environment into which to be discharged.
- Attempt to ensure that Jack is made aware of, and avails himself of, mental health resources and social support opportunities in light of his attempted suicide and hoarding behaviors.
- Obtain consent from Jack, or someone empowered to make decisions on his behalf, to develop and implement a plan for cleaning out Jack’s room.

Next Steps:

The part-time Public Health Nurse was briefed by the Director and the Environmental Health Agent, and spent the remainder of the day following up with the hospital. She informed them that Jack should not go back to his residence due to the unsanitary condition of the room, and suggested that the Hospital should not release him until he had secured another safe place to reside.

The Assistant Director/Social Worker from the Council on Aging and the part-time Public Health Nurse spent the entire next day contacting and working with Jack's father. As a result of those discussions, Jack's father later informed them that Jack would be going to a rehabilitation facility upon his release from the hospital. Jack's father also gave permission for Jack's room to be cleared out, and he and the landlord worked together to do so later that week. A neighbor volunteered to pay for a dumpster which helped to facilitate cleaning out the room and disposing of the clutter.

The Social Worker as well as the Public Health Director and the Environmental Health Agent discussed concerns that the property may be an illegal rooming house, as it was unclear how many renters were living there. Accordingly, town staff agreed that the Building Commissioner should be involved in the re-inspection of the property.

The Environmental Health Agent worked closely with the Building Department Commissioner to make sure that he will be involved in any future follow-up inspections to ensure that the tenants' room and other areas of the home are in compliance with the Housing and Building Codes.

Secondary Goals:

- Ensure the residence is being rented by the proper number of people and is in compliance with the Town's Housing and Building Codes.

Process:

The next week, the landlord provided notice that the residence was ready for re-inspection. The Environmental Health Agent asked the Building Commissioner to participate in the re-inspection to address any possible violations of the Town's Housing and Building Codes. In addition, the full-time Public Health Nurse attended the re-inspection because she knew the landlord from working with her in recent years to resolve complaints about the property, and could provide support and resources if needed. The re-inspection showed that the room which was previously unsanitary and cluttered nearly floor-to-ceiling had been thoroughly cleaned and emptied out. The Building Commissioner informed the landlord that only two renters could be present at the property, in accordance with the Housing Code. In addition, the Building Inspector made note of other items that had to be

addressed such as the removal of extra beds, exterior dead bolt locks on doors, and clutter on the porch, deck, and basement.

Following the inspection, the Environmental Health Agent reviewed the inspection notes and composed a Code Enforcement letter to the landlord listing the items that must be addressed within 21 days in order to achieve compliance and pass a re-inspection.

Outcomes:

- Jack was enrolled in a rehabilitation facility.
- Jack's room was cleaned out.
- The residence was inspected to ensure proper number of renters and to address other housing violations
- A letter was sent to the landlord stating the housing items that need to be fixed within 21 days.

Town Staff Involved & Approximate Time Spent:

Town Staff Member	Time Spent	Activities
Director of Public Health	2 hours	Initial Site Visit Case Oversight
Environmental Health Agent	12 hours	Initial Site Visit Re-inspection Draft of Letter Follow-up with landlord Additional re-inspection Updated letter sent
Public Health Nurse Time	16 Hours	Follow-up with Hospital Re-inspection Follow-up with Father Follow-up with landlord
Assistant Director/Social Worker from the Council on Aging	12 Hours	Follow-up with Father Follow-up with landlord
Building Commissioner	5 Hours	Re-Inspection Additional re-inspection Updated letter sent

**Name and identifying details have been changed to protect confidentiality and resident privacy.*



NEEDHAM PUBLIC HEALTH



August 2015

Case Vignette: Trash Complaint

The Needham Public Health Department received a call on a Thursday afternoon from the Assistant Town Manager, who was relaying a complaint that had been passed to a member of the Board of Selectman. The complaint was from a resident about a neighbor's property that was strewn with trash across the driveway and the lawn. The neighbor complained that there were multiple trash bags on the subject property, and that animals were getting into those bags, distributing trash all across the yard and driveway; the neighbor stated that these conditions in turn produced a foul smell and unsanitary environment.

The Public Health Director drove by the property later the same day and observed trash along the driveway and part of the front lawn, but his view was limited due to observing the situation only from public property (i.e. the sidewalk and street). A review of Public Health Department records revealed that similar complaints about this property had been filed with the Public Health Department three other times in previous years.

The following day (a Friday), a Needham resident named Mary* came in to the Public Health Department; she was very upset and emotional, and spoke to the Public Health Director for about an hour about the trash, flies, and odors from her neighbor's property. Mary was not the same resident that had complained to the Board of Selectmen, but the subject property was the same.

Following Mary's complaint and discussion, early that Friday afternoon the Public Health Director and the Assistant Town Manager went onto Mary's property in order to observe the neighbor's property more closely. A Needham Police car accompanied the Public Health Director and the Assistant Town Manager for precautionary reasons, as is often the town's protocol for such visits. The police had been to the subject property previously to respond to reports of drug-related issues of either the residents or associates of the residents. The Public Health Director and the Assistant Town Manager observed numerous trash bags in the bed of a pickup truck in the driveway, as well as both closed and ripped open trash bags along the driveway, at the back steps and in the open garage.¹

The Public Health Director and Assistant Town Manager then knocked on the door of the subject property and the homeowner, Barbara*, answered the door. Barbara was very upset and emotional during the subsequent discussion during which she explained that her husband has

¹ There were approximately 75 trash bags in total, by the Public Health Director's estimate.

serious physical health issues which have resulted in an inability to work and a need for home-based medical care. Barbara explained that she does not have trash pickup due to financial constraints, and had fallen behind on household chores and general upkeep under the weight of responsibilities for her family. Barbara assured the Public Health Director and the Assistant Town Manager that she would have a relative pick up and drive the trash to be disposed of properly.

While present, the Public Health Director and the Assistant Town Manager noted that there were a large number of cats on the property. During later discussion, Barbara would explain that there were eight cats on the property, five adults and three kittens, all of which had fleas and none of which were vaccinated. This presented immediate public health threats of rabies and fleas for the family and for neighbors.

Primary Goals:

- Ensure that trash is properly disposed.
- Address immediate public health threats of rabies and fleas by arranging veterinarian treatment for cats.
- Arrange for fumigation of the house to control flea infestation.
- Offer social service resources to Barbara.
- Work to develop a trusting relationship with Barbara.

Process:

At the start of the next work week (i.e. three days later) the Public Health Director drove by the property and observed that the trash had indeed been taken away as Barbara had promised. The Substance Abuse Education and Prevention Coordinator followed up with a phone call to Barbara, who was upset about the situation from Friday afternoon. As a result, the Prevention Coordinator invited her to come in for a meeting at the Public Health Department office, where she and Barbara spoke about some of the issues that Barbara was facing. Barbara was upset that the police had visited her house, as in the past she had issues with them and had developed an intense distrust of the Needham Police Department. Barbara expressed that for many years she has felt looked down upon by the Town, and that this was the first time the Town was helping her with concrete strategies.

Barbara works full-time, has two young adult children with behavioral issues, and is caretaker for her ill husband. The Substance Abuse Education and Prevention Coordinator connected Barbara to resources including a Riverside social worker and transportation for her husband's medical appointments. These resources will help Barbara to receive the support she needs in her everyday life. The Substance Abuse Education and Prevention Coordinator arranged for the house to be fumigated at a discounted rate by a pest control company to treat the flea infestation. The total cost of the pest control treatment was \$225, which was paid by the Public Health Department.

The Substance Abuse Education and Prevention Coordinator also contacted the Needham Animal Control Officer to ask about sources of veterinary treatment of the cats. The Needham Animal Control Officer was able to arrange for the discounted treatment of the cats at a nearby animal hospital. The Animal Control Officer met with Barbara and then transported the five adult cats to the hospital where they were treated for fleas, spayed/neutered, and vaccinated. The Animal Control Officer also transported the three kittens to a no-kill shelter. The total cost for treatment of the cats was \$350, which was paid for by the Public Health Department.

The Public Health Nurse and Substance Abuse Education and Prevention Coordinator followed up with Barbara following the fumigation and treatment of the cats. Barbara expressed that the flea treatment did not completely eliminate the flea problem and wanted to clean out the house so a second pest control treatment would be more effective. The Public Health Nurse arranged for a temporary dumpster to be placed at the house. Following the clean-out of the house, arrangements were made for the pest control company to come back to do a second treatment.

Outcomes:

- Trash was properly disposed.
- Cats were treated for fleas, given proper vaccines, spayed and neutered, and kittens were taken to a no-kill shelter.
- The house was fumigated for pest control treatment.
- Barbara was connected to social service resources for herself and her family.
- The Public Health Department developed a trusting relationship with Barbara.
- A temporary dumpster was secured for the property to help with the clean-out.

Town Staff Involved & Approximate Time Spent:

Town Staff Member	Time Spent	Activities
Director of Public Health	6 hours	Initial Inspections Case Oversight
Assistant Town Manager	4 hours	Initial Inspections
Substance Abuse Education & Prevention Coordinator	15 hours	Ongoing Follow Up with resident Referral to Riverside Referral to Animal Control Officer
Animal Control Officer	7.5 hours	Securing veterinary care for cats Securing no-kill shelter for kittens Transporting cats to shelter and animal hospital
Public Health Nurse	4 hours	Follow Up with resident Referral to Dumpster

Additional Costs:

Service	Cost	Paid by
Animal Hospital Care for Cats	\$350	Public Health Department
House Fumigation	\$225	Public Health Department
Trash Disposal Dumpster	\$345	Public Health Department

**Name and identifying details have been changed to protect confidentiality.*



September 2015

Case Vignette: Elder-at-Risk, and So Much More

The Public Health Nurse and Assistant Director/ Social Worker from the Council on Aging were engaged with an 80 year-old elderly woman, Deborah*, to help her with social services including fuel assistance. Deborah's husband passed away two years ago, and she has been starting to show possible signs of dementia. In the past, the Assistant Director/Social Worker from the Council on Aging connected Deborah to Springwell for cleaning services, but Deborah refused entry to the cleaning crew when they arrived, stating that she did not want them to come into her house.

Also living in Deborah's home are her 55 year-old son, a daughter-in-law, and a 15 year-old granddaughter. Deborah's son, Andre*, does not work, is obese, and has a series of chronic health issues. Andre's 22 year-old daughter, Tina*, who was living in Tennessee with her seven year-old child and one-year-old twins recently decided to leave an abusive relationship in Ohio to come live with Andre, in her grandmother Deborah's house. Tina is currently pregnant with twins, and her pregnancy has been identified by doctors as high risk.

A few weeks after a very pregnant Tina moved back from Tennessee with her three children, Deborah (Tina's grandmother) became physically aggressive with her son Andre, and the police were called to the home. Deborah was then taken from the house for evaluation at a hospital, where she was diagnosed as possibly having Alzheimer's disease. Following this evaluation and diagnosis, Deborah was admitted to a nursing home in another town.

On Tuesday September 8, the Public Health Nurse received a call from the Massachusetts Department of Child and Families who relayed information from the Tennessee Department of Human Services that Tina and her children had been struggling with a lice and bed bug infestation while living in a suburb of Knoxville. On the same day, the Public Health Department received an anonymous complaint about odors coming from Deborah's property.

Primary Goals

- Address senior resident need for fuel assistance and possible medical needs.
- Investigate odor complaint.
- Ensure the family is receiving effective pest control treatment for the reported bed bug infestation.
- Connect the family to social service resources needed.

Process

The Public Health Nurse and the Environmental Health Agent went to the house for a site visit and did a walk-through of the house to check for any health and safety issues. There were no odors evident. The Public Health Nurse and the Environmental Health Agent observed that the family was living on the first floor on pull-out beds. Andre explained that he had ordered a crib through an online yard sale and later found that it had bed bugs. Due to the bed bug infestation they had thrown out many pieces of furniture and sought treatment from a pest control company.

The Environmental Health Agent followed-up with a phone later that same week to the pest control company that treated the house and went back to the family's house on Monday September 14 to get a copy of the pest control inspection report. Since then, the Environmental Health Agent has been corresponding regularly with the pest control company's inspector, as they must do multiple inspections and treatments to eliminate the bed bug infestation. Additionally, the Environmental Health Agent has been corresponding with the family to ensure that the pest control treatments are scheduled and occurring in a timely manner which will maximize their effectiveness.

Additionally, the Public Health Nurse and Assistant Director/ Social Worker from the Council on Aging worked with the family to connect them to a Riverside Transitional Services Case Manager for social services including house cleaning, Mass Health Insurance, and possible alternative housing options.

Outcomes

- The odor complaint was investigated and no odor or housing concerns beyond the previously identified bed bug issues were found.
- The house is receiving on-going treatment for bed bugs by a pest control company.
- The family was connected to Riverside Transitional Services where they received a case manager to assist with a variety of social services.

Update

On Friday October 16, the Director of Public Health was handed a subpoena requiring that the Public Health Nurses appear in Norfolk Juvenile Court on Tuesday October 20 and testify at a Child Care Protection Hearing brought by the Massachusetts Department of Children and Families.

Summary

Complex, intergenerational cases where there are multiple needs (health, social/emotional, financial, and environmental) are becoming increasingly common occurrences for the Public Health Nurse and the Assistant Director/ Social Worker from the Council on Aging. Each instance of supporting and assisting Needham residents involves hours of follow-up phone calls and

meetings, resource referrals, inspections, and general support. And oftentimes, these cases stabilize for a few months and then resurface due to stressors and changes within the family unit. When that occurs, most families will again reach out to the Public Health Department or the Council on Aging for support and assistance.

Town Staff Involved & Approximate Time Spent:

Town Staff Member	Time Spent	Activities
Director of Public Health	7 hours	Oversight Handed subpoena (for PH Nurse) Attended Child Care Protection Hearing
Public Health Nurse	22 hours	On-going follow-up with family Correspondence with Department of Children and Families Site visit Referral to Riverside Social Services Served with subpoena Attended Child Care Protection Hearing
Assistant Director/Social Worker from the Council on Aging	16 hours	Ongoing Follow-up with family Referral to Riverside Social Services
Environmental Health Agent	12 hours	Site visit On-going follow-up with pest control company On-going follow-up with family Additional site visit
Town Counsel	3 hours	Subpoena review Phone Calls Appearance at court as support for PH Nurse

**Name and identifying details have been changed to protect confidentiality*



NEEDHAM PUBLIC HEALTH



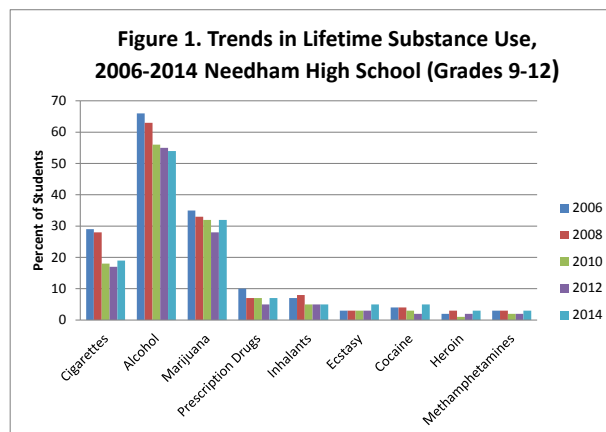
Memorandum

To: Needham Board of Health
From: Rachel Massar, Emily Pasco-Anderson, Public Health Interns
Needham Public Health Department Staff
Re: Overview and Analysis of 2014 MetroWest Adolescent Health Survey Results

The MetroWest Health Foundation has sponsored a detailed biennial survey of middle and high school students in the 25 cities and towns which comprise the MetroWest region.¹ This survey, first administered in fall 2006, collects information from students about their mental health, nutrition, safety, sexual activities, sleep, and substance use, among other topics. The survey results present a rich trove of data on youth activities and perceptions, and help to inform the Town's efforts across many municipal departments to educate, protect, and support its young residents.

Substance Use

Substance use rates among Needham High School students reported in the MetroWest Adolescent Health Survey (MWAHS) followed a steady downward trend from 2006 to 2012, but the data from 2014 revealed an across-the-board increase in substance use among Needham High School students as seen in Figure 1. In particular, the lifetime substance use rates reported by high school students for cigarettes (19%), marijuana (32%), and prescription drug misuse (7%) were all slightly higher than previously reported in 2012.



¹ The MetroWest Health Foundation's service area includes the communities of Ashland, Bellingham, Dover, Framingham, Franklin, Holliston, Hopedale, Hopkinton, Hudson, Marlborough, Medfield, Medway, Mendon, Milford, Millis, Natick, **Needham**, Norfolk, Northborough, Sherborn, Southborough, Sudbury, Wayland, Wellesley, and Westborough.

Needham High School substance use rates were slightly higher than the MetroWest area rates for cigarette smoking, binge drinking, and marijuana use. This is notable since rates of substance use in Needham were slightly lower than those of the MetroWest region in the past. In addition, there are also significant differences in substance use by sex and age. In general, males tend to have higher rates of substance use than females, and substance use increases substantially by grade level.

The abuse of prescription drugs and opioids is a pressing public health concern across the state of Massachusetts and within the Needham community. The 2014 MWAHS revealed a 50% increase in lifetime misuse of both prescription drugs and use of heroin among Needham High School students. Specifically, lifetime misuse of prescription drugs increased from 70 students in 2012 to 104 students in 2014 and lifetime heroin use increased from 29 students in 2012 to 45 students in 2014. This is an important trend to watch closely as the Commonwealth of Massachusetts declared an opioid epidemic in late spring 2015.

The 2014 iteration of the MWAHS is the first year in which youths were posed questions about usage of e-cigarettes. These questions revealed a new area of concern for school and public health officials; 29% of high school students reported that they have smoked e-cigarettes in their lifetime, and 17% currently smoke e-cigarettes. Additionally, e-cigarettes (6% usage rate) are twice as popular with 7th and 8th grade students as traditional nicotine cigarettes (3% usage rate).

Alcohol continues to be the most popular substance among high school students; the report shows that 54% Needham High School students have drunk alcohol in their lifetime. Furthermore, 35% of high school students reported drinking alcohol recently, and 20% reported recent binge drinking.

Mental Health

Mental health rates, similar to substance use rates, increased in many categories in 2014, undercutting gains over the previous eight years. Reports of mental health issues including stress and depressive symptoms returned to previous levels after showing improvement from 2006 to 2012. In general, females are more likely to report mental health issues than males, and there is a substantial increase in mental health issues by grade level, a trend which mirrors substance use.

High school students who reported that their life was very stressful in the past 30 days decreased from 2006 (32%) to 2010 (25%), but have returned to higher levels in 2014 (32%). Females were more likely to report stress than males (45% vs. 18%). The most common source of stress reported by high school students was “worrying about school” (63%).

Reports of depressive symptoms among high school students had also decreased from 2006 (19%) to 2012 (14%), but have since increased in 2014 (19%). While

12% of high school students reported self-injury in the past 12 months, 42% reported concern that a peer would hurt themselves. Similarly, although only 5% of 7th and 8th grade students reported self-injury, 23% reported concern that a peer would hurt themselves and 21% reported concern that a peer would hurt someone else. Reports of self-injury and suicidality have remained similar among high school students since 2006 at 11-13% and 9-11% respectively.

Sexual Behavior

18% of Needham High School teens are currently sexually active, while 22% have ever been sexually active. Although these numbers have not changed significantly, the rate of students ever having STDs has continued to increase, from 1% in 2006, to 1.9% in 2014. The 2014 data showed a concerning trend of higher rates of forced sexual contact since 2012, from 3.6% to 4.9%. This is above the rate for the MetroWest region, which is at 4.6%. In addition, more students are feeling pressured to send “sexts;” 5.9% to 9.8% between 2012 and 2014. These changes are reflected across the United States, and could be considered as bullying, cyberbullying, or even sexual harassment.

Cyberbullying

Cyberbullying is an increasingly important issue for Needham High School students, rising slightly from 15% in 2006 to 18% in 2014. Females are more likely to be report being victims of cyberbullying than males (21% vs. 14%), with reports of cyberbullying being the highest among 9th grade students. This is an area of public health that should be closely monitored as technology and social media become more popular and heavily used. Cyberbullying creates a new platform for harassment- perpetrators are able to hide behind anonymity, which encourages them to say hurtful things that they wouldn't have otherwise said.

Body Perception

According to the 2014 data, 25% of students overall (29% females and 20% males) have described themselves as slightly/very overweight, while 38% of students (54% females and 22% males) are trying to lose weight. However, only 12% of students (11% females and 14% males) are actually overweight, and 5% (3% of females and 8% of males) are obese. The weight perception versus actual weight of these students is skewed, especially within the female population. This issue is important to address as pop culture becomes more obsessed with weight loss, dieting, and having “the perfect body,” which is not accurately representative of the average human physique. The social pressure that this imposes on the young female population generates an entirely new spectrum of stress and dissatisfaction that may lead to mental disorders such as anorexia and bulimia, which are occurring with higher frequencies than in previous generations due the sensationalized media surrounding the “ideal” body.

Distracted Driving

Despite having state laws that ban anyone under the age of 18 from using any cellular device while driving, this data shows that a significant percent of the

Needham High School student body has either admitted to driving distracted (using their cellphones) or has driven with someone who was using their cellphone. 35% of 11th and 12th grade drivers reported that they have texted while driving, and 31% rode in a car with a high school driver who was texting while driving. More 12th graders reported texting while driving compared to 11th graders (45% vs. 24%). Reports of riding with a driver who was texting while driving has increased steadily from 2010 (22%) to 2012 (29%) to 2014 (31%). As Needham and the surrounding MetroWest area becomes more populated, it is important to keep drivers, especially younger drivers, focused on their surroundings to avoid hurting not only themselves, but those around them as well.

Conclusion

The MWAHS results are a valuable tool for the Town of Needham to assess the status of adolescent health related behaviors, evaluate current efforts, and inform future initiatives. The 2014 results illuminated several areas of adolescent health that deserve attention. In particular, rates of substance use and overall mental health issues (including both stress and body perception) among high school students are on the rise after several years of improvement. These results suggest the need to evaluate of Needham's current substance use and mental health prevention methods and identify possible areas of improvement. Considering the strict regulations that exist in Needham to prevent youths' access to substances including tobacco products, the increase in substance use among Needham youth points to factors besides availability. Furthermore, adolescent issues of mental health are not to be ignored, as high levels of stress may lead to unhealthy and possibly dangerous coping mechanisms for students. Public Health efforts will not only require the inclusion of school staff and counselors for education and prevention, but also from town law enforcement and local government- students must understand and abide by the policies that prevent distracted driving. This collaborative approach across the Town's many municipal departments and schools is necessary to consider reevaluate current efforts in place. By working together, the Town of Needham can address these issues, and ensure that Needham's youth is healthy and vibrant.

NEEDHAM MIDDLE SCHOOL 2014 MWAHS
SUBSTANCE USE X MENTAL HEALTH CROSSTABS - 6/26/15

	% of youth substance users reporting mental health problems	% of youth <u>non</u> substance users reporting mental health problems	p-value from Chi-Squared test
STRESS (life " very stressful" in past 30 days)			
Cigarette use (lifetime)	8.7	8.4	n/a
Alcohol use (lifetime)	15.4	7.7	0.032
Marijuana use (lifetime)	15.4	8.3	n/a
Prescription drug misuse (lifetime)	16.7	8.4	n/a
Inhalant use (lifetime)	11.1	8.4	n/a
DEPRESSIVE SYMPTOMS (past 12 months)			
Cigarette use (lifetime)	17.4	8.9	n/a
Alcohol use (lifetime)	24.6	7.7	<0.001
Marijuana use (lifetime)	15.4	9.1	n/a
Prescription drug misuse (lifetime)	50.0	8.9	n/a
Inhalant use (lifetime)	33.3	9.0	n/a
SELF-INJURY (past 12 months)			
Cigarette use (lifetime)	8.7	4.7	n/a
Alcohol use (lifetime)	9.2	4.4	n/a
Marijuana use (lifetime)	15.4	4.7	n/a
Prescription drug misuse (lifetime)	16.7	4.8	n/a
Inhalant use (lifetime)	22.2	4.7	n/a
SERIOUSLY CONSIDERED SUICIDE (lifetime)			
Cigarette use (lifetime)	17.4	7.7	n/a
Alcohol use (lifetime)	20.6	6.8	<0.001
Marijuana use (lifetime)	38.5	7.4	n/a
Prescription drug misuse (lifetime)	50.0	7.6	n/a
Inhalant use (lifetime)	22.2	7.8	n/a
ATTEMPTED SUICIDE (lifetime)			
Cigarette use (lifetime)	4.3	1.4	n/a
Alcohol use (lifetime)	3.1	1.4	n/a
Marijuana use (lifetime)	7.7	1.4	n/a
Prescription drug misuse (lifetime)	16.7	1.4	n/a
Inhalant use (lifetime)	0.0	1.5	n/a

*if $p < .05$, then the difference in mental health between users and nonusers is statistically significant.
n/a means that the number of youth reporting the behaviors is too small to compute a p value.*

NEEDHAM MIDDLE SCHOOL 2014 MWAHS
SUBSTANCE USE X MENTAL HEALTH CROSSTABS - 6/25/15

	% of youth with mental health problems reporting substance use	% of youth without mental health problems reporting substance use	p-value from Chi-Squared test
CIGARETTE SMOKING (lifetime)			
Stress (past 30 days)	3.0	2.9	n/a
Depressive symptoms (past 12 months)	5.6	2.7	n/a
Self-injury (past 12 months)	5.3	2.8	n/a
Seriously considered suicide (past 12 months)	6.5	2.6	n/a
Attempted suicide (past 12 months)	8.3	2.8	n/a
ALCOHOL USE (lifetime)			
Stress (past 30 days)	15.2	7.6	0.032
Depressive symptoms (past 12 months)	22.2	6.8	<0.001
Self-injury (past 12 months)	15.8	7.9	n/a
Seriously considered suicide (past 12 months)	21.0	7.0	<0.001
Attempted suicide (past 12 months)	16.7	8.0	n/a
MARIJUANA USE (lifetime)			
Stress (past 30 days)	3.0	1.5	n/a
Depressive symptoms (past 12 months)	2.7	1.5	n/a
Self-injury (past 12 months)	5.1	1.5	n/a
Seriously considered suicide (past 12 months)	8.1	1.1	n/a
Attempted suicide (past 12 months)	8.3	1.5	n/a
PRESCRIPTION DRUG MISUSE (lifetime)			
Stress (past 30 days)	1.5	0.7	n/a
Depressive symptoms (past 12 months)	4.1	0.0	n/a
Self-injury (past 12 months)	2.6	0.7	n/a
Seriously considered suicide (past 12 months)	4.8	0.4	n/a
Attempted suicide (past 12 months)	8.3	0.6	n/a
Inhalant USE (lifetime)			
Stress (past 30 days)	1.5	1.1	n/a
Depressive symptoms (past 12 months)	4.1	0.8	n/a
Self-injury (past 12 months)	5.1	0.9	n/a
Seriously considered suicide (past 12 months)	3.2	1.0	n/a
Attempted suicide (past 12 months)	0.0	1.2	n/a

*if $p < .05$, then the difference in mental health between users and nonusers is statistically significant.
n/a means that the number of youth reporting the behaviors is too small to compute a p value.*

NEEDHAM HIGH SCHOOL 2014 MWAHS
SUBSTANCE USE X MENTAL HEALTH CROSSTABS - 6/24/15

	% of users	% of nonusers	p-value from Chi-Squared test
STRESS (life " very stressful" in past 30 days)			
Cigarette use (past 30 days)	45.0	30.8	0.002
Alcohol use (past 30 days)	40.0	27.6	<0.001
Marijuana use (past 30 days)	39.3	29.9	0.002
Prescription drug misuse (past 30 days)	47.5	31.3	0.008
Heroin use (lifetime)	40.0	31.7	0.266, ns
Methamphetamine use (lifetime)	46.7	31.5	0.032
DEPRESSIVE SYMPTOMS (past 12 months)			
Cigarette use (past 30 days)	43.4	16.8	<0.001
Alcohol use (past 30 days)	22.9	16.8	0.004
Marijuana use (past 30 days)	28.4	16.3	<0.001
Prescription drug misuse (past 30 days)	55.6	17.1	<0.001
Heroin use (lifetime)	40.9	18.1	<0.001
Methamphetamine use (lifetime)	36.2	18.3	0.002
SELF-INJURY (past 12 months)			
Cigarette use (past 30 days)	33.0	10.5	<0.001
Alcohol use (past 30 days)	13.1	11.9	0.491, ns
Marijuana use (past 30 days)	19.0	10.5	<0.001
Prescription drug misuse (past 30 days)	36.5	11.2	<0.001
Heroin use (lifetime)	34.1	11.7	<0.001
Methamphetamine use (lifetime)	31.9	11.7	<0.001
SERIOUSLY CONSIDERED SUICIDE (past 12 months)			
Cigarette use (past 30 days)	31.3	9.2	<0.001
Alcohol use (past 30 days)	12.4	10.2	0.209, ns
Marijuana use (past 30 days)	16.8	9.4	<0.001
Prescription drug misuse (past 30 days)	27.0	10.1	<0.001
Heroin use (lifetime)	34.1	10.1	n/a
Methamphetamine use (lifetime)	27.7	10.4	<0.001
ATTEMPTED SUICIDE (past 12 months)			
Cigarette use (past 30 days)	11.6	2.6	n/a
Alcohol use (past 30 days)	5.1	2.4	0.007
Marijuana use (past 30 days)	7.7	2.2	<0.001
Prescription drug misuse (past 30 days)	24.2	2.5	n/a
Heroin use (lifetime)	27.3	2.6	n/a
Methamphetamine use (lifetime)	25.5	2.6	n/a

*if $p < .05$, then the difference in mental health between users and nonusers is statistically significant.
n/a means that the number of youth reporting the behaviors is too small to compute a p value.*

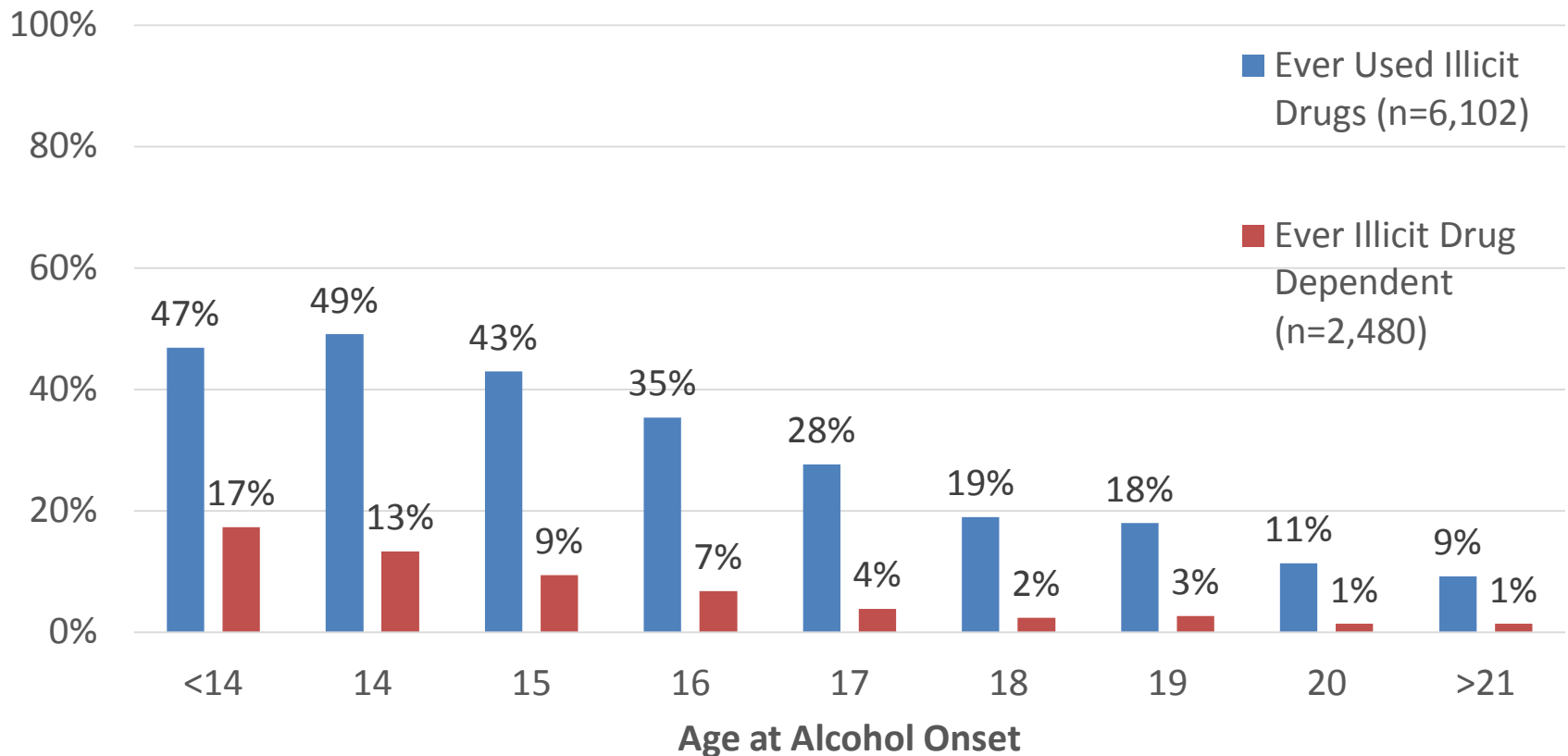
NEEDHAM HIGH SCHOOL 2014 MWAHS
SUBSTANCE USE X MENTAL HEALTH CROSSTABS - 6/24/15

	% of youth with mental health problem reporting substance use	% of youth without mental health problem reporting substance use	p-value from Chi-Squared test
CIGARETTE SMOKING (past 30 days)			
Stress (past 30 days)	10.6	6.1	0.002
Depressive symptoms (past 12 months)	17.8	5.4	<0.001
Self-injury (past 12 months)	20.7	5.8	<0.001
Seriously considered suicide (past 12 months)	22.0	5.9	<0.001
Attempted suicide (past 12 months)	27.1	7.1	n/a
ALCOHOL USE (past 30 days)			
Stress (past 30 days)	43.8	30.7	<0.001
Depressive symptoms (past 12 months)	42.2	33.2	0.004
Self-injury (past 12 months)	37.2	34.6	0.491, ns
Seriously considered suicide (past 12 months)	39.4	34.4	0.209, ns
Attempted suicide (past 12 months)	53.1	34.4	0.007
MARIJUANA USE (past 30 days)			
Stress (past 30 days)	26.5	19.2	0.002
Depressive symptoms (past 12 months)	32.5	19.2	<0.001
Self-injury (past 12 months)	33.3	20.0	<0.001
Seriously considered suicide (past 12 months)	33.1	20.2	<0.001
Attempted suicide (past 12 months)	49.0	20.6	<0.001
PRESCRIPTION DRUG MISUSE (past 30 days)			
Stress (past 30 days)	6.2	3.2	0.008
Depressive symptoms (past 12 months)	12.8	2.4	<0.001
Self-injury (past 12 months)	12.8	3.1	<0.001
Seriously considered suicide (past 12 months)	10.8	3.6	<0.001
Attempted suicide (past 12 months)	30.6	3.4	n/a
HEROIN USE (lifetime)			
Stress (past 30 days)	3.4	2.4	0.266, ns
Depressive symptoms (past 12 months)	6.5	2.2	<0.001
Self-injury (past 12 months)	8.3	2.3	<0.001
Seriously considered suicide (past 12 months)	9.5	2.2	n/a
Attempted suicide (past 12 months)	24.5	2.3	n/a
METHAMPHETAMINE USE (lifetime)			
Stress (past 30 days)	4.5	2.4	0.032
Depressive symptoms (past 12 months)	6.2	2.5	0.002
Self-injury (past 12 months)	8.3	2.5	<0.001
Seriously considered suicide (past 12 months)	8.2	2.6	<0.001
Attempted suicide (past 12 months)	24.5	2.5	n/a

*if $p < .05$, then the difference in mental health between users and nonusers is statistically significant.
n/a means that the number of youth reporting the behaviors is too small to compute a p value.*

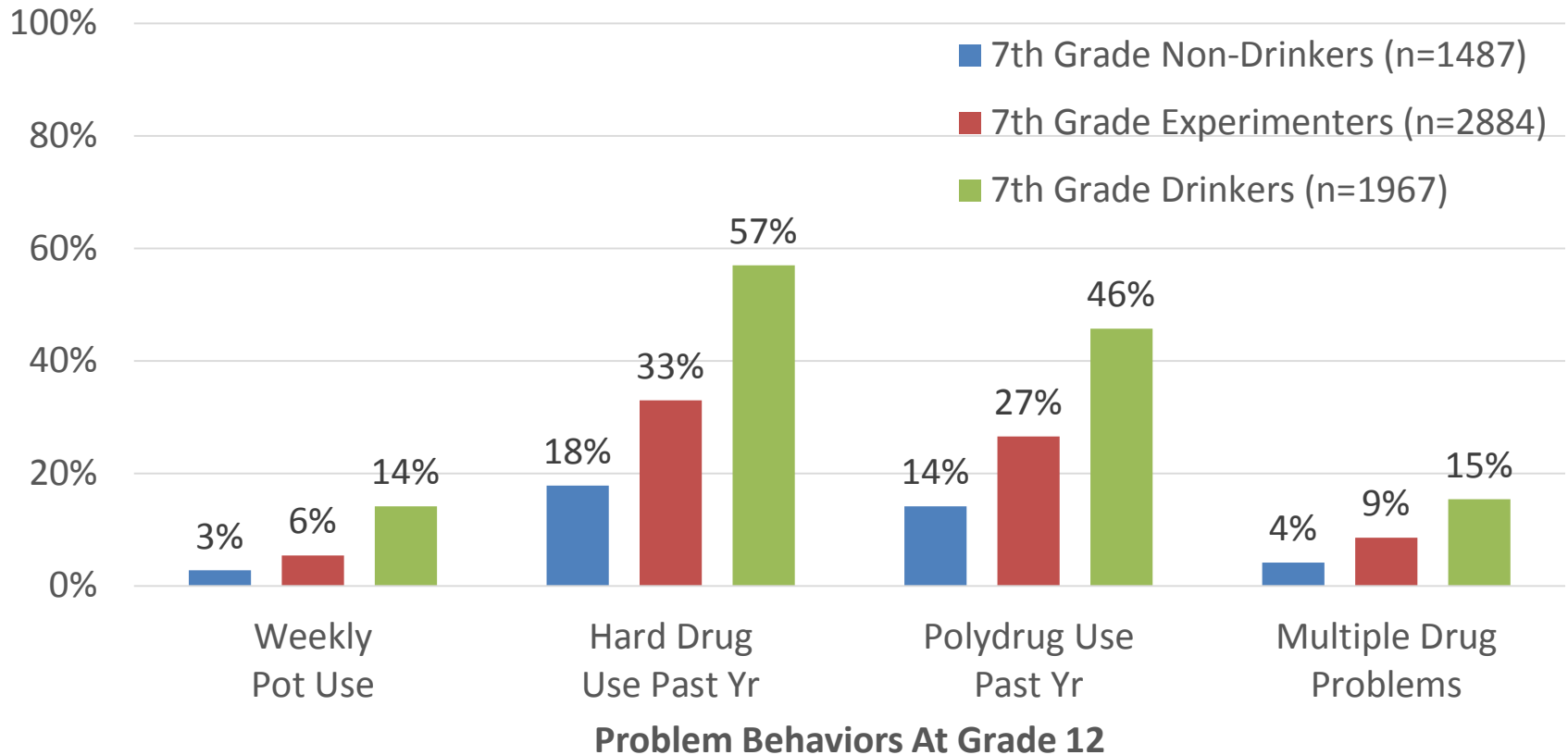
Key National Data on Youth Alcohol Use

Early Alcohol Use Increases Likelihood of Illicit Drug Use and Dependence*



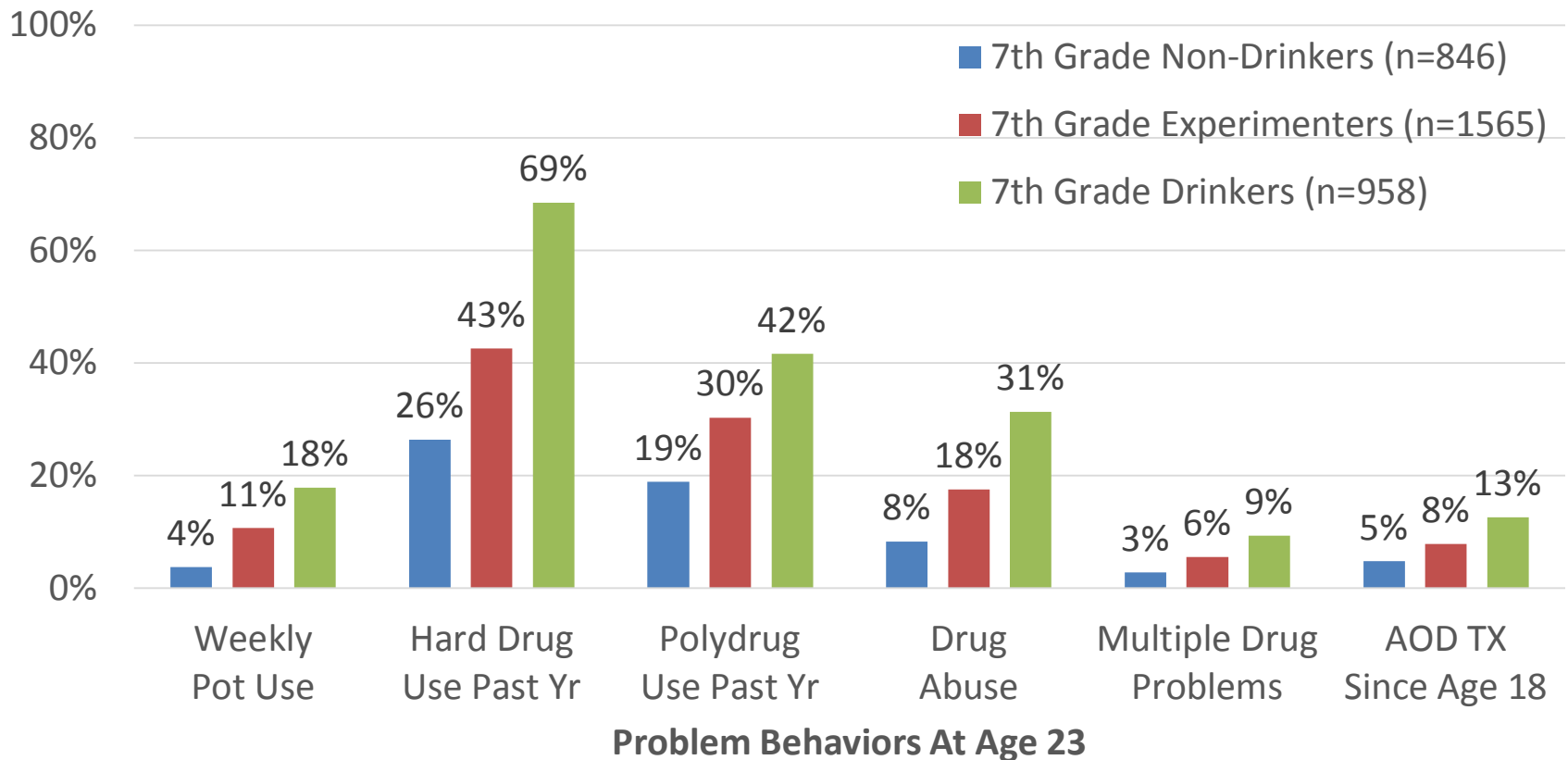
* Hingson, R.W., Heeren, T., & Edwards, E.M. (2008). Age at drinking onset, alcohol dependence, and their relation to drug use and dependence, driving under the influence of drugs, and motor-vehicle crash involvement because of drugs. *Journal of Studies on Alcohol and Drugs*, Mar;69(2):192-201.

Problem Behaviors in 12th Grade Based on 7th Grade Drinking Status*



* Ellickson, P.L., Tucker, J.S., & Klein, D.J. (2003). Ten-Year Prospective Study of Public Health Problems Associated with Early Drinking. *Pediatrics*, May;111(5):949-955.

Problem Behaviors at Age 23 Based on 7th Grade Drinking Status*



* Ellickson, P.L., Tucker, J.S., & Klein, D.J. (2003). Ten-Year Prospective Study of Public Health Problems Associated with Early Drinking. *Pediatrics*, May;111(5):949-955.

2014 MWAHS

Pollard Middle School Key Indicators

Pollard Middle School, Needham (Grades 7-8)
2006-2014 Trends in Key Indicators*

	Year of Survey (%)				
	2006 (654)	2008 (653)	2010 (772)	2012 (787)	2014 (804)
SUBSTANCE USE					
Lifetime cigarette smoking	6.9	6.6	5.7	5.5	2.9
Current cigarette smoking (past 30 days)	3.4	2.0	2.0	1.6	0.4
Lifetime alcohol use	19.7	19.8	14.8	13.6	8.3
Current alcohol use (past 30 days)	8.1	6.3	6.4	6.2	1.9
Binge drinking (past 30 days) [†]	2.3	2.0	2.0	0.9	0.4
Rode with driver who had been drinking (lifetime)	14.9	15.8	15.5	12.5	15.3
Lifetime marijuana use	3.5	3.3	4.3	3.5	1.6
Current marijuana use (past 30 days)	2.6	2.0	3.0	1.9	0.8
Lifetime inhalant use	13.4	6.8	7.1	3.3	1.1
VIOLENCE					
Physical fighting (lifetime)	45.4	42.3	36.9	39.3	31.7
Physical fighting on school property (lifetime)	20.3	14.9	12.3	9.5	7.1
Carried a weapon (lifetime)	12.6	10.9	8.8	10.8	9.8
Carried weapon on school property (lifetime)	2.8	2.5	1.2	1.3	0.7
BULLYING VICTIMIZATION					
Bullying victim (past 12 months)	46.1	46.4	30.4	22.2	19.2
Bullying victim on school property (past 12 months)	41.0	41.6	24.1	16.5	12.5
Cyberbullying victim (past 12 months)	17.3	14.9	11.5	14.6	14.1
MENTAL HEALTH					
Life "very" stressful (past 30 days)	12.4	10.2	10.6	10.2	8.5
Depressive symptoms (past 12 months)	12.8	9.4	8.5	8.6	9.2
Self-injury (past 12 months)	4.5	5.6	4.4	4.9	4.9
Considered suicide (lifetime)	8.0	7.6	8.1	8.1	7.9
Attempted suicide (lifetime)	2.5	1.7	1.7	1.3	1.5
PHYSICAL ACTIVITY AND BODY WEIGHT					
Exercised for ≥20 minutes on 3 or more days/week	81.3	83.3	81.7	83.7	89.1
Overweight or obese [‡]	16.3	12.8	14.8	16.8	13.0

* Source: MetroWest Adolescent Health Survey

[†] Consumed 5 or more drinks in a row on one or more occasions

[‡] Students who were ≥85th percentile for body mass index by age and gender, based on reference data

Pollard Middle School, Needham (Grades 7-8)
2014 Gender Patterns for Key Indicators*

	<u>Gender (%)</u>		<u>Total (%)</u>
	<u>Female</u> <i>(400)</i>	<u>Male</u> <i>(403)</i>	<i>(804)</i>
SUBSTANCE USE			
Lifetime cigarette smoking	2.3	3.5	2.9
Current cigarette smoking (past 30 days)	0.0	0.8	0.4
Lifetime alcohol use	5.8	10.8	8.3
Current alcohol use (past 30 days)	0.8	3.0	1.9
Binge drinking (past 30 days) [†]	0.3	0.5	0.4
Rode with driver who had been drinking (lifetime)	14.6	16.0	15.3
Lifetime marijuana use	0.8	2.5	1.6
Current marijuana use (past 30 days)	0.3	1.3	0.8
Lifetime inhalant use	1.5	0.8	1.1
VIOLENCE			
Physical fighting (lifetime)	15.7	47.4	31.7
Physical fighting on school property (lifetime)	2.8	11.5	7.1
Carried a weapon (lifetime)	4.3	15.3	9.8
Carried weapon on school property (lifetime)	0.0	1.5	0.7
BULLYING VICTIMIZATION			
Bullying victim (past 12 months)	21.3	17.3	19.2
Bullying victim on school property (past 12 months)	14.2	10.8	12.5
Cyberbullying victim (past 12 months)	18.5	9.7	14.1
MENTAL HEALTH			
Life "very" stressful (past 30 days)	10.8	6.3	8.5
Depressive symptoms (past 12 months)	11.6	6.8	9.2
Self-injury (past 12 months)	6.5	3.3	4.9
Considered suicide (lifetime)	9.9	5.8	7.9
Attempted suicide (lifetime)	1.8	1.3	1.5
PHYSICAL ACTIVITY AND BODY WEIGHT			
Exercised for ≥20 minutes on 3 or more days/week	86.5	91.7	89.1
Overweight or obese [‡]	10.4	15.4	13.0

* Source: MetroWest Adolescent Health Survey

† Consumed 5 or more drinks in a row on one or more occasions

‡ Students who were ≥85th percentile for body mass index by age and gender, based on reference data

Pollard Middle School, Needham (Grades 7-8)
2014 Grade Patterns for Key Indicators*

	<u>Grade (%)</u>		<u>Total (%)</u>
	<u>7th</u>	<u>8th</u>	
	(373)	(431)	(804)
SUBSTANCE USE			
Lifetime cigarette smoking	2.7	3.0	2.9
Current cigarette smoking (past 30 days)	0.5	0.2	0.4
Lifetime alcohol use	6.2	10.1	8.3
Current alcohol use (past 30 days)	1.9	1.9	1.9
Binge drinking (past 30 days) [†]	0.3	0.5	0.4
Rode with driver who had been drinking (lifetime)	10.9	19.2	15.3
Lifetime marijuana use	1.3	1.9	1.6
Current marijuana use (past 30 days)	0.5	0.9	0.8
Lifetime inhalant use	1.1	1.2	1.1
VIOLENCE			
Physical fighting (lifetime)	28.1	34.8	31.7
Physical fighting on school property (lifetime)	7.8	6.5	7.1
Carried a weapon (lifetime)	9.2	10.3	9.8
Carried weapon on school property (lifetime)	0.0	1.4	0.7
BULLYING VICTIMIZATION			
Bullying victim (past 12 months)	19.2	19.2	19.2
Bullying victim on school property (past 12 months)	13.0	12.0	12.5
Cyberbullying victim (past 12 months)	13.7	14.4	14.1
MENTAL HEALTH			
Life "very" stressful (past 30 days)	4.8	11.8	8.5
Depressive symptoms (past 12 months)	6.2	11.8	9.2
Self-injury (past 12 months)	4.8	5.0	4.9
Considered suicide (lifetime)	6.5	9.0	7.9
Attempted suicide (lifetime)	1.6	1.4	1.5
PHYSICAL ACTIVITY AND BODY WEIGHT			
Exercised for ≥20 minutes on 3 or more days/week	90.4	88.0	89.1
Overweight or obese [‡]	11.1	14.5	13.0

* Source: MetroWest Adolescent Health Survey

† Consumed 5 or more drinks in a row on one or more occasions

‡ Students who were ≥85th percentile for body mass index by age and gender, based on reference data

2014 MWAHS

Needham High School Key Indicators

Needham High School (Grades 9-12)

2006-2014 Trends in Key Indicators*

	Year of Survey (%)				
	2006 (1,281)	2008 (1,285)	2010 (1,326)	2012 (1,403)	2014 (1,490)
SUBSTANCE USE					
Lifetime cigarette smoking	29.1	28.3	17.9	16.8	19.3
Current cigarette smoking (past 30 days)	12.9	10.3	6.7	5.5	7.7
Lifetime alcohol use	66.1	63.5	55.8	55.1	54.0
Current alcohol use (past 30 days)	45.2	43.5	36.4	34.9	35.0
Binge drinking (past 30 days) [†]	27.7	25.0	23.0	21.3	19.7
Rode with driver who had been drinking (past 30 days)	23.5	21.1	17.7	15.1	16.3
Lifetime marijuana use	35.2	33.3	32.4	28.0	32.1
Current marijuana use (past 30 days)	24.8	23.7	22.9	19.4	21.8
Lifetime prescription drug misuse [‡]	10.5	7.4	6.5	4.6	6.7
VIOLENCE					
Physical fighting (past 12 months)	20.3	20.6	17.0	12.8	14.0
Physical fighting on school property (past 12 months)	6.9	6.3	5.0	4.1	4.2
Carried a weapon (past 30 days)	4.7	5.2	3.9	4.7	5.6
Carried a weapon on school property (past 30 days)	2.4	2.9	2.3	2.5	2.7
BULLYING VICTIMIZATION					
Bullying victim (past 12 months)	29.0	31.7	28.4	20.1	18.0
Bullying victim on school property (past 12 months)	25.1	27.3	24.2	15.7	13.9
Cyberbullying victim (past 12 months)	15.1	17.9	18.2	15.9	18.0
MENTAL HEALTH					
Life "very" stressful (past 30 days)	32.4	25.4	25.2	26.8	31.9
Depressive symptoms (past 12 months)	19.5	18.0	16.6	14.1	18.9
Self-injury (past 12 months)	11.4	12.2	12.0	12.5	12.3
Considered suicide (past 12 months)	11.2	9.5	10.2	10.3	11.0
Attempted suicide (past 12 months)	3.2	3.5	2.2	3.3	3.4
SEXUAL BEHAVIOR					
Lifetime sexual intercourse	21.3	21.1	20.3	18.8	22.5
Currently sexually active (past 3 months)	15.9	17.4	16.2	15.0	18.1
Condom use at last intercourse (among sexually active youth)	64.8	72.2	75.2	66.5	68.7
PHYSICAL ACTIVITY AND BODY WEIGHT					
Exercised for ≥60 minutes on 5 or more days/week	33.8	36.4	45.3	57.5	56.5
Overweight or obese [§]	16.8	16.8	14.9	15.7	17.5

* Source: MetroWest Adolescent Health Survey

† Consumed 5 or more drinks in a row on one or more occasions

‡ Without a doctor's prescription

§ Students who were ≥85th percentile for body mass index by age and gender, based on reference data

Needham High School (Grades 9-12)

2014 Gender Patterns for Key Indicators*

	Gender (%)		Total (%)
	Female (769)	Male (706)	(1,490)
SUBSTANCE USE			
Lifetime cigarette smoking	17.1	21.4	19.3
Current cigarette smoking (past 30 days)	6.4	8.9	7.7
Lifetime alcohol use	54.5	53.1	54.0
Current alcohol use (past 30 days)	35.6	34.3	35.0
Binge drinking (past 30 days) [†]	17.5	22.1	19.7
Rode with driver who had been drinking (past 30 days)	17.0	15.3	16.3
Lifetime marijuana use	28.7	35.5	32.1
Current marijuana use (past 30 days)	17.2	26.7	21.8
Lifetime prescription drug misuse [‡]	5.4	8.0	6.7
VIOLENCE			
Physical fighting (past 12 months)	8.6	19.6	14.0
Physical fighting on school property (past 12 months)	2.1	6.4	4.2
Carried a weapon (past 30 days)	2.7	8.7	5.6
Carried a weapon on school property (past 30 days)	2.0	3.4	2.7
BULLYING VICTIMIZATION			
Bullying victim (past 12 months)	21.2	14.3	18.0
Bullying victim on school property (past 12 months)	15.7	11.9	13.9
Cyberbullying victim (past 12 months)	21.4	14.0	18.0
MENTAL HEALTH			
Life "very" stressful (past 30 days)	45.0	17.8	31.9
Depressive symptoms (past 12 months)	25.8	11.3	18.9
Self-injury (past 12 months)	18.2	5.9	12.3
Considered suicide (past 12 months)	13.1	8.4	11.0
Attempted suicide (past 12 months)	3.9	2.7	3.4
SEXUAL BEHAVIOR			
Lifetime sexual intercourse	21.2	23.4	22.5
Currently sexually active (past 3 months)	17.0	19.1	18.1
Condom use at last intercourse (among sexually active youth)	67.4	70.5	68.7
PHYSICAL ACTIVITY AND BODY WEIGHT			
Exercised for ≥60 minutes on 5 or more days/week	53.6	59.9	56.5
Overweight or obese [§]	14.1	21.2	17.5

* Source: MetroWest Adolescent Health Survey

† Consumed 5 or more drinks in a row on one or more occasions

‡ Without a doctor's prescription

§ Students who were ≥85th percentile for body mass index by age and gender, based on reference data

Needham High School (Grades 9-12)

2014 Grade Patterns for Key Indicators*

	Grade (%)				Total (%)
	9 th (382)	10 th (385)	11 th (365)	12 th (344)	(1,490)
SUBSTANCE USE					
Lifetime cigarette smoking	9.3	16.8	22.4	29.9	19.3
Current cigarette smoking (past 30 days)	2.1	4.2	11.3	13.2	7.7
Lifetime alcohol use	34.7	49.1	62.4	71.6	54.0
Current alcohol use (past 30 days)	17.1	32.1	39.8	52.6	35.0
Binge drinking (past 30 days) [†]	5.5	17.4	25.0	31.9	19.7
Rode with driver who had been drinking (past 30 days)	10.3	16.4	22.3	15.2	16.3
Lifetime marijuana use	8.4	27.9	39.9	54.1	32.1
Current marijuana use (past 30 days)	6.3	19.7	24.5	38.1	21.8
Lifetime prescription drug misuse [‡]	2.9	4.5	10.5	9.1	6.7
VIOLENCE					
Physical fighting (past 12 months)	18.4	10.4	15.7	10.6	14.0
Physical fighting on school property (past 12 months)	5.2	2.1	6.3	2.3	4.2
Carried a weapon (past 30 days)	3.9	5.2	7.4	5.6	5.6
Carried a weapon on school property (past 30 days)	1.3	2.1	4.4	2.6	2.7
BULLYING VICTIMIZATION					
Bullying victim (past 12 months)	23.0	14.9	21.0	11.7	18.0
Bullying victim on school property (past 12 months)	17.2	11.8	17.3	8.5	13.9
Cyberbullying victim (past 12 months)	21.7	17.3	18.0	14.4	18.0
MENTAL HEALTH					
Life "very" stressful (past 30 days)	21.6	30.4	35.1	42.6	31.9
Depressive symptoms (past 12 months)	18.9	18.3	19.3	19.4	18.9
Self-injury (past 12 months)	12.9	12.6	13.3	10.0	12.3
Considered suicide (past 12 months)	8.9	10.8	13.4	10.9	11.0
Attempted suicide (past 12 months)	2.7	3.3	4.5	2.7	3.4
SEXUAL BEHAVIOR					
Lifetime sexual intercourse	6.4	12.2	30.0	43.3	22.5
Currently sexually active (past 3 months)	3.5	9.1	23.2	38.9	18.1
Condom use at last intercourse (among sexually active youth)	69.2	70.6	65.9	71.5	68.7
PHYSICAL ACTIVITY AND BODY WEIGHT					
Exercised for ≥60 minutes on 5 or more days/week	65.9	59.5	47.1	53.0	56.5
Overweight or obese [§]	16.8	18.1	20.1	14.2	17.5

* Source: MetroWest Adolescent Health Survey

† Consumed 5 or more drinks in a row on one or more occasions

‡ Without a doctor's prescription

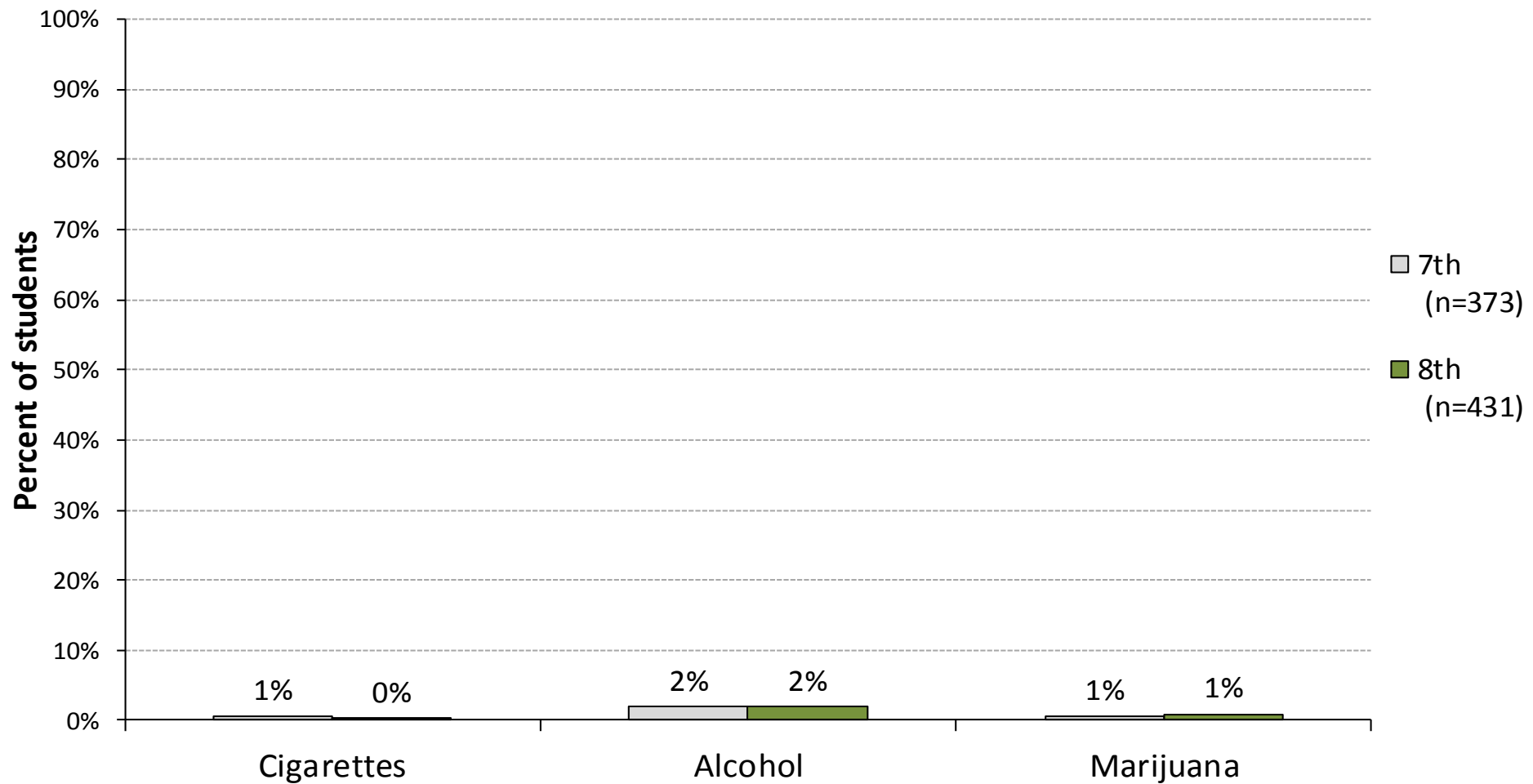
§ Students who were ≥85th percentile for body mass index by age and gender, based on reference data

2014 MWAHS

Pollard Middle School Grades 7&8

Selected Slides

Figure 2-2B. Current Substance Use* by Grade, 2014
Pollard Middle School, Needham (Grades 7-8)
MetroWest Adolescent Health Survey

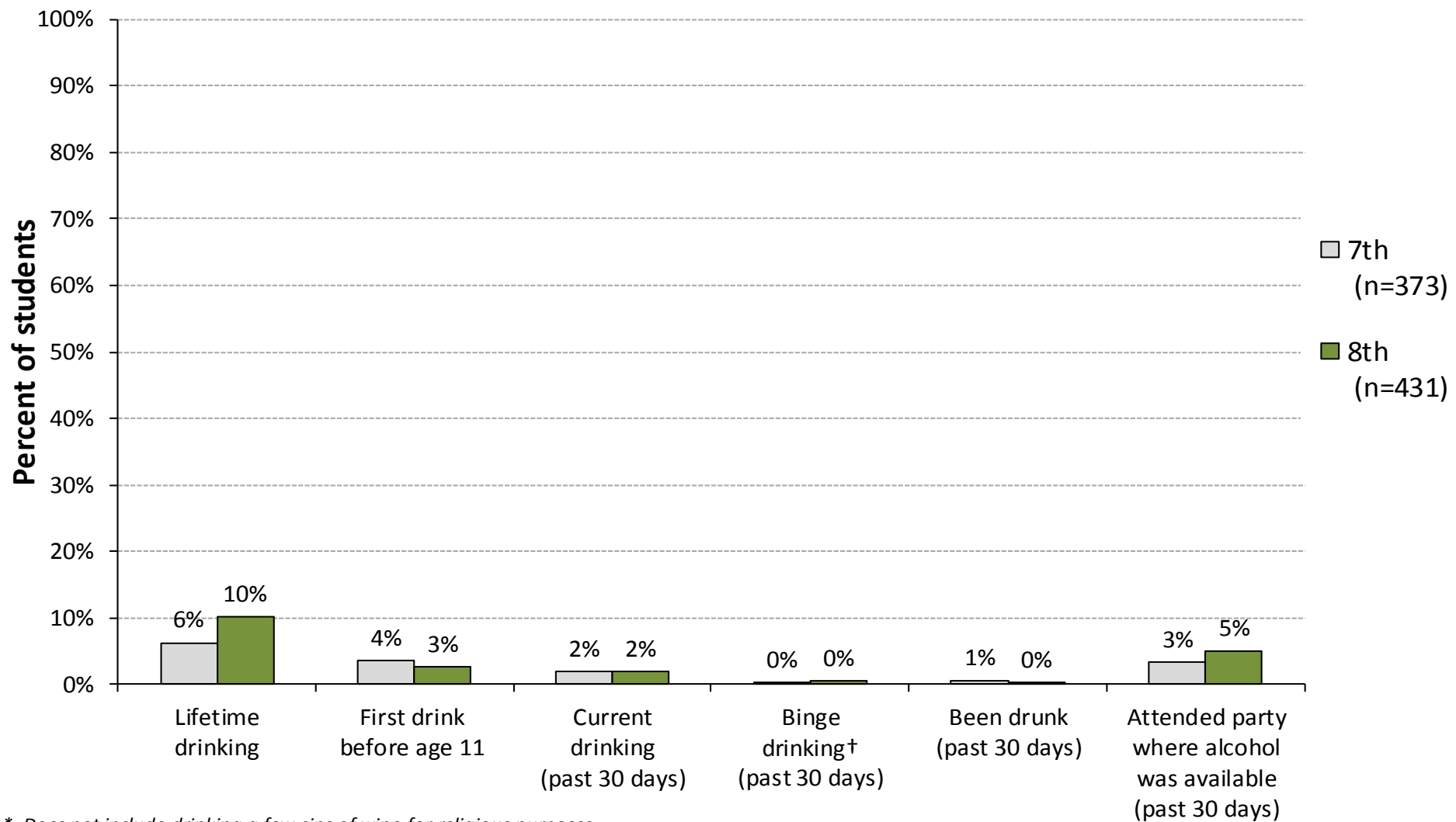


* Used one or more times in the past 30 days

Figure 2-5B. Alcohol Use* by Grade, 2014

Pollard Middle School, Needham (Grades 7-8)

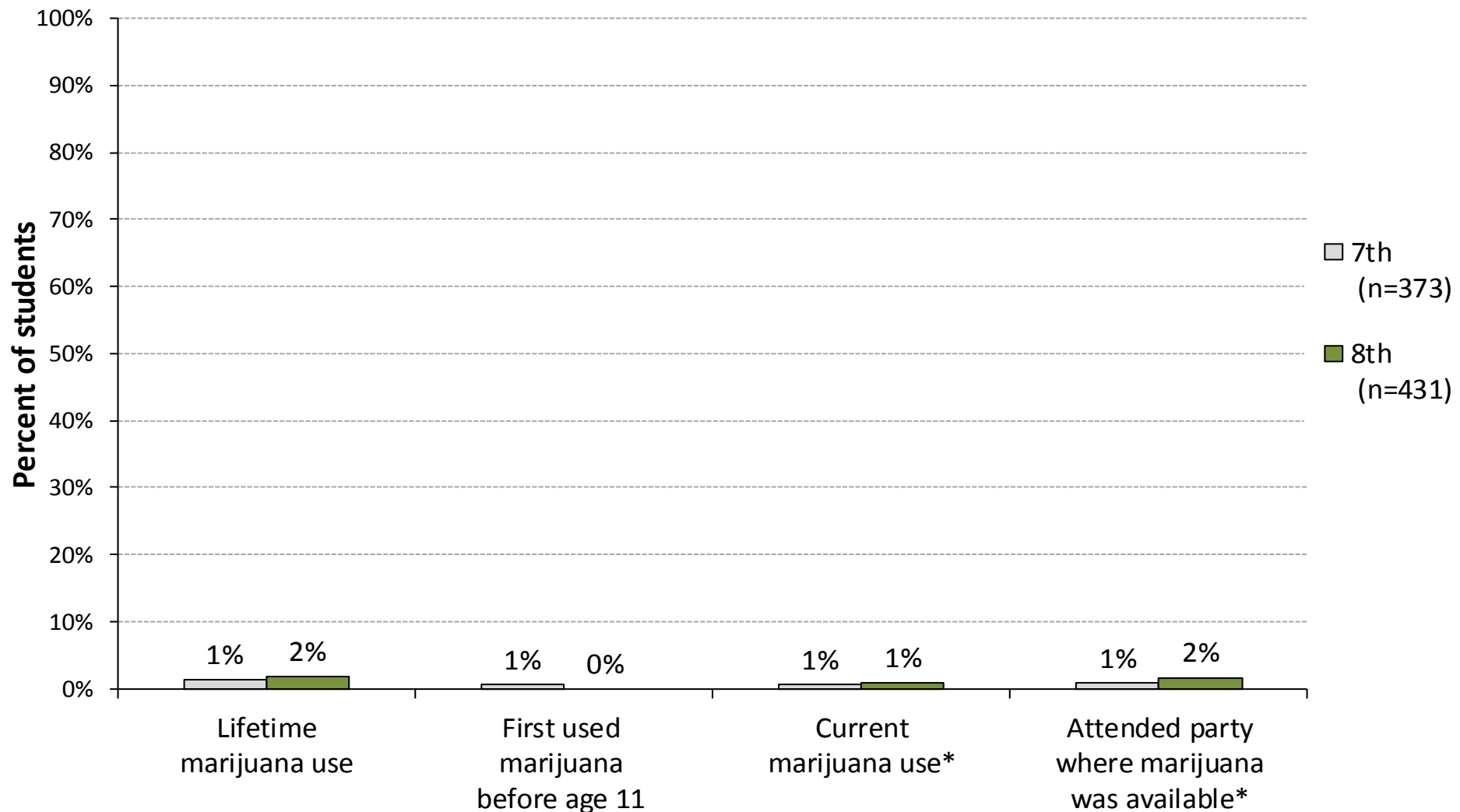
MetroWest Adolescent Health Survey



* Does not include drinking a few sips of wine for religious purposes

† Had 5 or more drinks in a row (within a couple of hours)

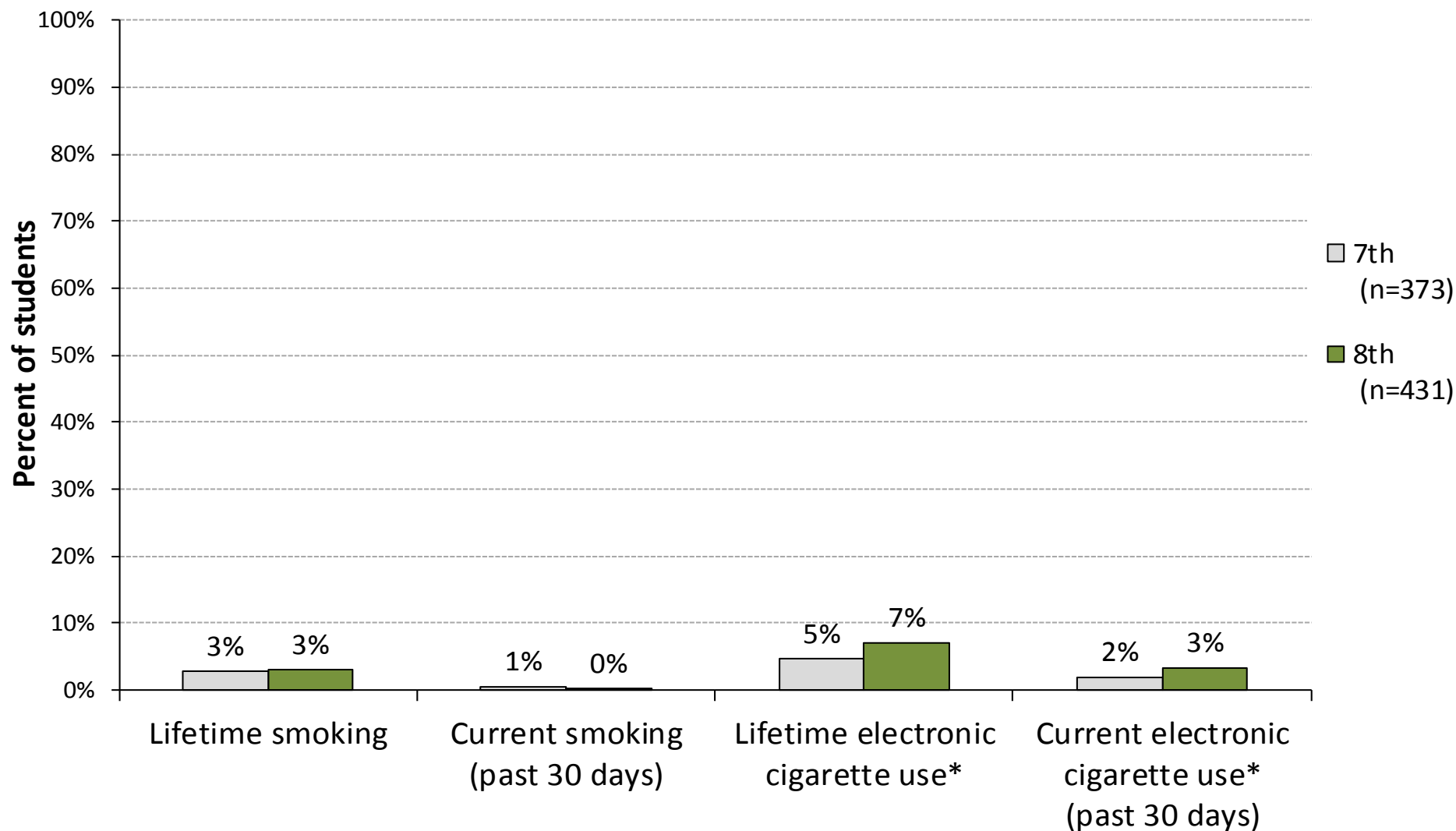
Figure 2-7B. Marijuana Use by Grade, 2014
Pollard Middle School, Needham (Grades 7-8)
MetroWest Adolescent Health Survey



* In the past 30 days

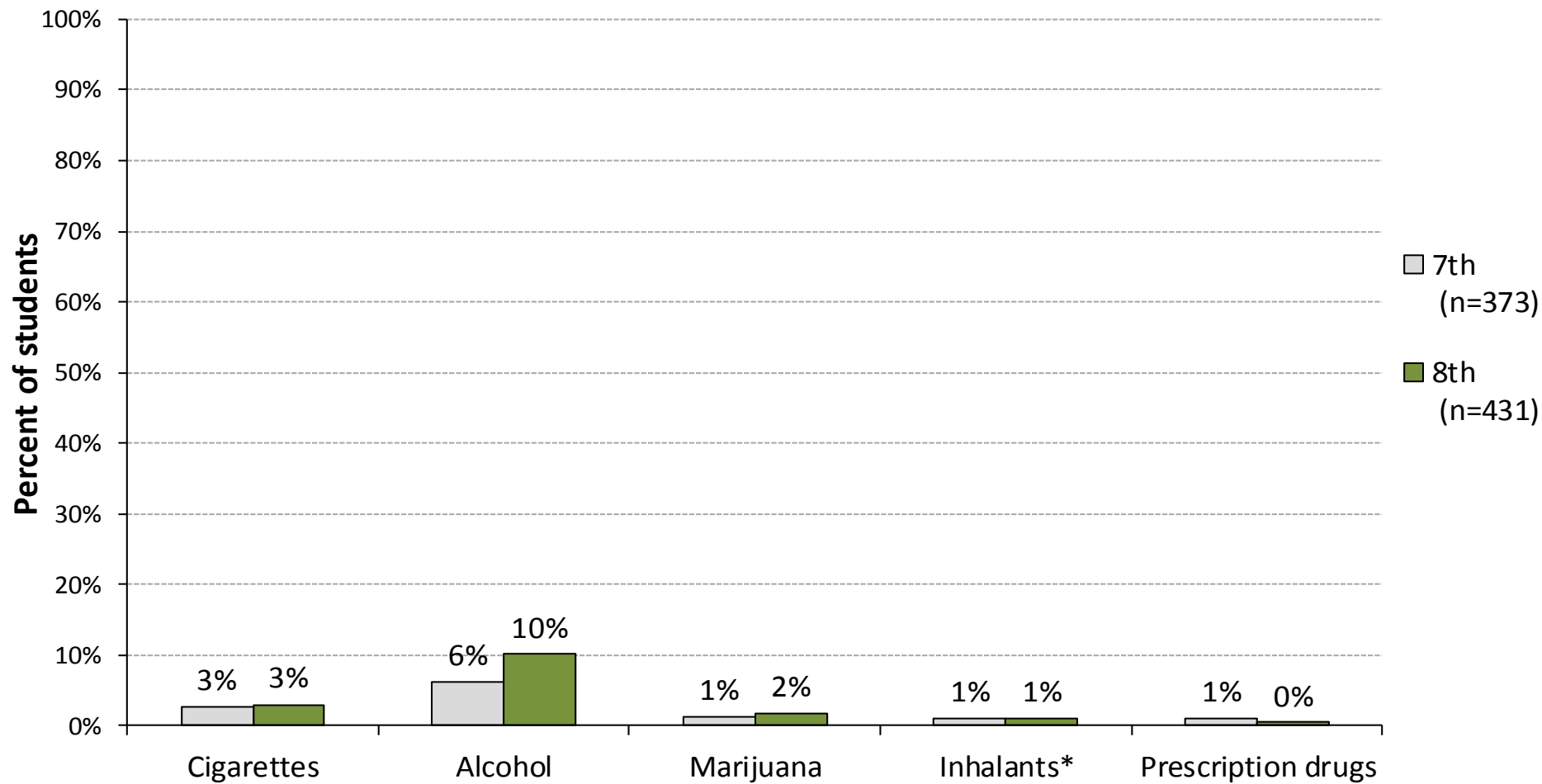
Figure 2-3B. Cigarette and Electronic Cigarette Smoking by Grade, 2014 Pollard Middle School, Needham (Grades 7-8)

MetroWest Adolescent Health Survey



* Includes electronic cigarettes, or e-cigarettes, and other electronic vapor products. E-cigarettes create a mist or vapor that you breathe in like smoke.

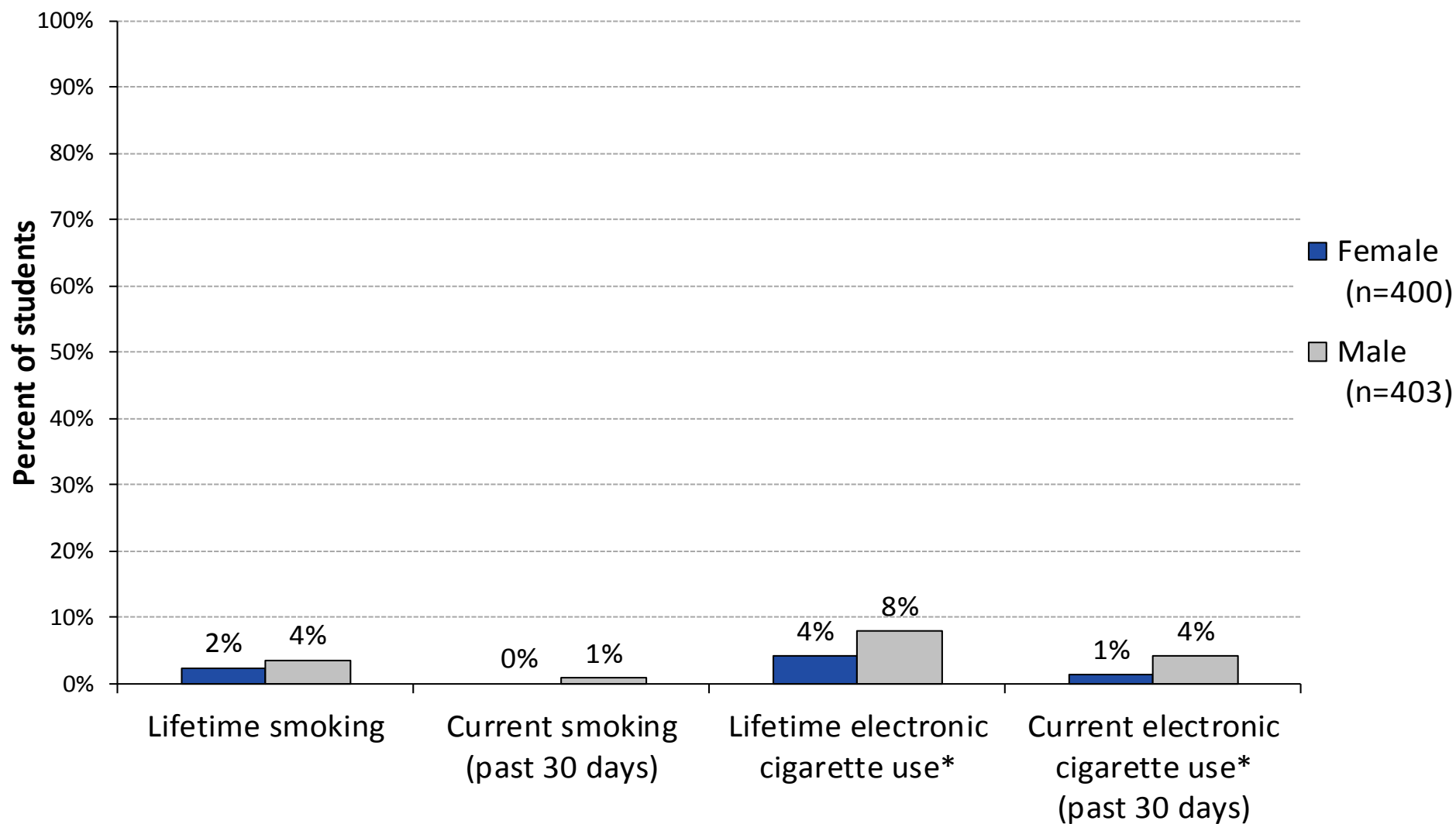
Figure 2-1B. Lifetime Substance Use by Grade, 2014
Pollard Middle School, Needham (Grades 7-8)
MetroWest Adolescent Health Survey



* Includes sniffing glue, breathing the contents of aerosol spray cans, or inhaling any paints or sprays to get high

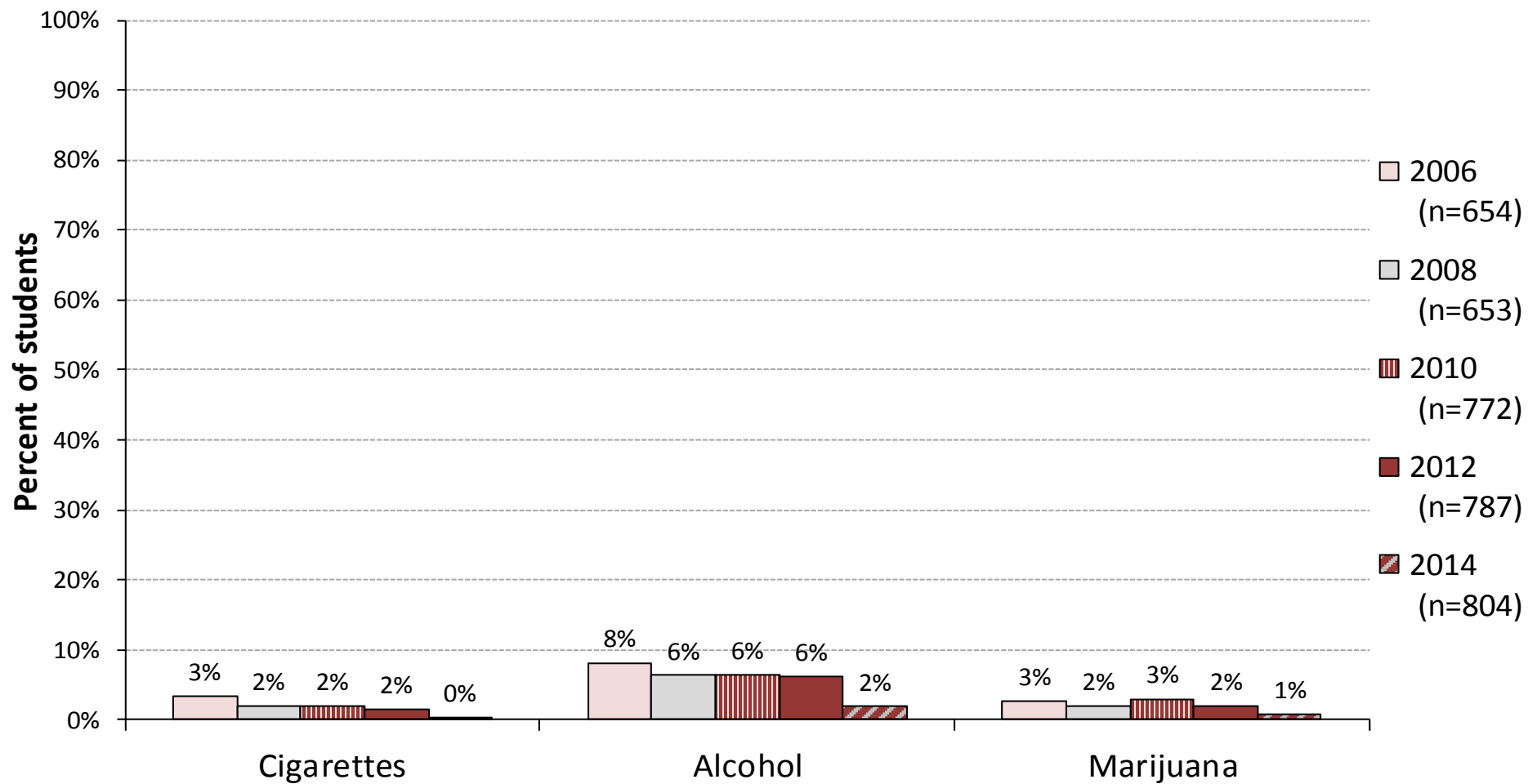
Figure 2-3A. Cigarette and Electronic Cigarette Smoking by Gender, 2014 Pollard Middle School, Needham (Grades 7-8)

MetroWest Adolescent Health Survey



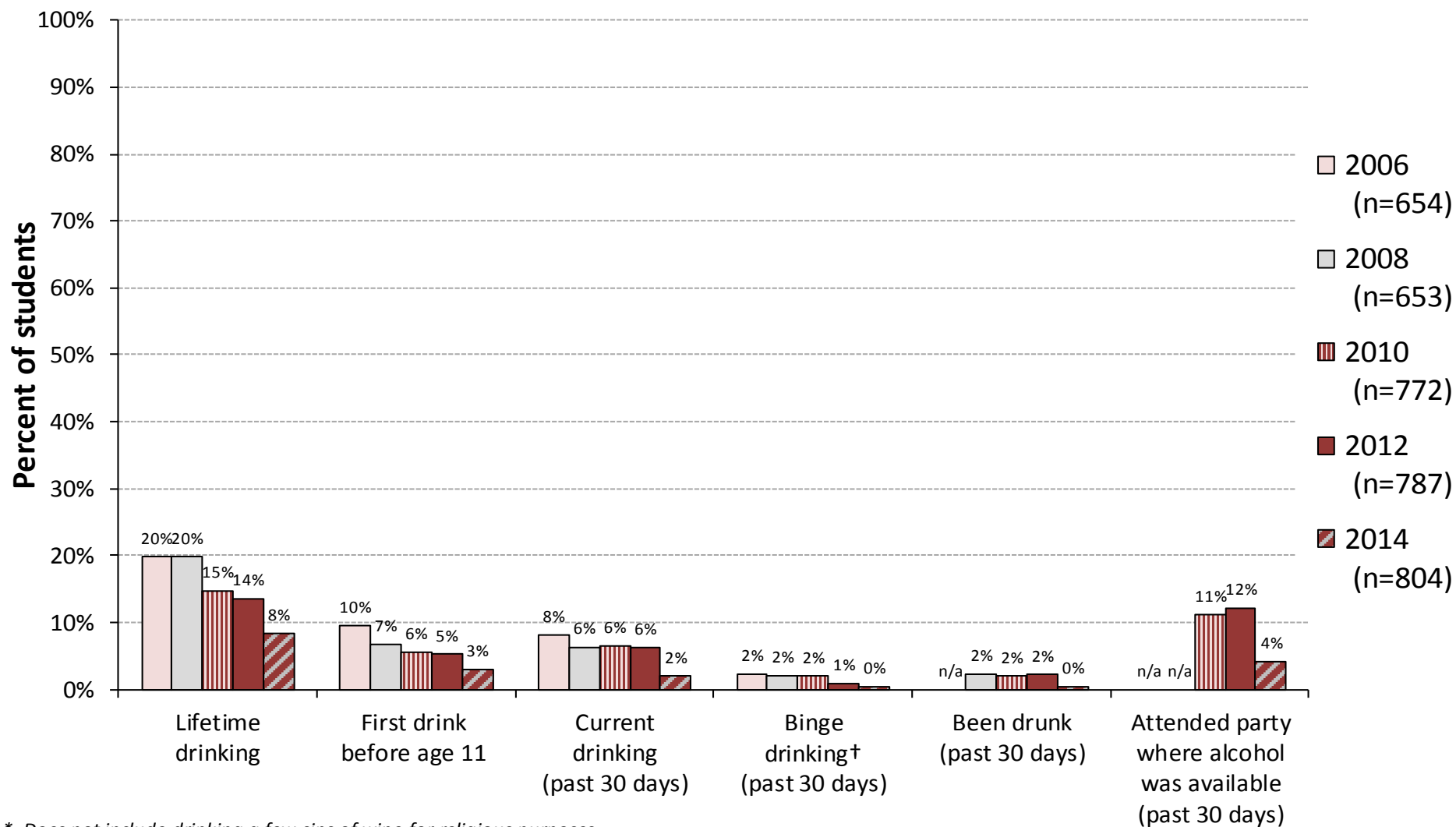
* Includes electronic cigarettes, or e-cigarettes, and other electronic vapor products. E-cigarettes create a mist or vapor that you breathe in like smoke.

Figure 2-2C. Trends in Current Substance Use,* 2006-2014
Pollard Middle School, Needham (Grades 7-8)
MetroWest Adolescent Health Survey



* Used one or more times in the past 30 days

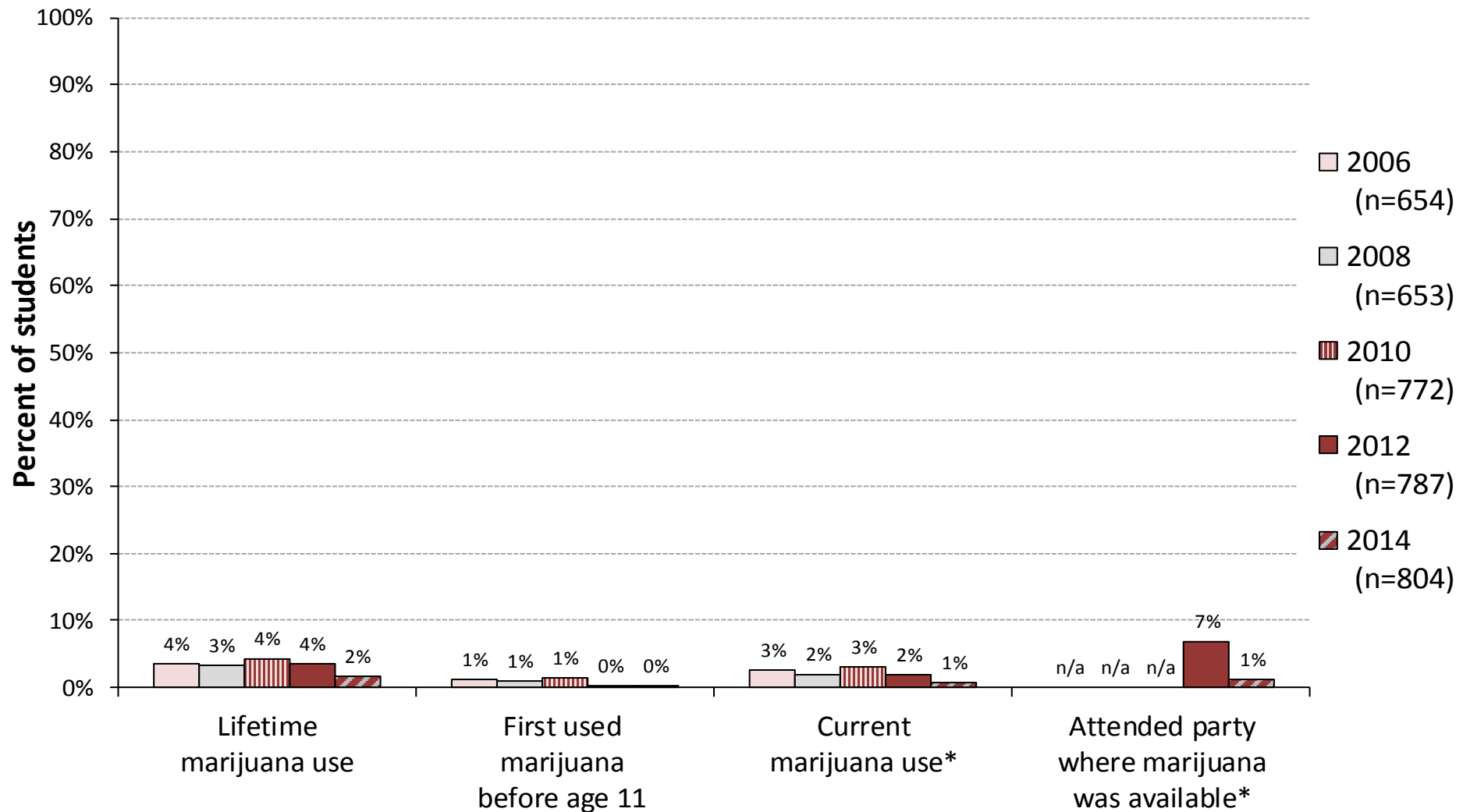
Figure 2-5C. Trends in Alcohol Use,* 2006-2014
Pollard Middle School, Needham (Grades 7-8)
MetroWest Adolescent Health Survey



* Does not include drinking a few sips of wine for religious purposes

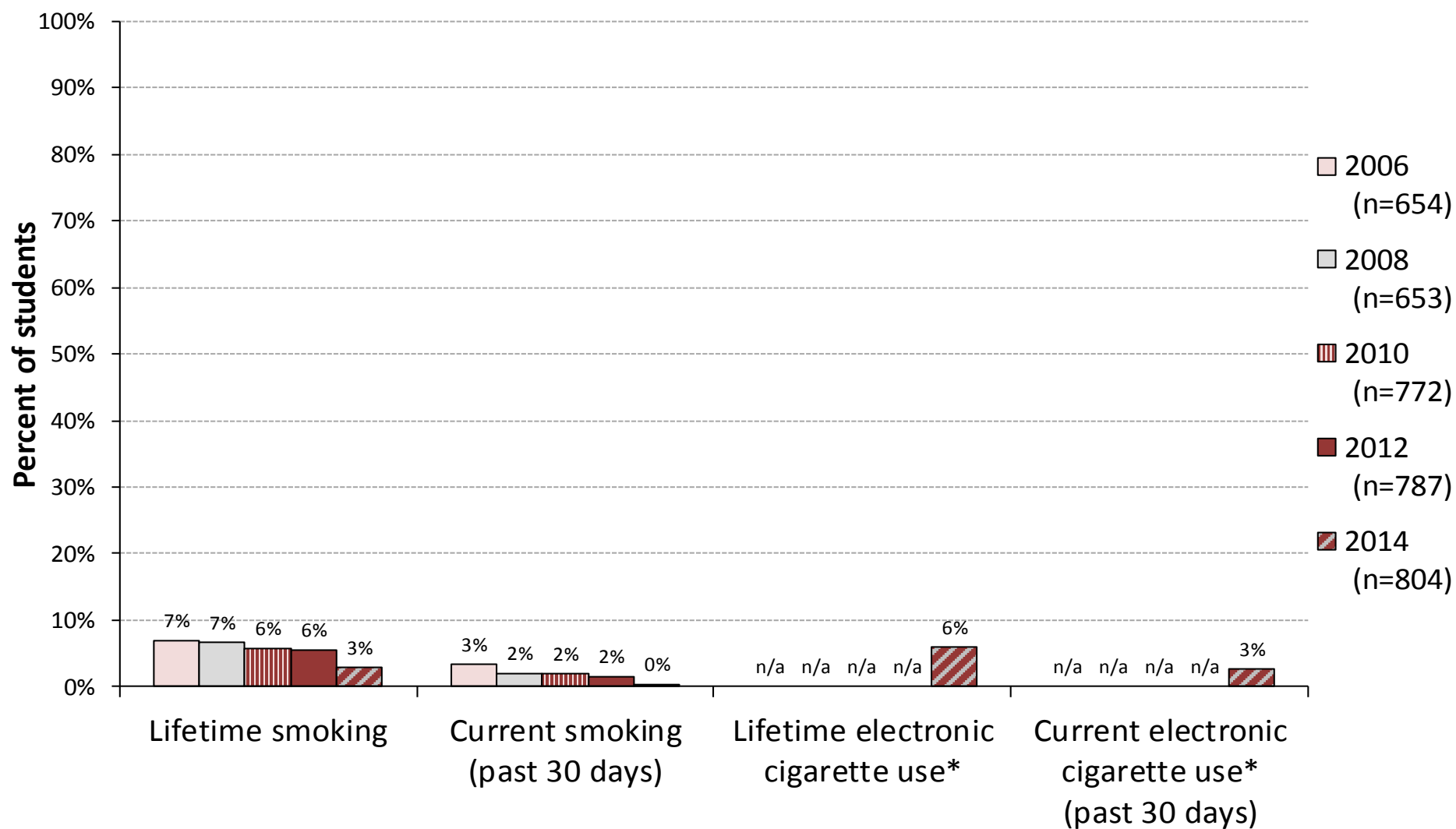
† Had 5 or more drinks in a row (within a couple of hours)

Figure 2-7C. Trends in Marijuana Use, 2006-2014
Pollard Middle School, Needham (Grades 7-8)
MetroWest Adolescent Health Survey



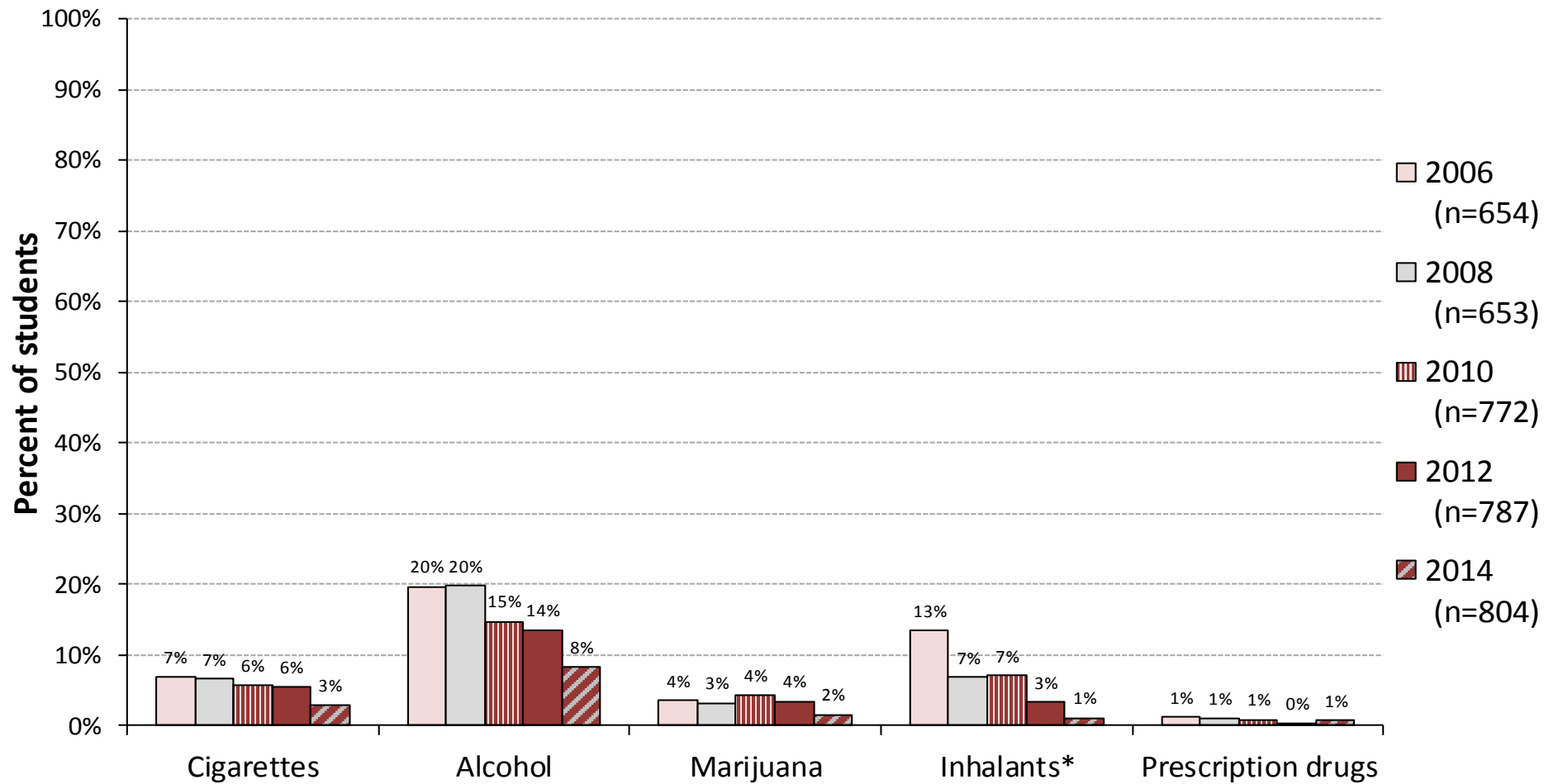
* In the past 30 days

Figure 2-3C. Trends in Cigarette and Electronic Cigarette Smoking, 2006-2014
Pollard Middle School, Needham (Grades 7-8)
MetroWest Adolescent Health Survey



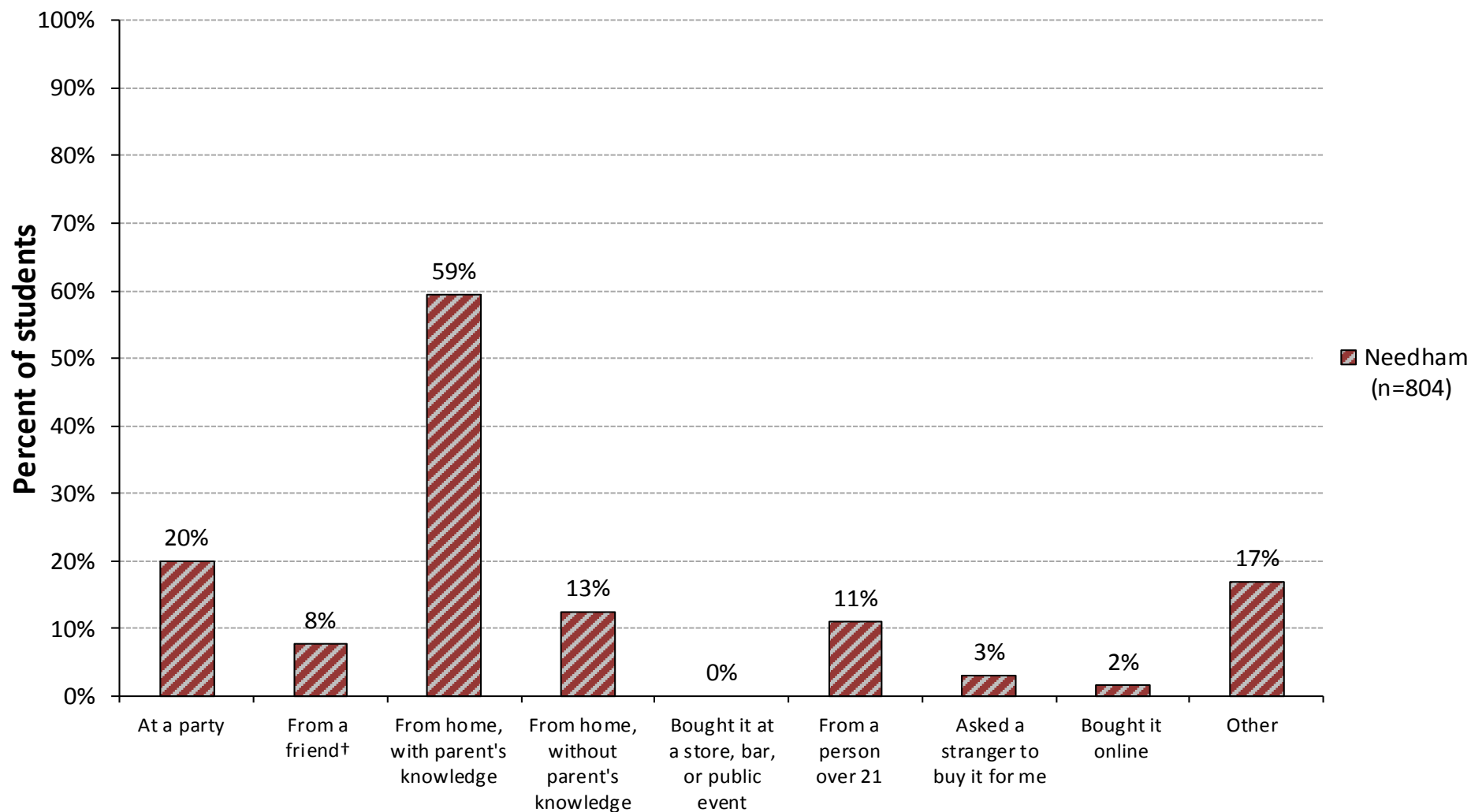
* Includes electronic cigarettes, or e-cigarettes, and other electronic vapor products. E-cigarettes create a mist or vapor that you breathe in like smoke.

Figure 2-1C. Trends in Lifetime Substance Use, 2006-2014
Pollard Middle School, Needham (Grades 7-8)
MetroWest Adolescent Health Survey



* Includes sniffing glue, breathing the contents of aerosol spray cans, or inhaling any paints or sprays to get high

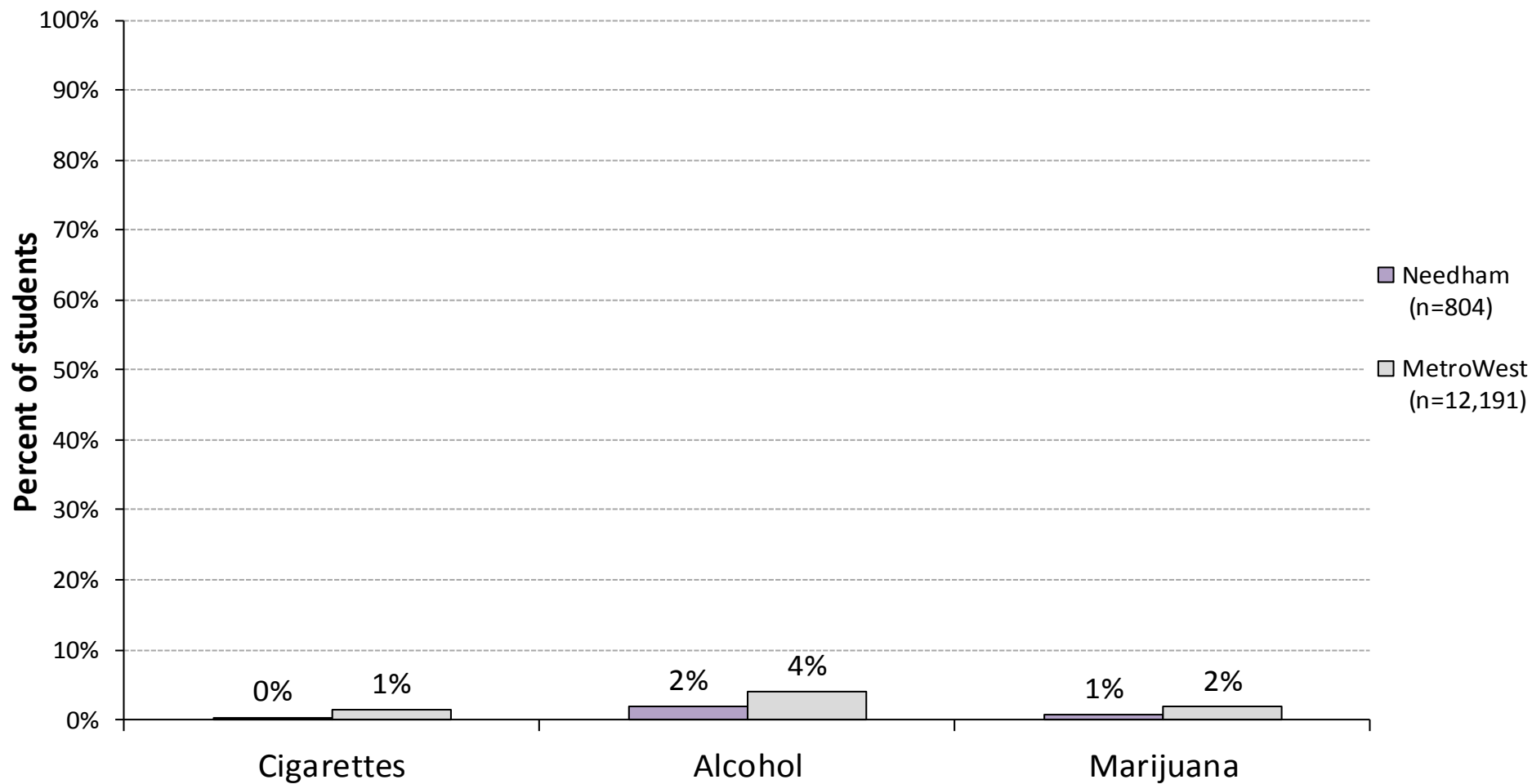
Figure 2-6A. Access to Alcohol Among Lifetime Drinkers,* 2014
Pollard Middle School, Needham (Grades 7-8)
MetroWest Adolescent Health Survey



* Among students that drank in their lifetime

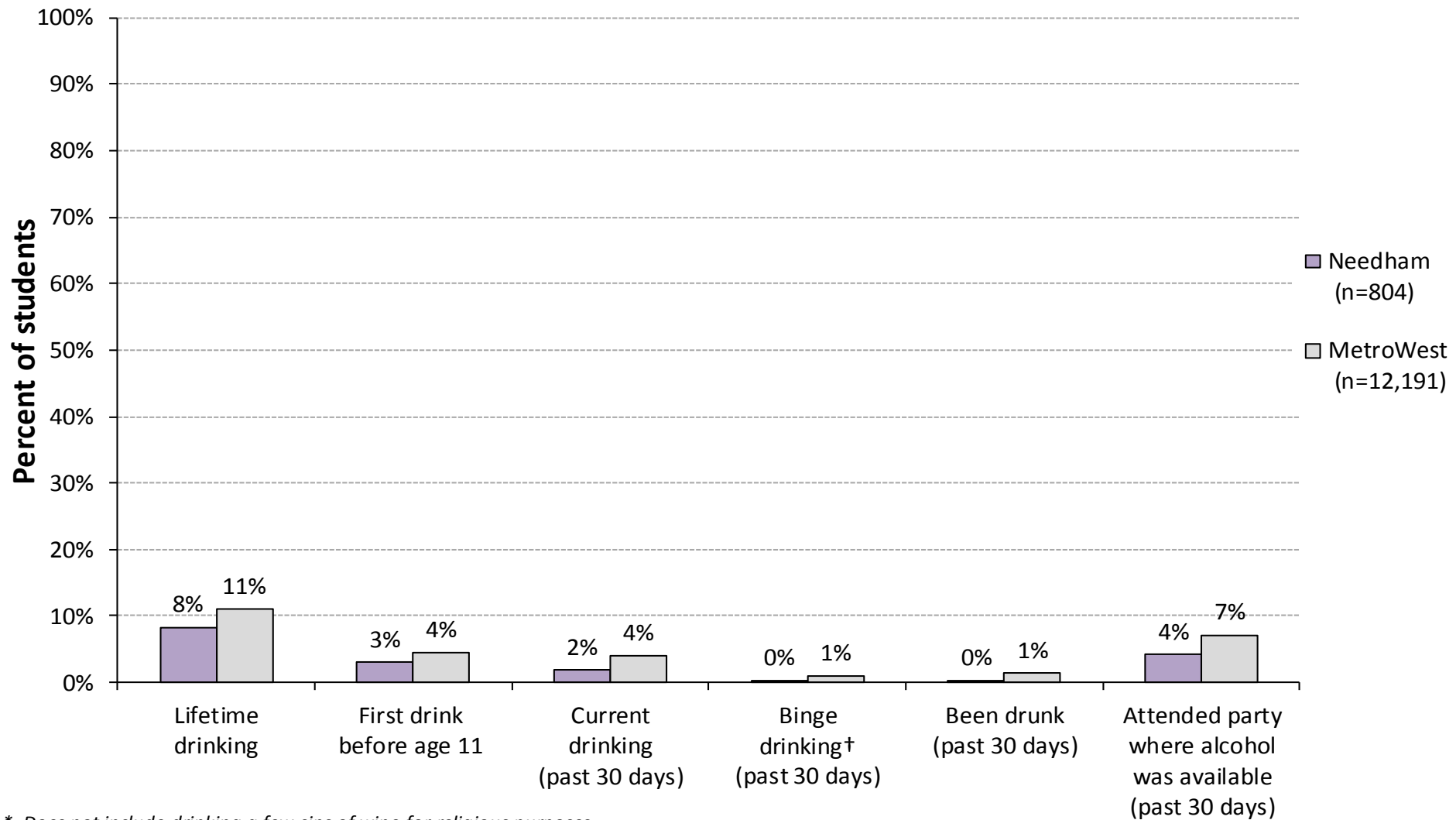
† Does not include at a party

Figure 2-2D. Current Substance Use* at the District and Regional Levels, 2014
Pollard Middle School, Needham (Grades 7-8)
MetroWest Adolescent Health Survey



* Used one or more times in the past 30 days

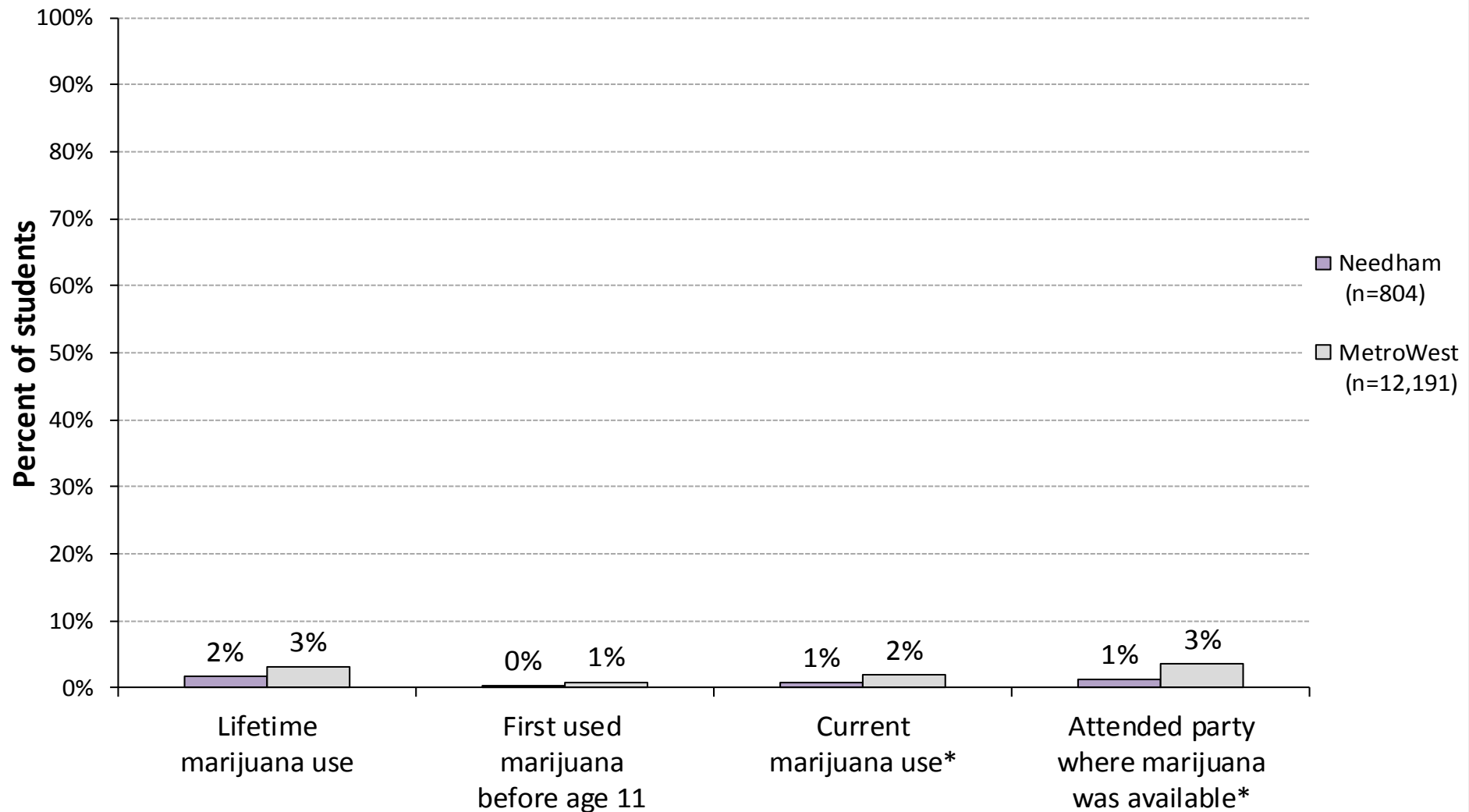
Figure 2-5D. Alcohol Use* at the District and Regional Levels, 2014
Pollard Middle School, Needham (Grades 7-8)
MetroWest Adolescent Health Survey



* Does not include drinking a few sips of wine for religious purposes

† Had 5 or more drinks in a row (within a couple of hours)

Figure 2-7D. Marijuana Use at the District and Regional Levels, 2014
Pollard Middle School, Needham (Grades 7-8)
MetroWest Adolescent Health Survey

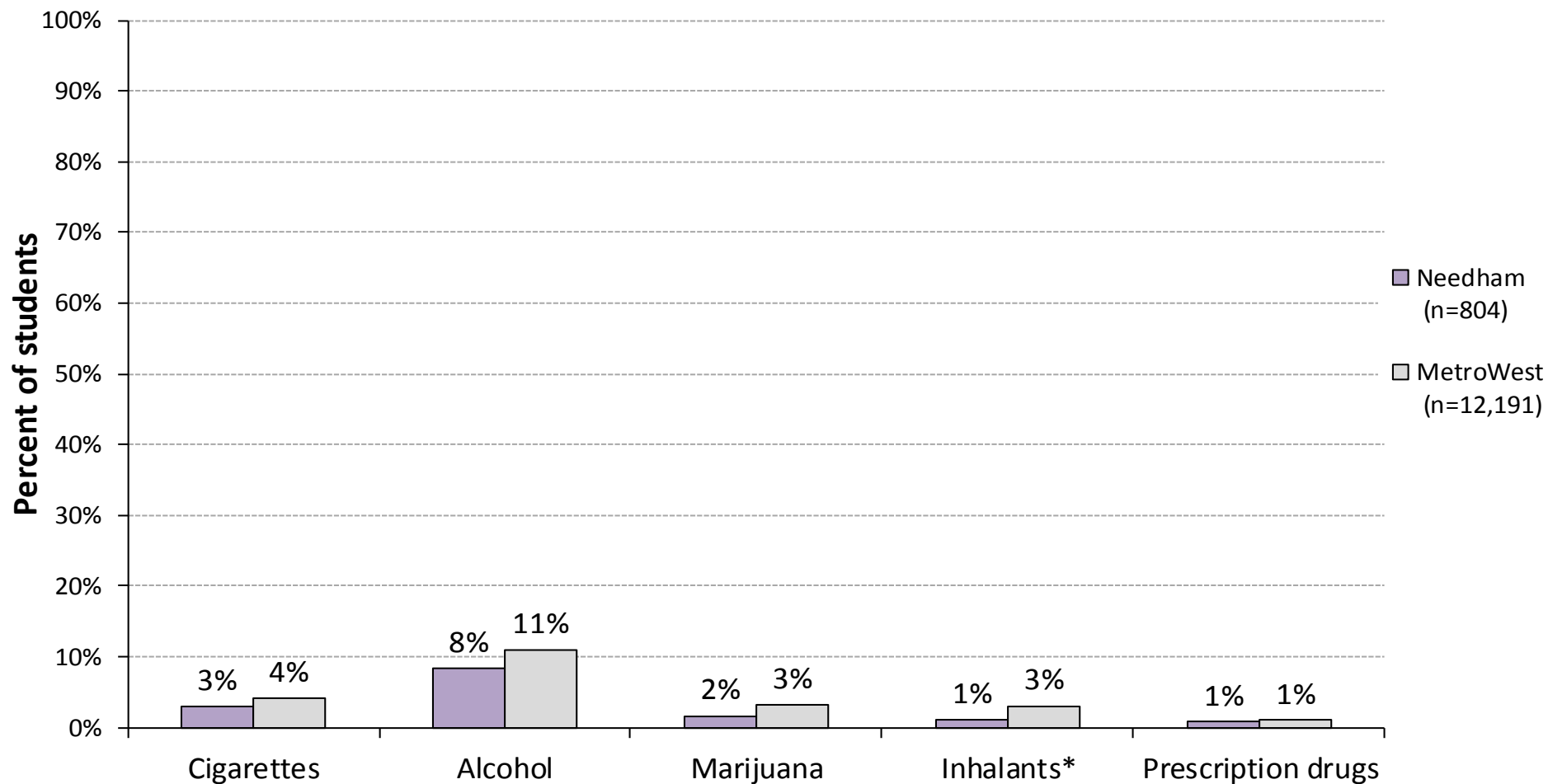


* In the past 30 days

Figure 2-1D. Lifetime Substance Use at the District and Regional Levels, 2014

Pollard Middle School, Needham (Grades 7-8)

MetroWest Adolescent Health Survey



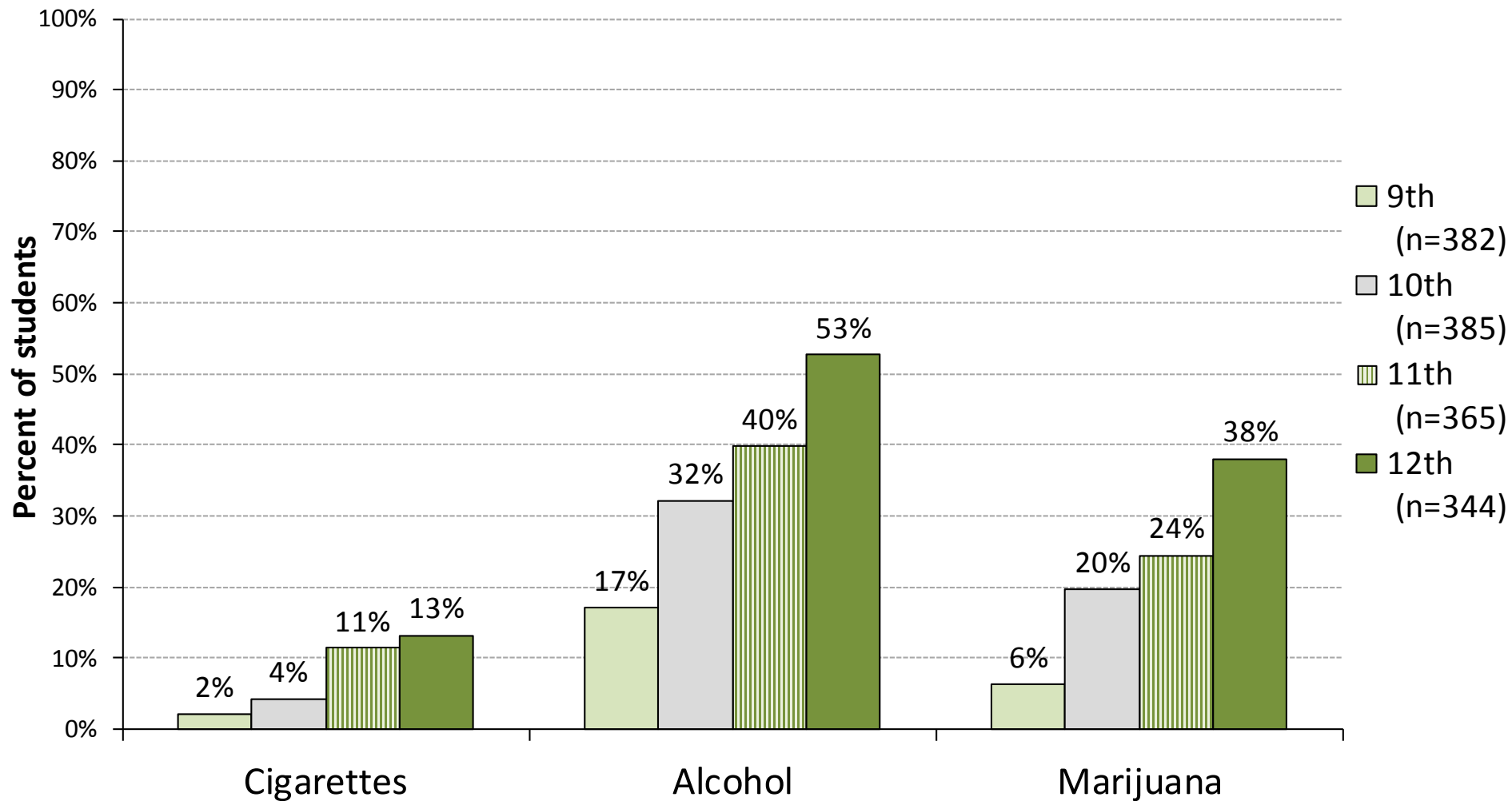
* Includes sniffing glue, breathing the contents of aerosol spray cans, or inhaling any paints or sprays to get high

2014 MWAHS

Needham High School Grades 9-12

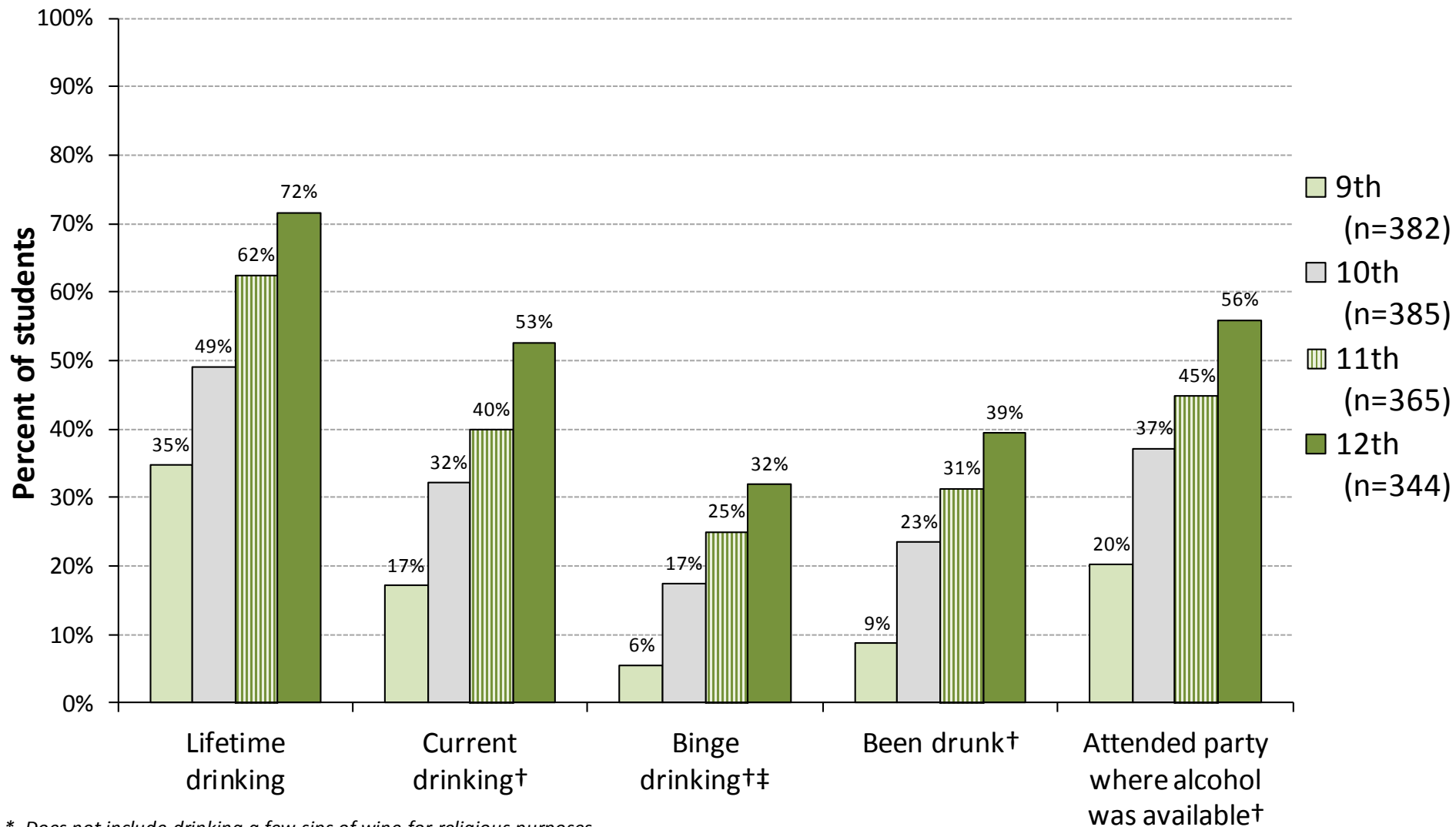
Selected Slides

Figure 2-3B. Current Substance Use* by Grade, 2014
Needham High School (Grades 9-12)
MetroWest Adolescent Health Survey



* Used one or more times in the past 30 days

Figure 2-6B. Alcohol Use* by Grade, 2014
Needham High School (Grades 9-12)
MetroWest Adolescent Health Survey

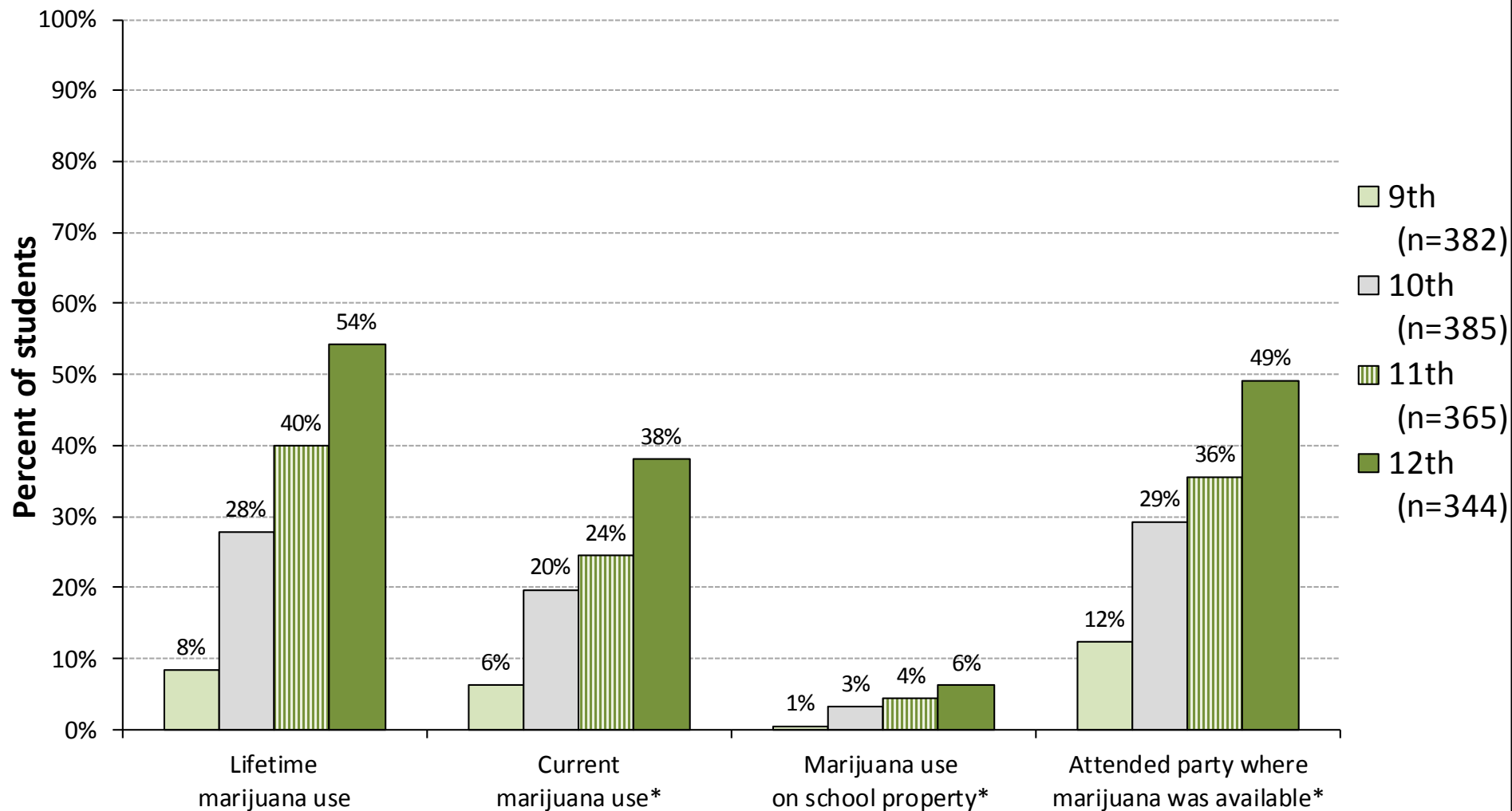


* Does not include drinking a few sips of wine for religious purposes

[†] In the past 30 days

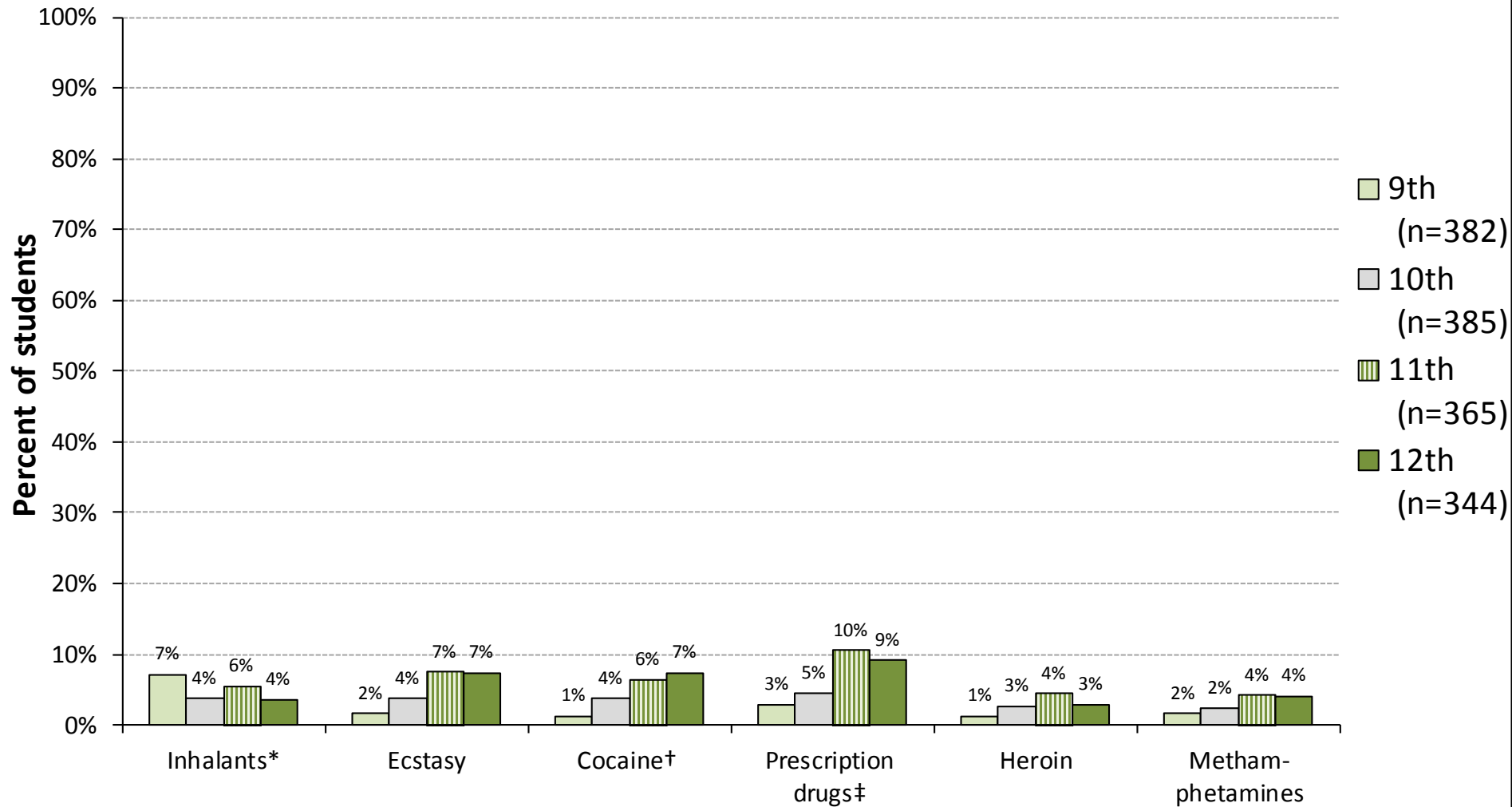
[‡] Had 5 or more drinks in a row (within a couple of hours)

Figure 2-8B. Marijuana Use by Grade, 2014
Needham High School (Grades 9-12)
MetroWest Adolescent Health Survey



* In the past 30 days

Figure 2-2B. Lifetime Other Substance Use by Grade, 2014
Needham High School (Grades 9-12)
MetroWest Adolescent Health Survey

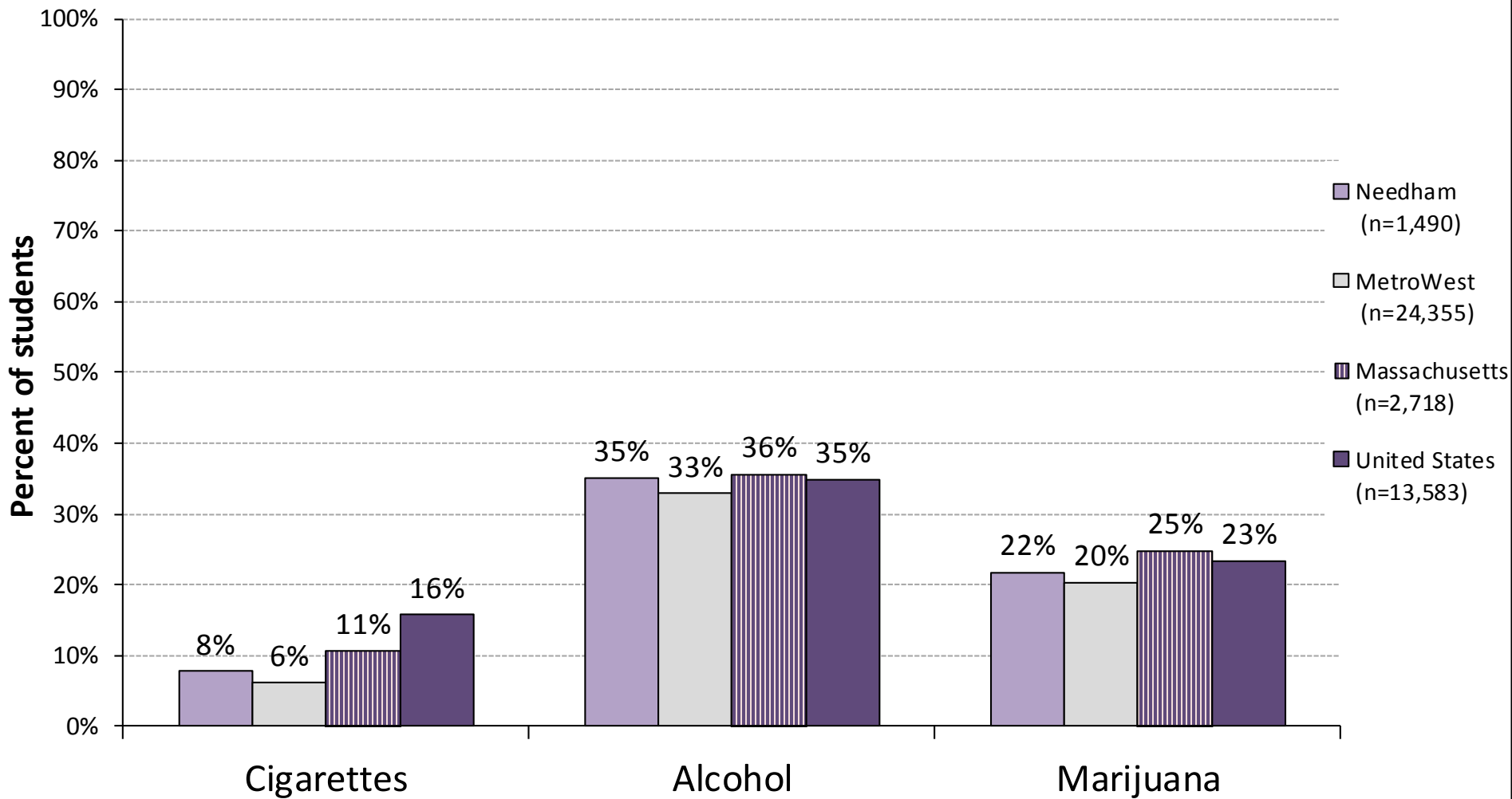


* Includes sniffing glue, breathing the contents of aerosol spray cans, or inhaling any paints or sprays to get high

† Includes using powder, crack or freebase

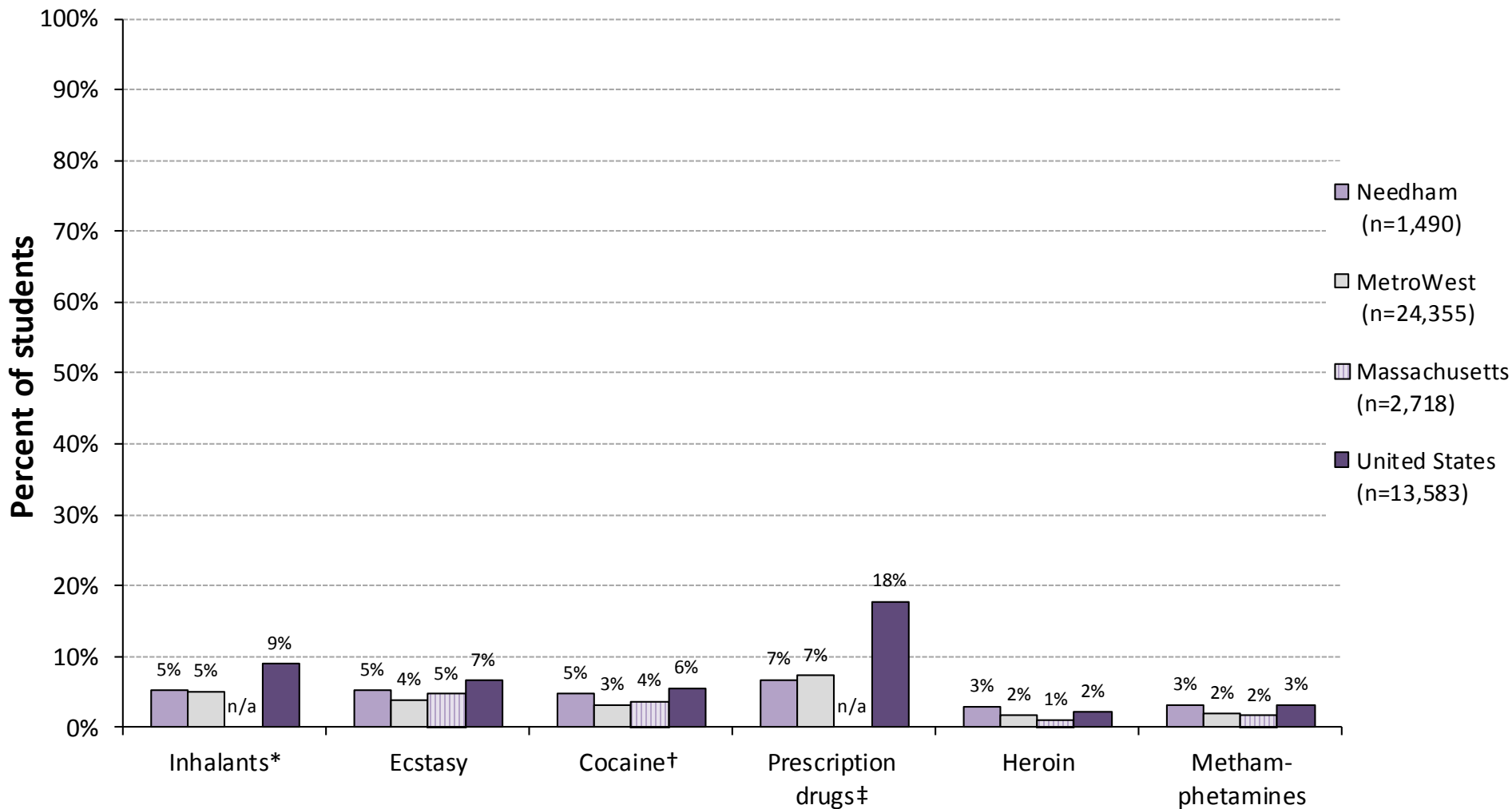
‡ Without a doctor's prescription

Figure 2-3D. Current Substance Use* at the District, Regional, State, and National Levels, 2014
Needham High School (Grades 9-12)
MetroWest Adolescent Health Survey



* Used one or more times in the past 30 days

Figure 2-2D. Lifetime Other Substance Use at the District, Regional, State, and National Levels, 2014
Needham High School (Grades 9-12)
MetroWest Adolescent Health Survey

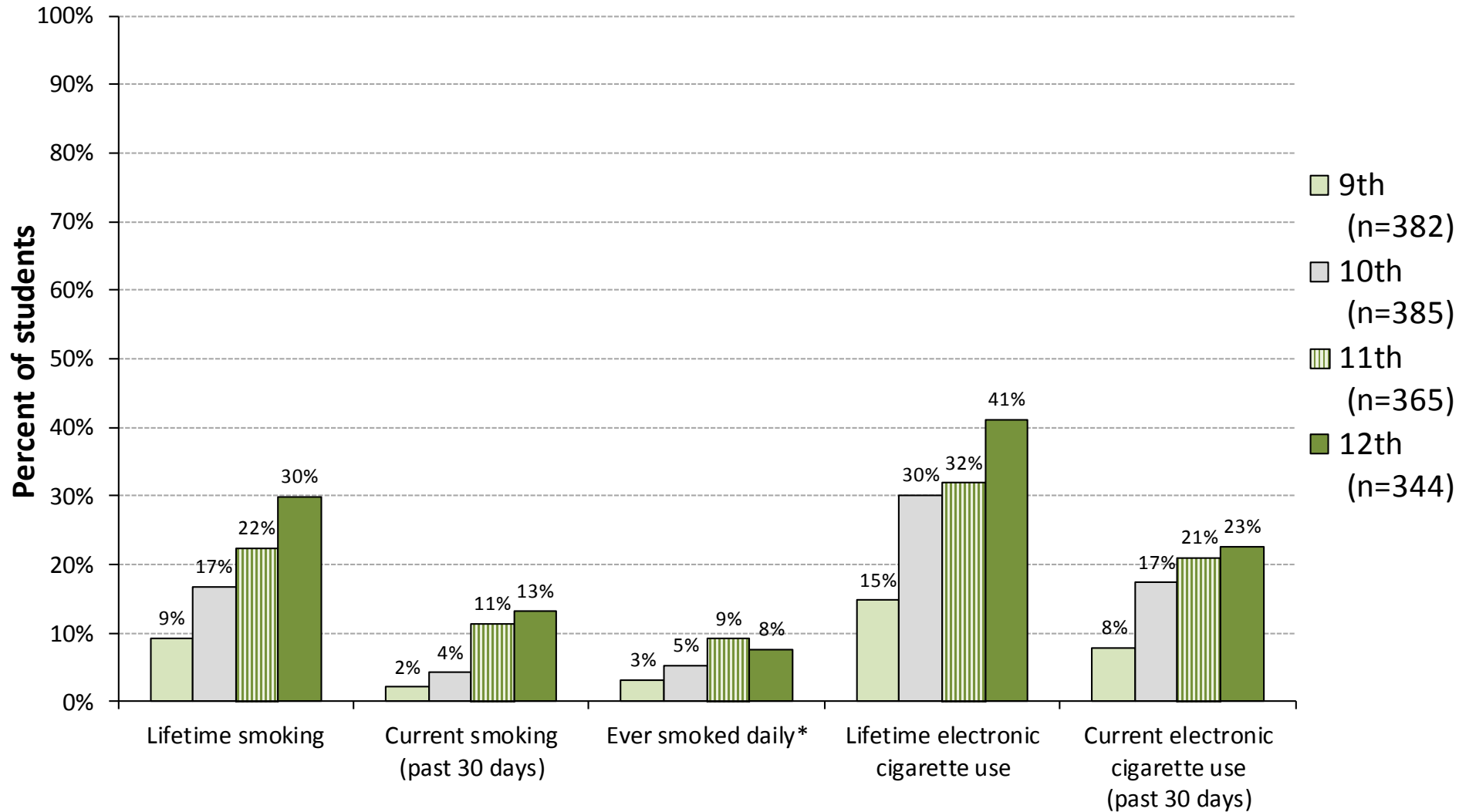


* Includes sniffing glue, breathing the contents of aerosol spray cans, or inhaling any paints or sprays to get high

† Includes using powder, crack or freebase

‡ Without a doctor's prescription

Figure 2-4B. Cigarette and Electronic Cigarette Smoking by Grade, 2014
Needham High School (Grades 9-12)
MetroWest Adolescent Health Survey



* Every day for 30 days

Figure 2-1B. Lifetime Substance Use by Grade, 2014
Needham High School (Grades 9-12)
MetroWest Adolescent Health Survey

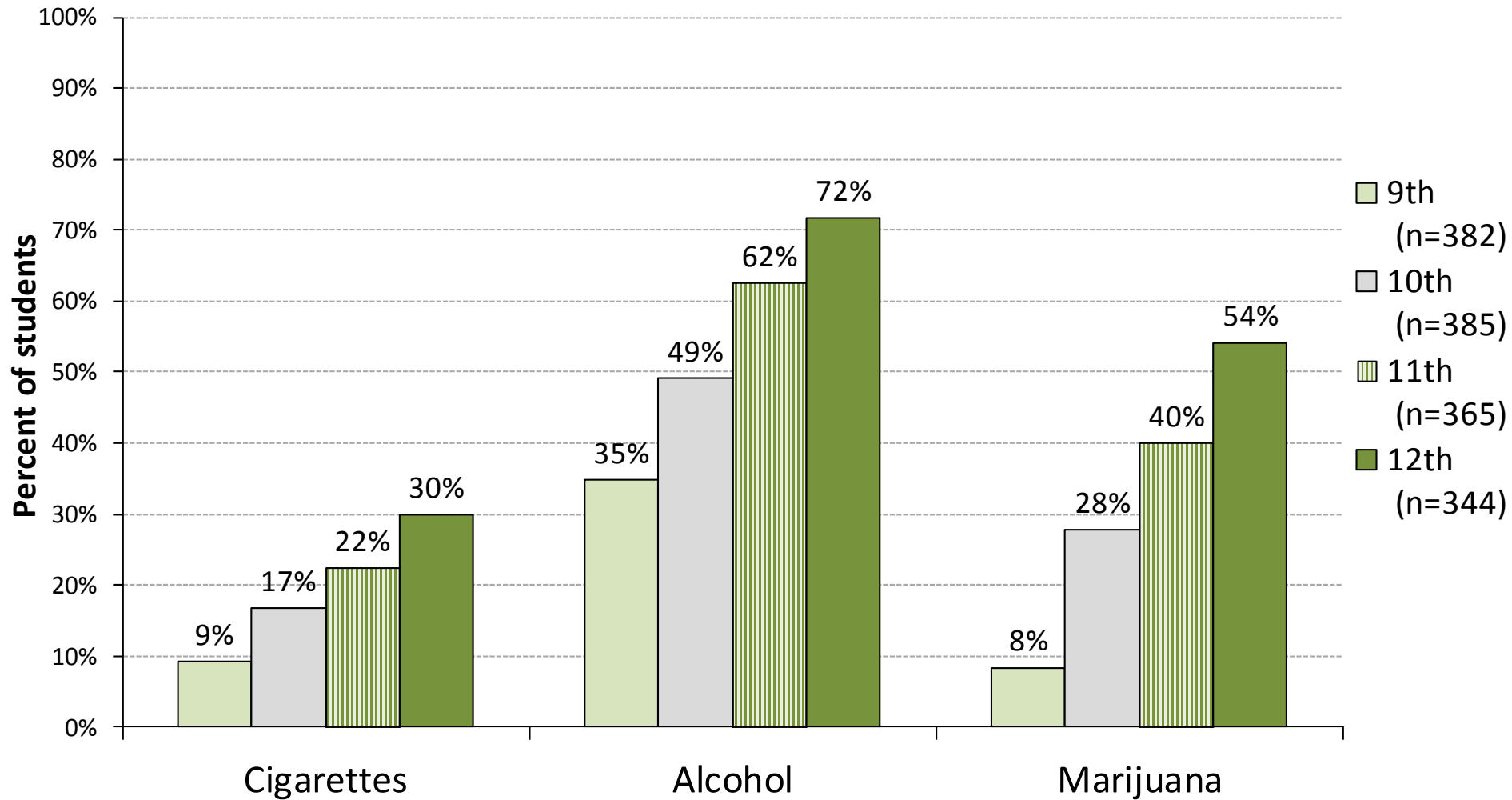


Figure 2-1C. Trends in Lifetime Substance Use, 2006-2014
Needham High School (Grades 9-12)
MetroWest Adolescent Health Survey

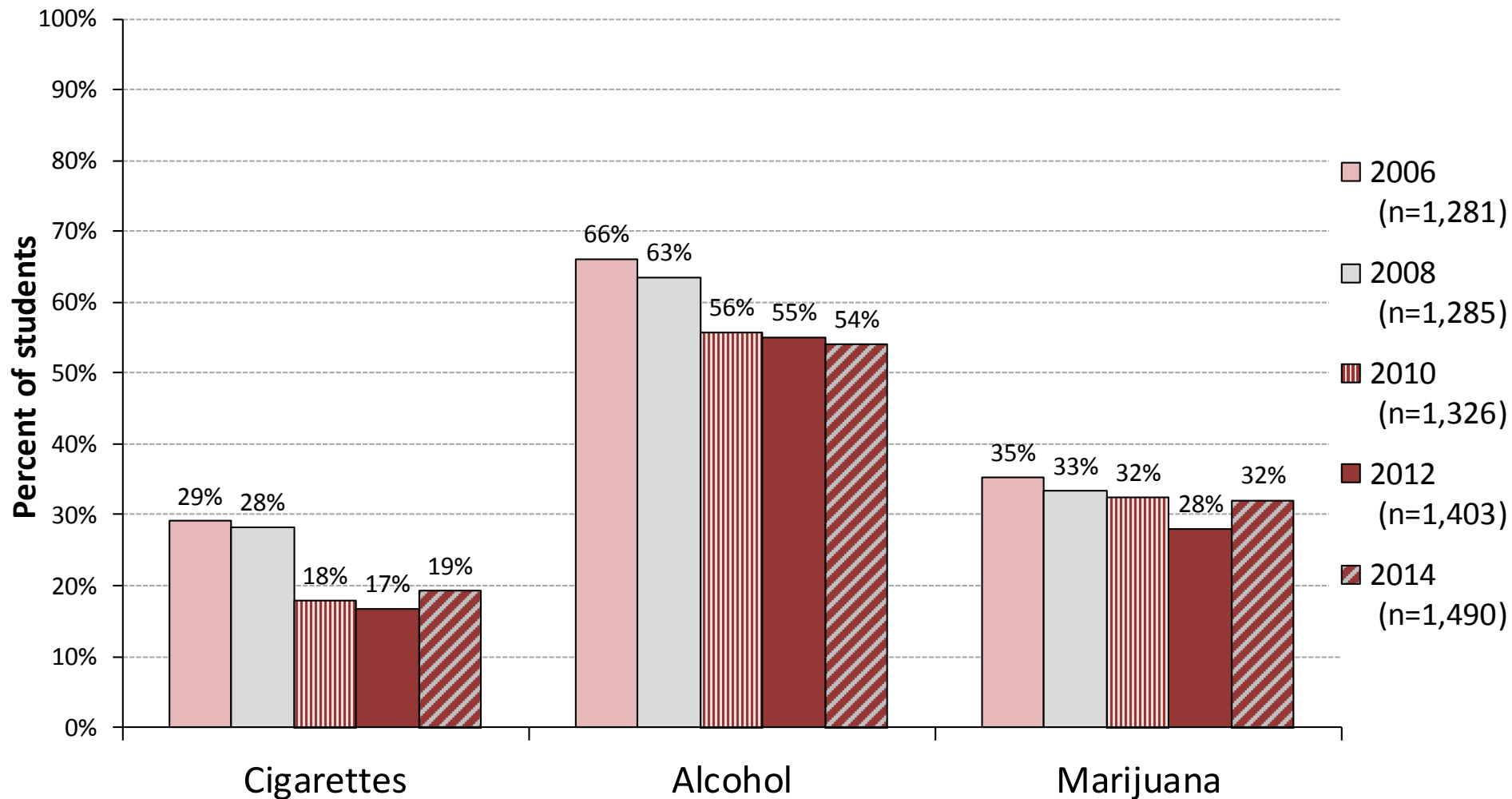


Figure 2-1D. Lifetime Substance Use at the District, Regional, State, and National Levels, 2014
Needham High School (Grades 9-12)
MetroWest Adolescent Health Survey

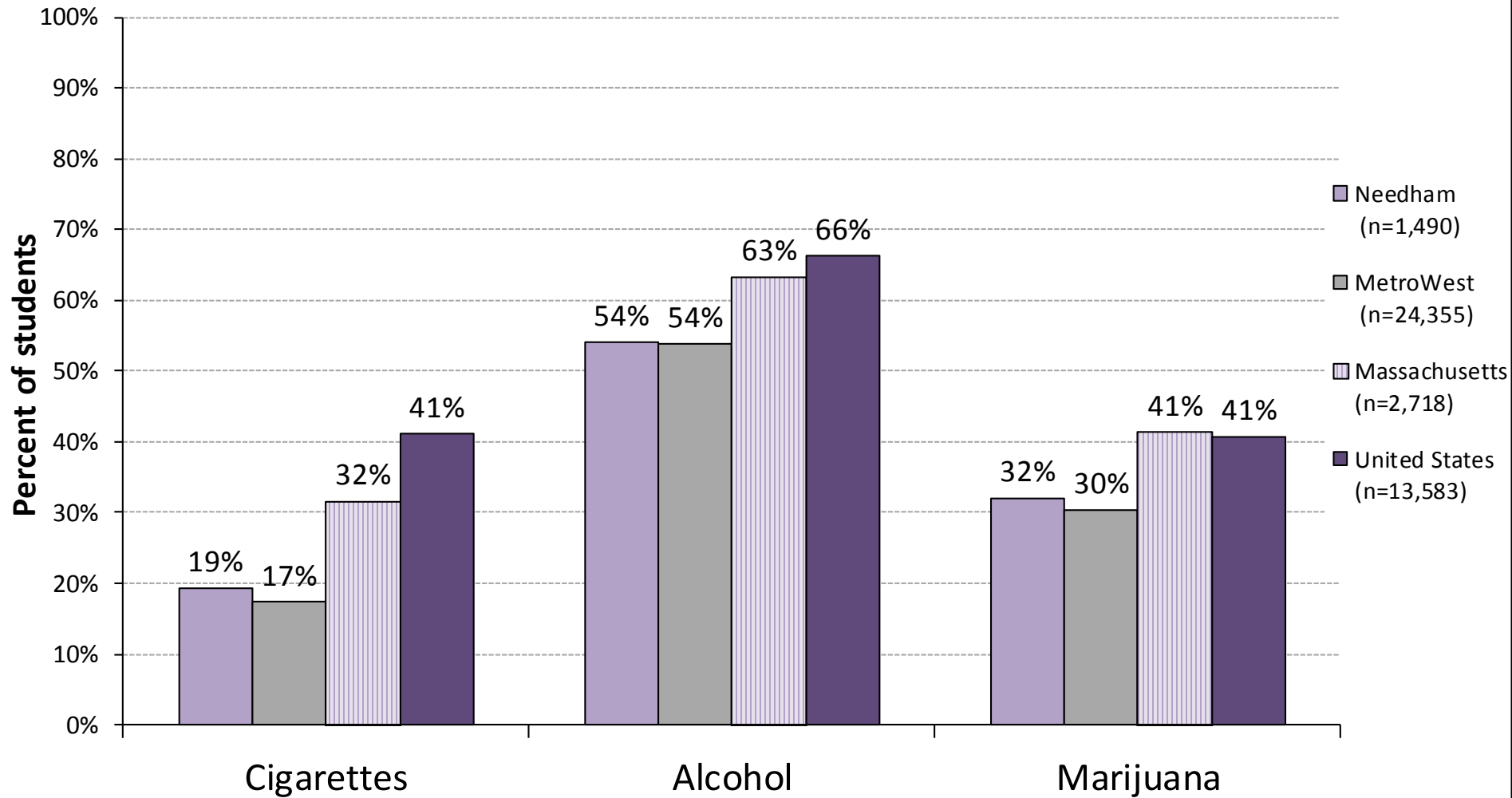
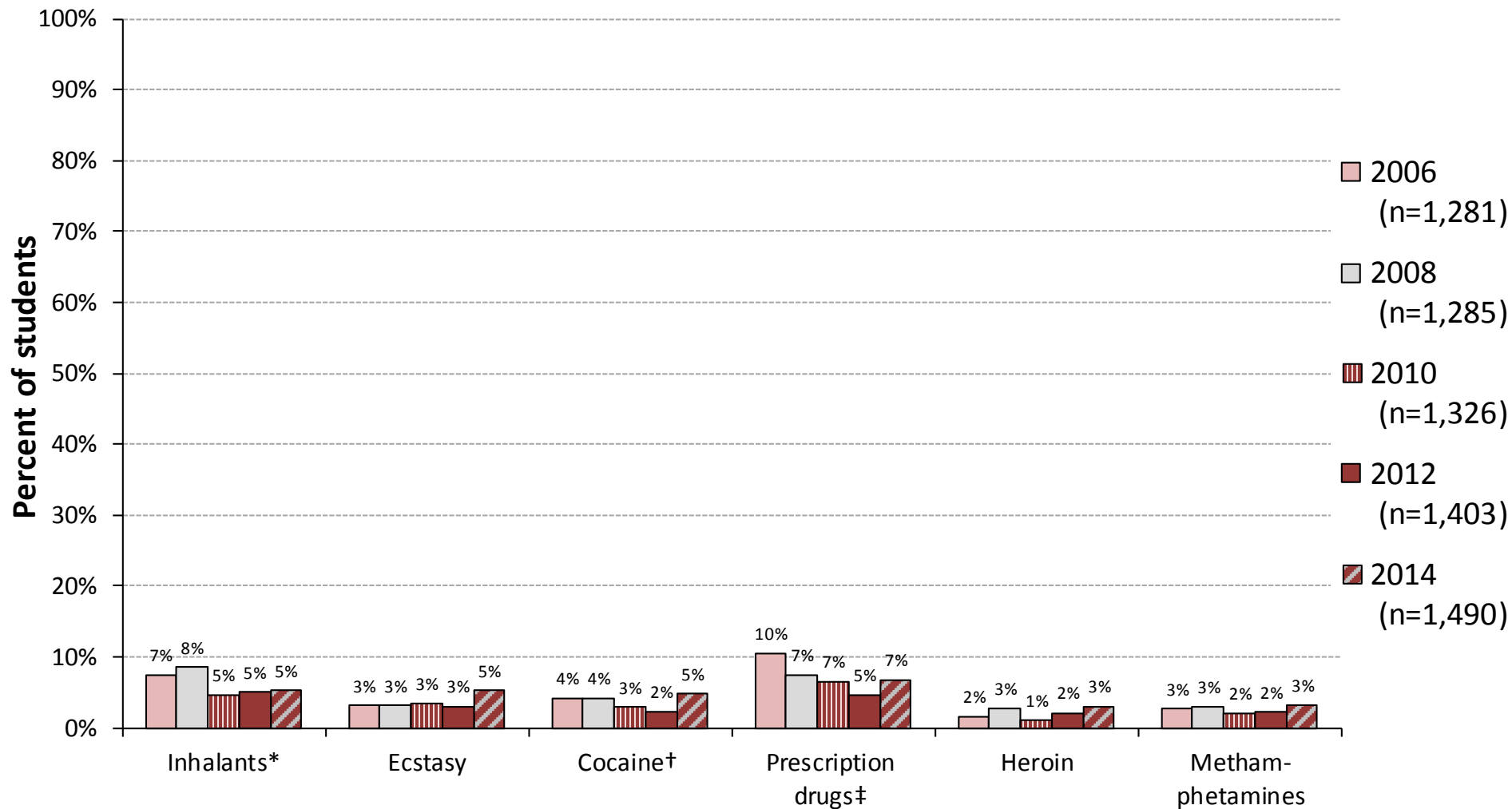


Figure 2-2C. Trends in Lifetime Other Substance Use, 2006-2014
Needham High School (Grades 9-12)
MetroWest Adolescent Health Survey



* Includes sniffing glue, breathing the contents of aerosol spray cans, or inhaling any paints or sprays to get high

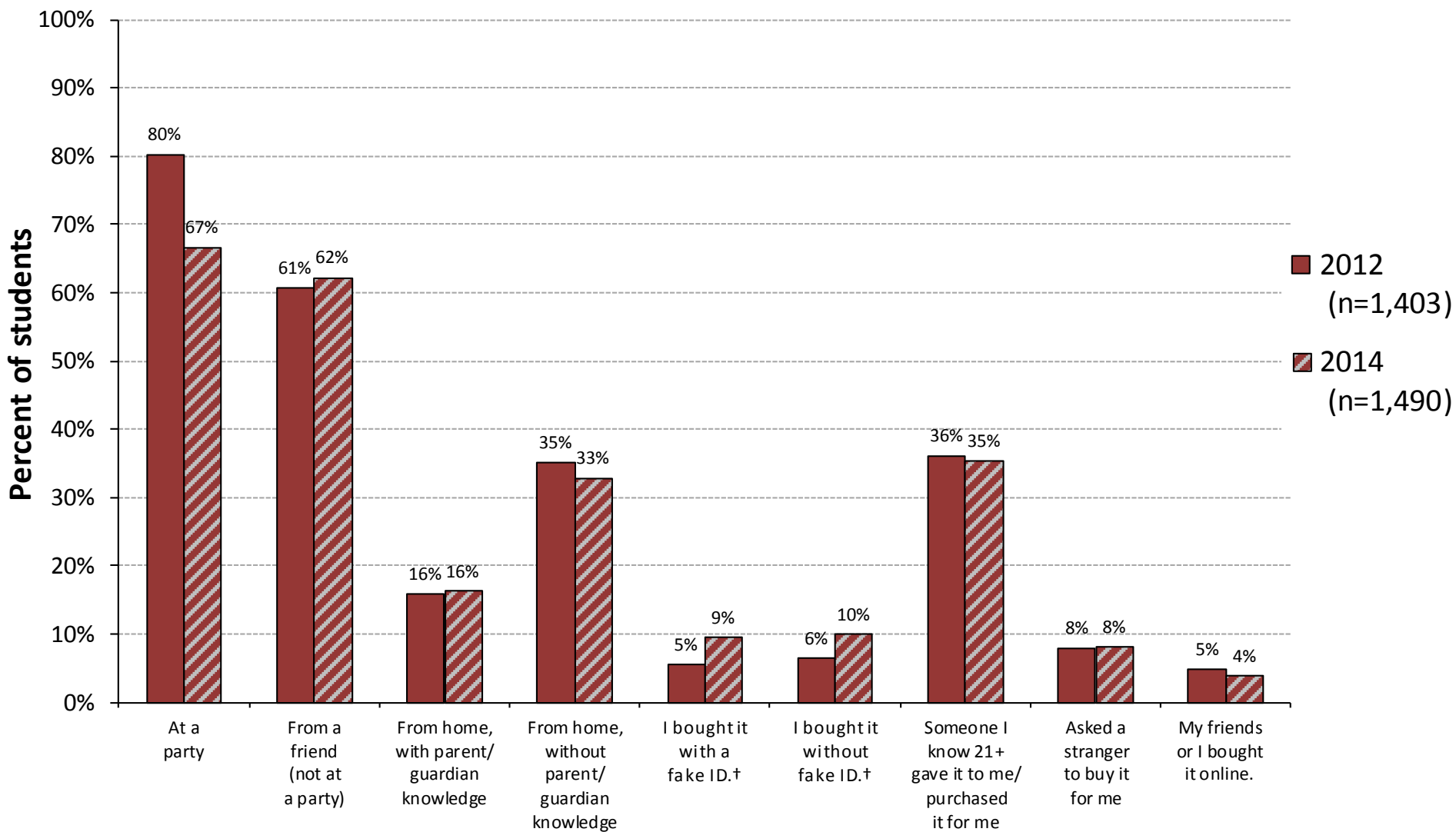
† Includes using powder, crack or freebase

‡ Without a doctor's prescription

Figure 2-7C. Trends in Access to Alcohol Among Current Drinkers,* 2012-2014

Needham High School (Grades 9-12)

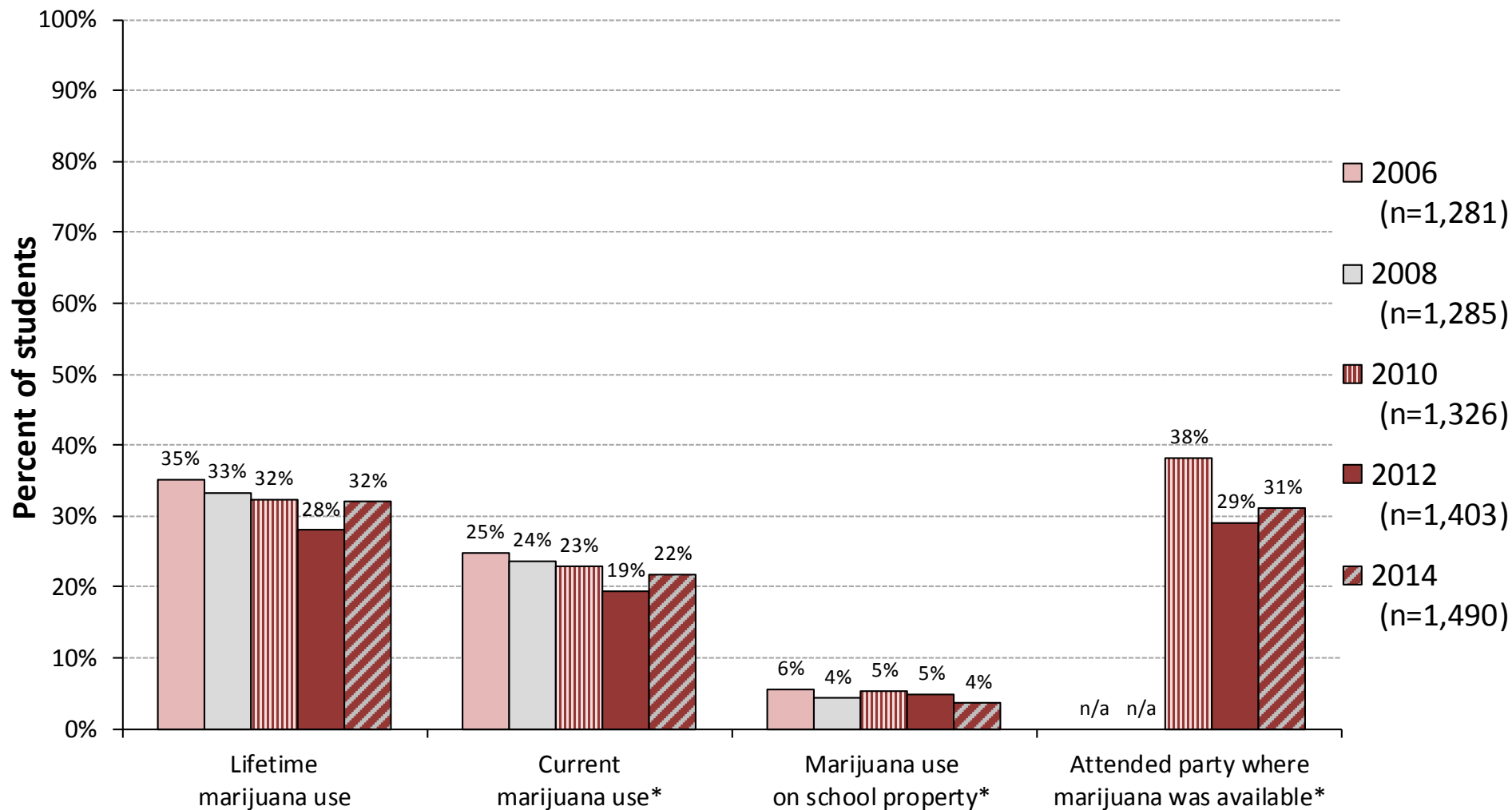
MetroWest Adolescent Health Survey



* Among students who drank in the past 30 days

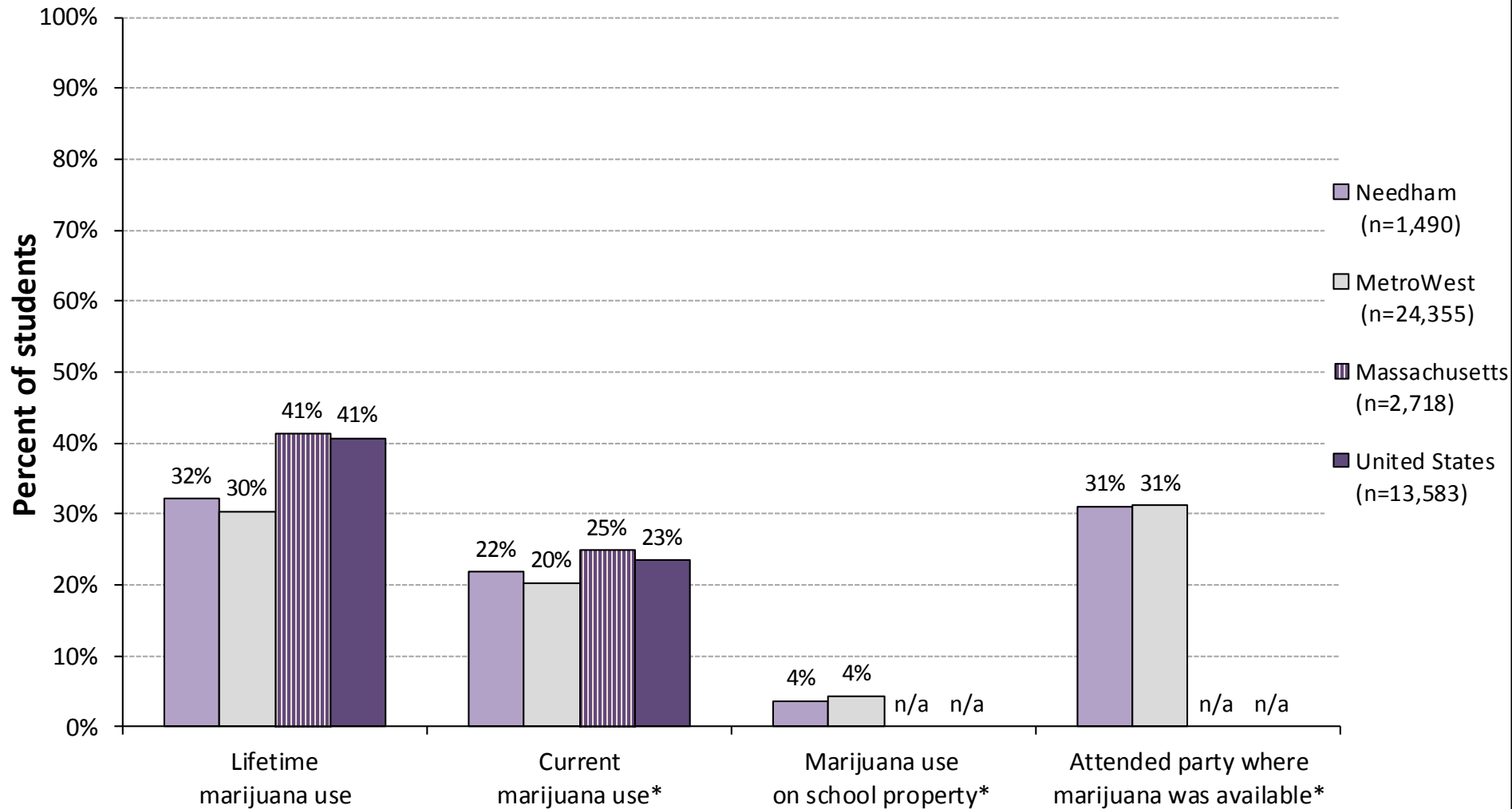
† At a store, tavern, bar, or public event (like a concert or sporting event)

Figure 2-8C. Trends in Marijuana Use, 2006-2014
Needham High School (Grades 9-12)
MetroWest Adolescent Health Survey



* In the past 30 days

Figure 2-8D. Marijuana Use at the District, Regional, State, and National Levels, 2014
Needham High School (Grades 9-12)
MetroWest Adolescent Health Survey



* In the past 30 days

Figure 4-2B. Perceptions of Risk and Passenger Behaviors Related to Impaired Driving by Grade, 2014
Needham High School (Grades 9-12)
MetroWest Adolescent Health Survey

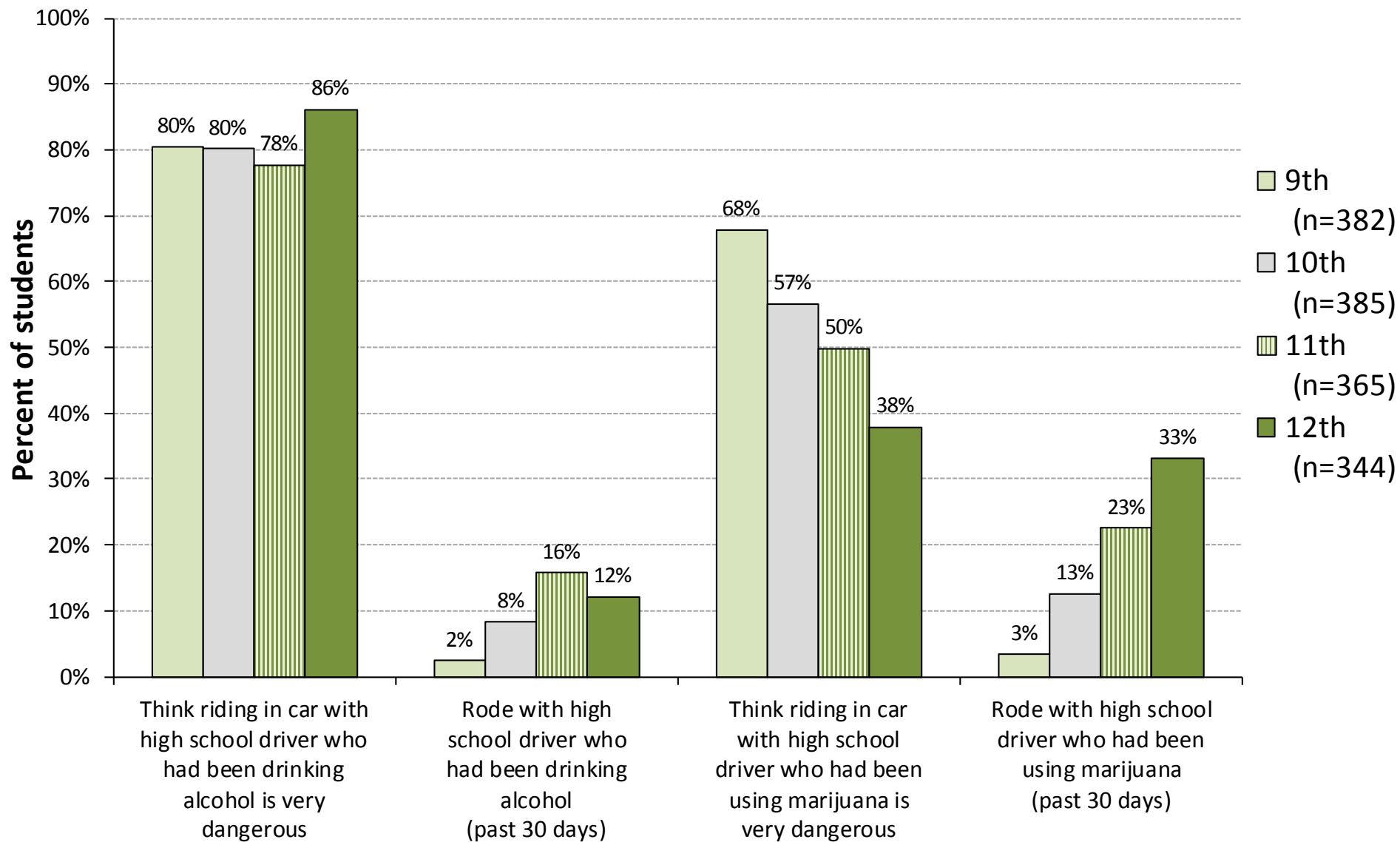


Figure 4-3B. Impaired Driving and Related Passenger Behaviors* by Grade, 2014
Needham High School (Grades 9-12)
MetroWest Adolescent Health Survey

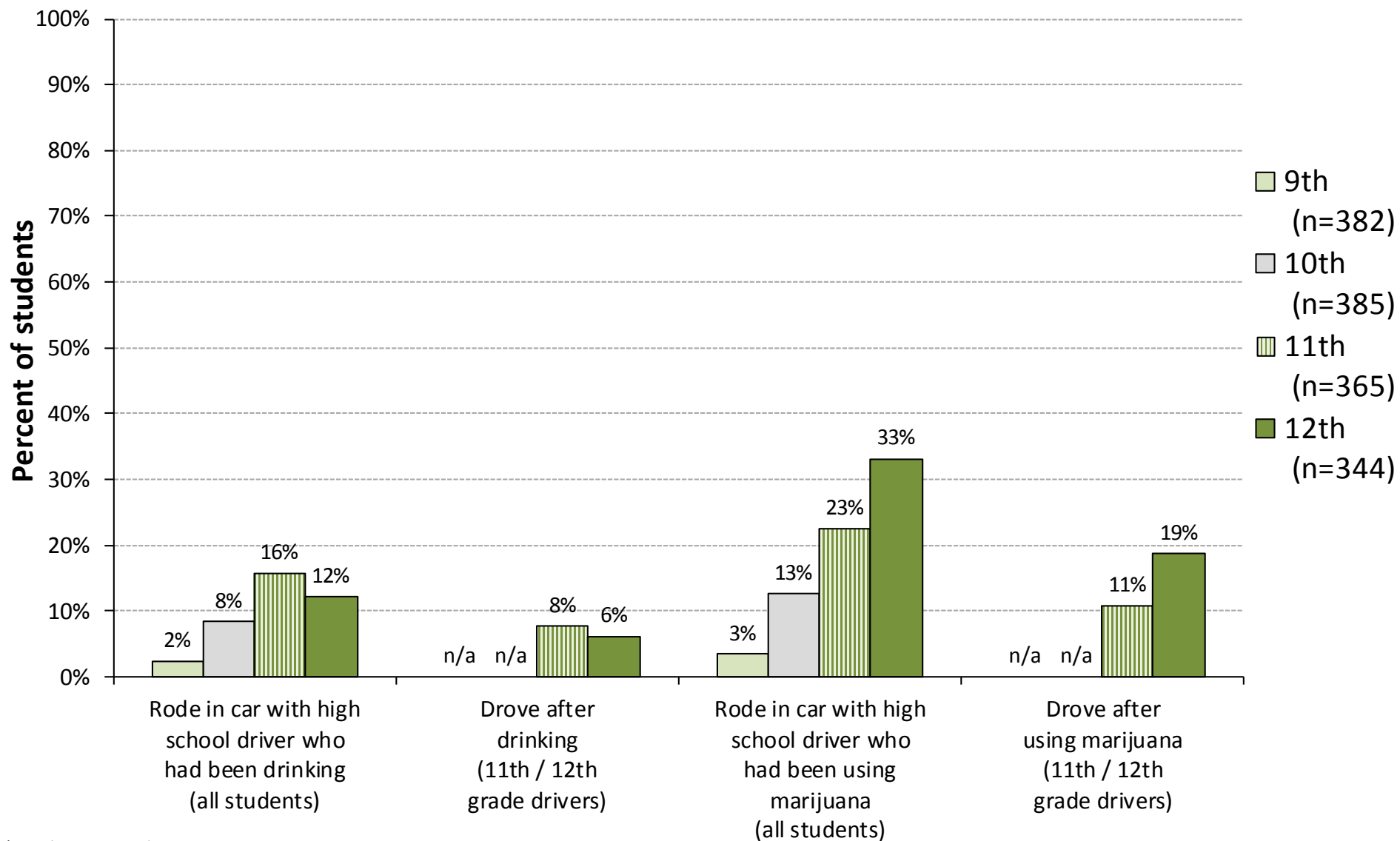
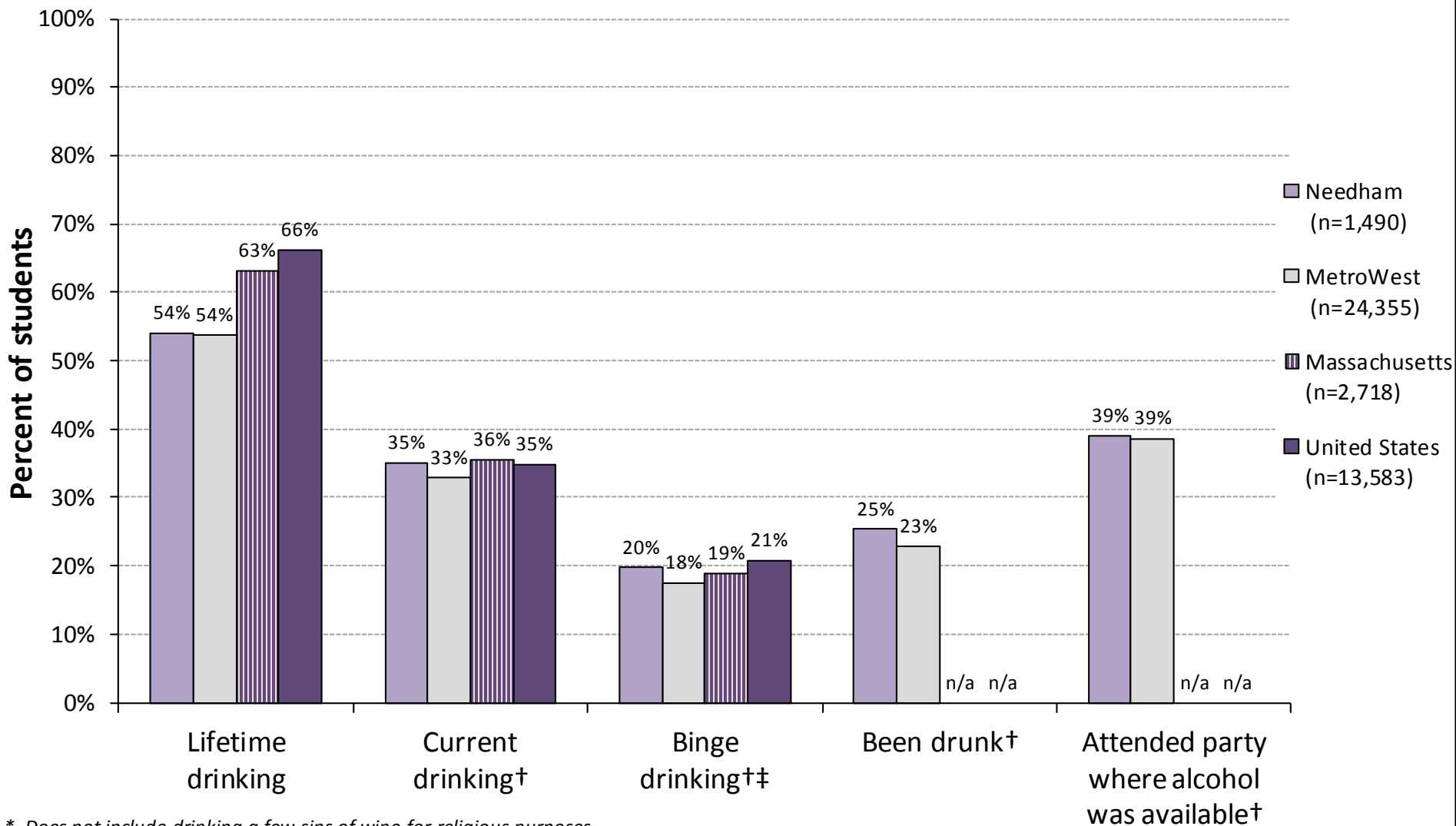


Figure 2-6D. Alcohol Use* at the District, Regional, State, and National Levels, 2014
Needham High School (Grades 9-12)
MetroWest Adolescent Health Survey



* Does not include drinking a few sips of wine for religious purposes

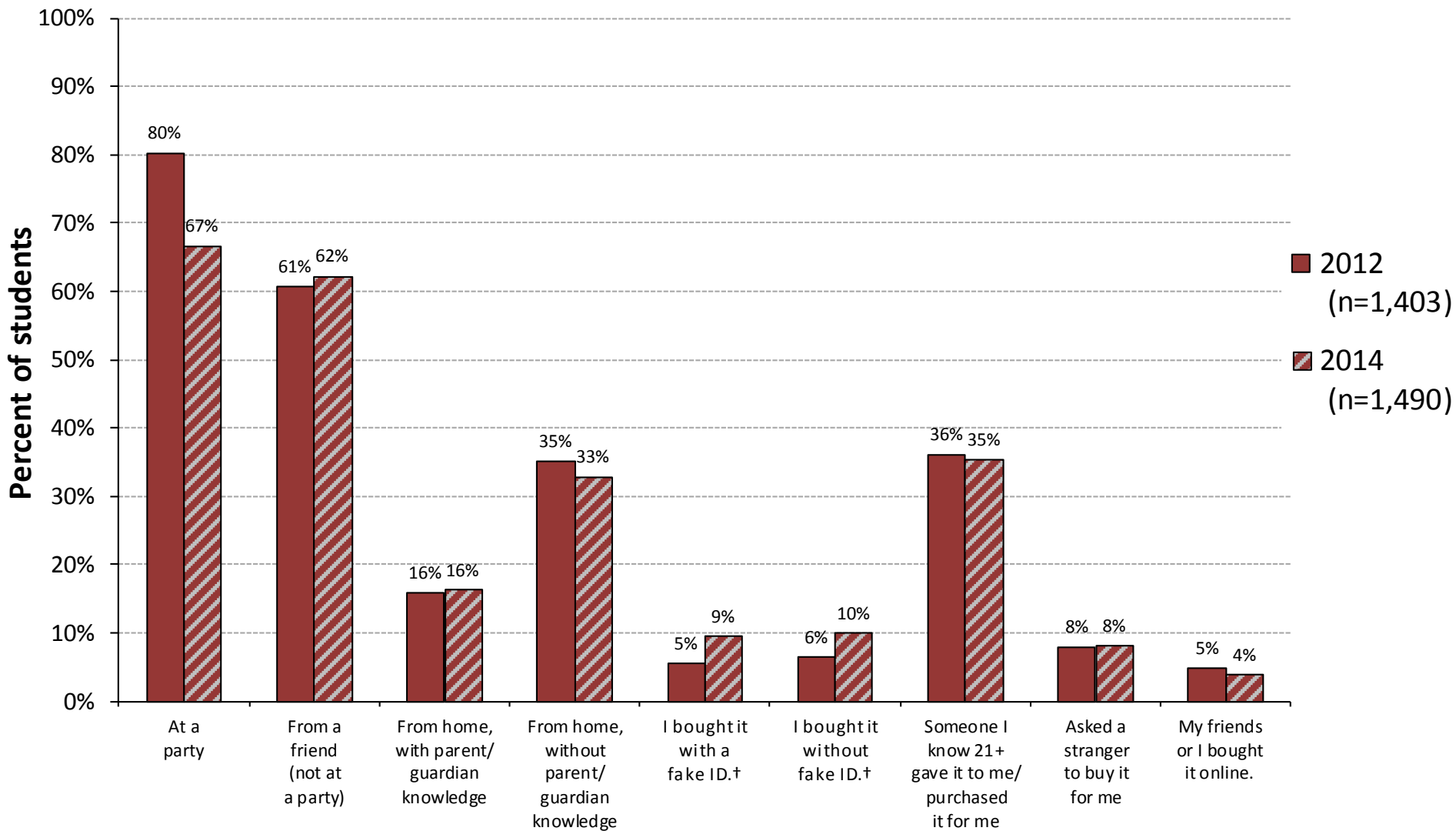
† In the past 30 days

‡ Had 5 or more drinks in a row (within a couple of hours)

Figure 2-7C. Trends in Access to Alcohol Among Current Drinkers,* 2012-2014

Needham High School (Grades 9-12)

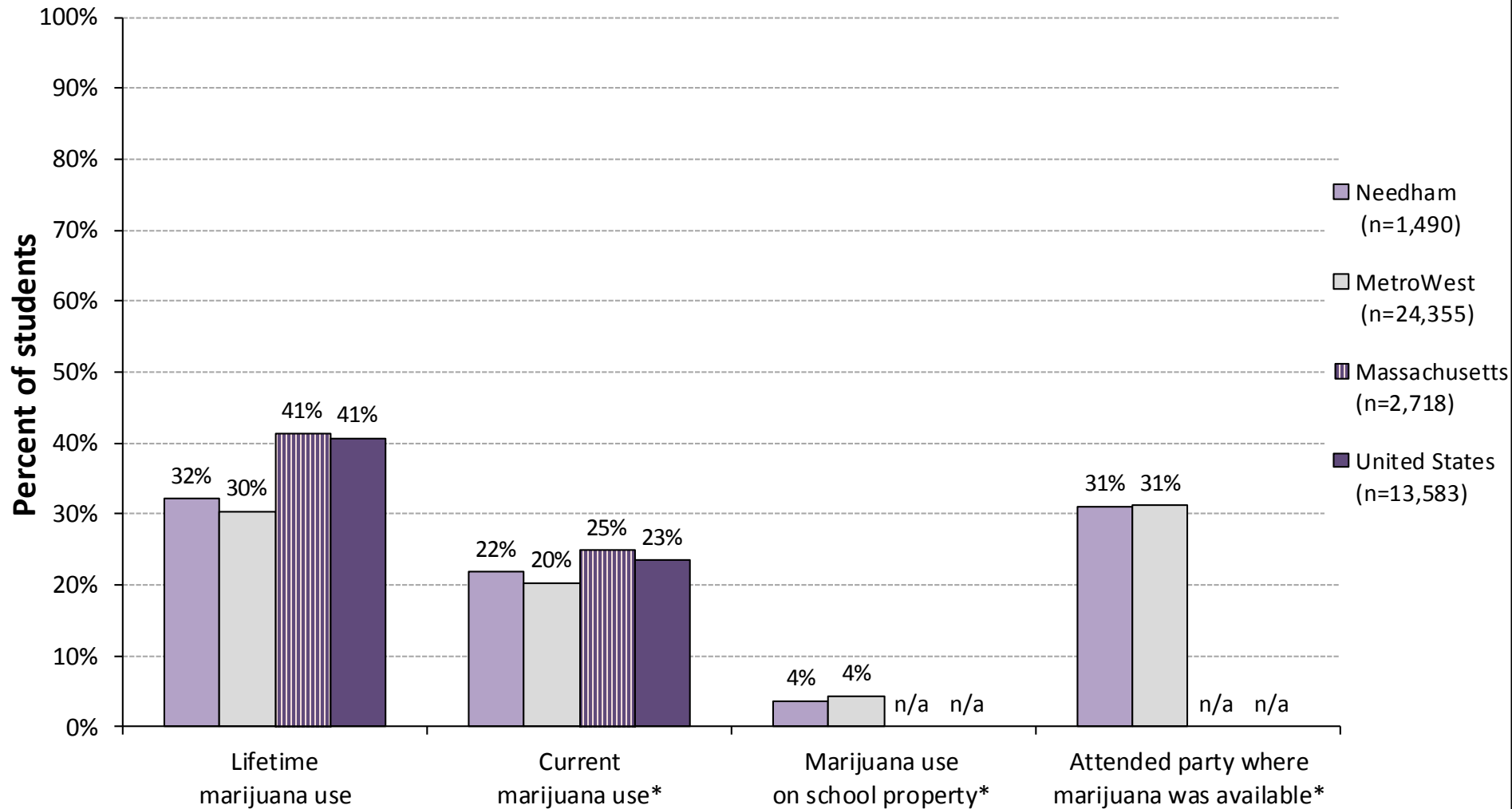
MetroWest Adolescent Health Survey



* Among students who drank in the past 30 days

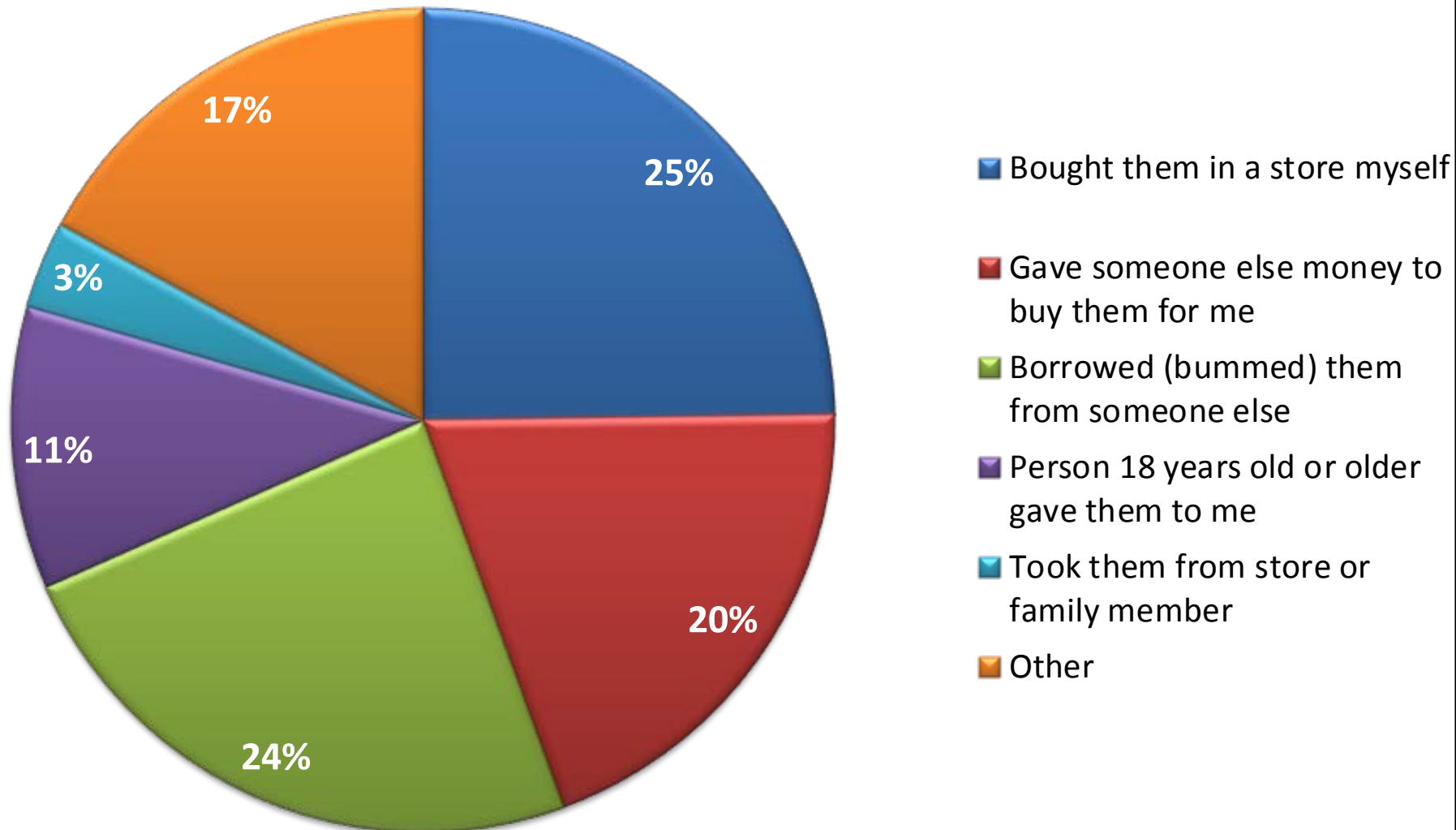
† At a store, tavern, bar, or public event (like a concert or sporting event)

Figure 2-8D. Marijuana Use at the District, Regional, State, and National Levels, 2014
Needham High School (Grades 9-12)
MetroWest Adolescent Health Survey



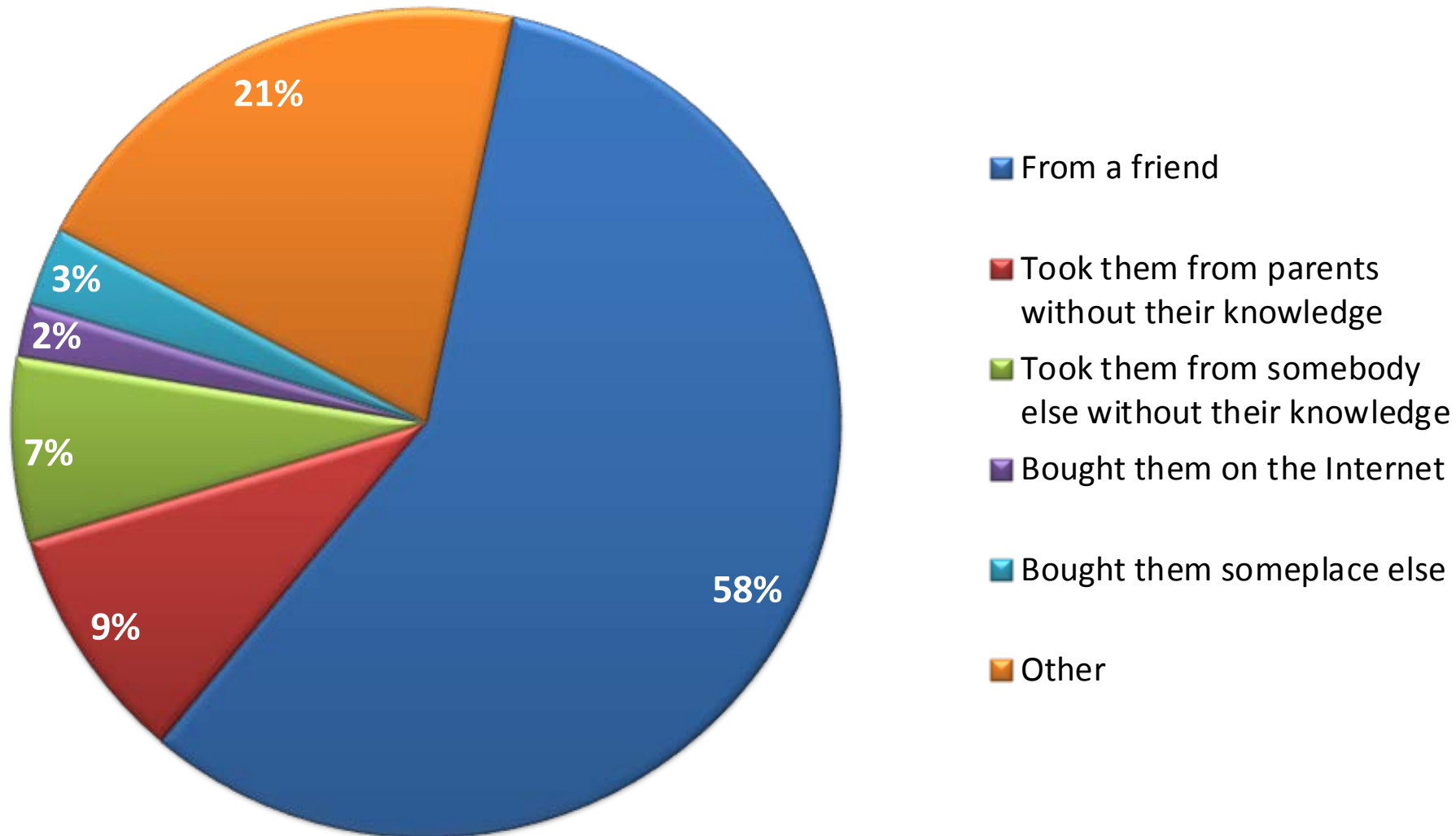
* In the past 30 days

Figure 2-5. Access to Cigarettes,* 2014
Needham High School (Grades 9-12)
MetroWest Adolescent Health Survey



* Among students who smoked in the past 30 days

Figure 2-9. Access to Prescription Drugs,* 2014
Needham High School (Grades 9-12)
MetroWest Adolescent Health Survey



* Among students who misused prescription drugs in their lifetime

SECTION 6.0 CONDITIONS OF BODYWORK LICENSE

(b) No licensed therapist shall use the therapist-client relationship to solicit for or engage in sexual activity with any client, whether consensual or otherwise, whether within or outside the **massage bodywork** establishment, or to make arrangements to engage in sexual activity with any client.

SECTION 12.0 PROHIBITIONS

(a) No person licensed by Needham Public Health Department to perform bodywork shall use the therapist-client relationship to solicit for, or engage in, sexual activity with any client, whether consensual or otherwise, whether within or outside the **massage bodywork** establishment, or to make arrangements to engage in sexual activity with any client.

SECTION 16.0 EXEMPTIONS

(f) Persons licensed to practice massage ~~by any city or town~~ in the Commonwealth of Massachusetts may, at the request of a physician, attend patients in the Town of Needham without taking out an additional license.

Department Information DSR1	
Department	Public Health Department
Department Mission	
The Needham Public Health Department is empowered through the Needham Board of Health by the Massachusetts General Laws (Chapter 111) to enforce state and local public health and environmental regulations. The mission of the Department is to prevent disease, promote health, and protect the public health and social well-being of the citizens of Needham, especially the most vulnerable. The staff of the Public Health Department pursues this mission through a series of goals and objectives to: • efficiently use Town operating budget funds, grant resources, and donations; • actively cooperate and collaborate with state and local agencies and community partners; • promote evidence-based health practices and data-driven program management; and • advocate for policy and regulatory changes that promote health and well-being.	
Operational Considerations	
The last half of FY 2014 and the first half of FY 2015 produced a number of challenges for the Needham Public Health Department. A director with a decade-long tenure and an active role in local and regional planning initiatives departed suddenly, and a long-time administrative manager who was extensively involved in managing the department's budgets and donations transitioned into retirement. An interim director was appointed and a new administrative manager was hired to fill those positions. And over the spring, summer, and fall of 2014, more than a third of the department's then employees (including the interim director) were assigned to a separate worksite from the majority of the department. All of those changes in such a short period of time could have been expected to disrupt the normal operations of any municipal departments, but the staff members of the Needham Public Health Department have been both diligent in the performance of their normal duties and have continued to advance additional efforts and activities that support the health and well-being of all of Needham's residents. When I was appointed Director in mid-November, I undertook significant efforts to re-align the manner in which the Public Health Department conducts its activities. Significant accomplishments in FY 2015 included: • The development of a detailed budgeting and expenditure tracking spreadsheet to ensure greater fiscal accountability. ▪ Salary line funding was spent down to three-tenths of one percent remaining (not including \$51,758 transferred into account on May 8th ...if that amount if included,	

**Department Information
DSR1**

Department

Public Health Department

- there was 10.94% remaining unexpended in the salary line).
 - Expense line was slightly overspent (by \$380), mostly as a result of purchasing a laptop and supplies (total of just over \$1,200) for the Parks & Recreation Department to assist them in the transfer of the Youth Center program; this purchase occurred on the last day of the fiscal year but some expenses (for travel reimbursements) had not been incorporated into Infinite Visions, causing an overdraw on the expense line.
 - o As part of the development of the budgeting and expenditure tracking spreadsheet, the department revised a revenue tracking spreadsheet to keep better track of the revenue from permit and fees, as well as small grants and donations. This process **has clarified mistakes in previous year's reporting.**
 - For example, an oversight in the way the department was managing the remaining funds from its expired federal Drug Free Communities grant was discovered. This afforded the Town access to **an additional \$10,220** that it had previously not spent and which it did not have plans to expend.
 - In its FY 2015 budget submission, the Public Health Department claimed it had received \$104,577 in fees and permit revenues and \$107,357 in small grants and donations for a total of \$211,934 generated in FY 2014. Due to a spreadsheet formula error, **this amount was overstated by nearly \$30,000.** In FY 2014, the department actually took in \$90,713 in permits and fees and \$91,548.79 in small grants and donations for a total of \$182,261.79.
- In FY 2015, the department took in \$81,317.50 in permits and fees and \$104,096.42 in small grants and donations for a total of \$185,419.92. **This is a 1.73% increase over FY 2014 and 2.25% increase over FY 2013.**
 - The difference in fee revenue between FY 2014 and FY 2015 is largely the result of the transfer of the electronic burial permit function to the Town Clerk's Office. This was a cooperative initiative between the Public Health Department and the Town Clerk's Office with the aim of improving efficiency and convenience for the customers; a two-step process became one-step, and the time for processing was reduced substantially. **It was a worthy initiative, but it means that the Public Health Department will forego \$7,605 in annual permit revenue that will now come under the Town Clerk's Office.**
- The Public Health Department aggressively pursued external funding opportunities including state and federal grants, grants from foundations, and donations from community agencies and organizations. Grants and donations beyond the "expected" annual sources included:
 - o a Sharps Disposal Kiosk mini-grant from MA DPH for \$1,315;
 - o a Concussion training database grant from the MetroWest Health Foundation for \$20,000;
 - o a regional adaptation planning grant from MA DPH for \$10,000;
 - o a federal Drug Free Communities grant (\$125,000 per year for five years); and
 - o a regional Substance Abuse Prevention Collaborative Grant (\$100,000 for three years, with an extension for an additional four years and a total of \$700,000).

**Department Information
DSR1**

Department

Public Health Department

- major, multi-year donations from the Beth Israel Deaconess Hospital-Needham and the Kyle W. Shapiro Foundation (\$30,000 from each source over a five year period) to support mental health and suicide prevention activities in Needham.
- All told, the Public Health Department increased very modestly (+2%) the amount of typical revenue that it receives from traditional donors, grants, and from permits and fees. But **\$268,315 in new grants** and donations for “current year” were secured, and a further **\$1,148,000 in future year funding** commitments will be available.

* * * * *

Programmatic Activities

In addition to a FY 2015 budget of \$641,168¹, the Public Health Department received \$104,096.42 in grants and donations and \$81,317.50 from permits and licenses for an additional \$185,413.92. The grants and donations helped to maintain our mission and provide necessary services. Every March at its monthly public meeting, the Board of Health reviews permit and license fees and makes appropriate changes in the fee structure as needed.

The Public Health Departments draws upon a pair of Revolving Accounts that support the expenses of the Traveling Meals Program and the Immunization/Vaccination Fund. The DSR2 Budget submission includes modest requests for increases to the professional and technical service contracts for Fuss and O’Neil Associates and Riverside Community Care, and a corresponding reduction in the contractual funds for Charles River ARC.

The Riverside Community Home Based Care brings outstanding services to high risk adults and seniors in the community, including consultation and home visits to clients identified by the Public Health Department, Fire Department, Police Department, Building Department, Needham Housing, and Human Services. In addition Riverside is leading the Adult Education Subcommittee for the Needham Coalition for Suicide Prevention. Riverside has also provided a Licensed Clinical Social Worker to the Housing Committee, Domestic Violence Committee and Needham Coalition for Youth Substance Abuse Prevention. Charles River ARC continues to provide many services to cognitive delayed residents. Needham’s synthetic turf playing fields are tested annually by Fuss and O’Neill to proactively monitor chemical exposure; these tests are conducted on behalf of the Public Health Department in consultation with the Director of the Parks & Recreation Department, the Athletic Director of Needham High School, and the DPW Superintendent of Parks & Forestry. Since 2010, the Board of Health has had testing on the synthetic turf fields and uses these results to compare data from year-to-year.

INTERFACE has been brought to all the Human Service Departments, School Guidance Departments, and School Nurses and Beth Israel Deaconess Hospital-Needham. The service provides licensed professionals that match client needs to available mental health providers in

¹ \$530,443 in Salaries, and \$110,725 per Annual Town Meeting Appropriation, for a fiscal year total of \$641,168.

**Department Information
DSR1**

Department

Public Health Department

Needham and surrounding towns. This makes finding mental health services easier and faster. INTERFACE also follows up within a few weeks to evaluate the services found. This valuable program is funded by donations to the Public Health Department from the Beth Israel Deaconess Hospital-Needham and the Kyle W. Shapiro Foundation; in June 2015, both organizations made a five-year, \$30,000 commitment to the Town to support this program.

Additionally, a Community Council pledge of \$2,500 supported the design, production, and placement of INTERFACE advertisements in the Needham Times, the Hometown Weekly, and in poster-form in businesses, physician offices, religious organizations, and the schools.



HELLO I AM...

SOMEONE WHO CAN HELP!

Resource Information | Provider Referrals

Call the INTERFACE® Helpline
617-332-3666 x1411
or 1-888-244-6843 x1411

Where can you learn about *Mental Health Resources* in or near your community?

How can you access *Mental Health Services* for all ages?

Find answers at the **INTERFACE Referral Service.**
interface.williamjames.edu

Call Monday-Friday 9:00 am-5:00 pm to consult with a mental health professional about resources and/or receive personalized, matched referrals.

For additional information and resources, please visit the Needham Public Health Department at needhamma.gov/health. Funding for this valuable service is generously provided by Beth Israel Deaconess Hospital Needham and The Kyle W. Shapiro Foundation.

WILLIAM JAMES COLLEGE
INTERFACE Referral Service

Needham Public Health
Prevent. Promote. Protect.

The mission and vision of the Needham Coalition for Youth Substance Abuse Prevention (NCYSAP) and the Senior Substance Abuse Prevention Project Coordinator are centered on collaboratively reducing substance use in our community with prevention initiatives impacting media advocacy, policy and enforcement, access and availability and creating a shift in community norms around the normalization of youth substance use. The work in these vital areas has created community awareness outside of the youth population, resulting in an increase in the adult population seeking services. Initiatives impacting access, through the Medication Take- Back and the Needham Police Department Party Patrols, accompanied by media advocacy on the justification of these initiatives, have created an enhanced awareness of substance abuse issues. These prevention initiatives have contributed to enhanced awareness of abuse and dependence as a treatable condition as well as visible access to counseling, treatment and support resources for Needham adults. The Public Health department receives calls from adults and parents of youth for counseling and treatment resources for substance abuse and mental health issues reportedly motivated by the community prevention work. The federal funding of the Drug Free Communities (DFC) grant program has created awareness of substance abuse and mental health issues for youth while simultaneously extending the reach to Needham

**Department Information
DSR1**

Department

Public Health Department

adults, motivating their pursuit of support resources and treatment. Continuing strategies included Fifth-Quarter, a substance free events, held following high school sporting events. Students Advocating Life Without Substance Abuse (SALSA) is a peer learning program brought to the Pollard Middle School students by High School students who have been trained to discuss refusal skills for substances and highlight that most students do not use substances at the High School.

The Public Health Department continues to look for opportunities for shared services with other towns. We work with CHNA #18 (Waltham, Newton, Brookline, Wellesley Weston, Dover, Dedham, Westwood and Needham) to promote health initiatives based on the results of our Community Needs Assessment that found Mental Health needs (especially anxiety and depression) are the top issues in all nine communities. We work with Norfolk County – 7 (Wellesley, Westwood, Norwood, Dedham, Canton, Milton, and Needham) to write grants to support Emergency Preparedness exercises and trainings for our Departments and our Medical Reserve Corps. We continue to work with Region 4B (27 towns bordering Boston which meet monthly) on Emergency Preparedness activities, sharing exercises and deliverables defined by the Center for Disease Control.

The Traveling Meals Programs continues to deliver a two meal package five days a week to approximately 40 -50 homebound clients a day. This program is supported by approximately 80 volunteers. It is managed by one part-time employee who coordinates all services. In 2010 Harvard Community Health Care awarded the program a “Community Spirit Award” as an example of Town and Volunteers working together to deliver services to a vulnerable population. Although attracting volunteers remains a challenge (especially in the Winter months), the Traveling Meals Program has expanded its service in response to the pressing needs of community members. The number of meals delivered in the first three months of FY 2016 is sharply up (21% over the same quarter in FY 2015), thanks to expanded volunteer recruitment efforts and a push to make the community (especially physicians’ offices and religious organizations) more aware of the service that is available to qualified residents.

	# Meals	# Meals	% Change
Month	FY2015	FY2016	FY 16 to FY 15
Jul	684	855	25%
Aug	682	791	16%
Sep	655	794	21%
Totals:	2,021	2,440	21%

Currently the Public Health Department Chairs the Housing Committee, Co-Chairs the Needham Coalition for Suicide Prevention with the Public School Guidance Department, Co-Chairs the Local Emergency Planning Committee with the Fire Chief, Co-Chairs the Domestic Violence Action Committee with the Police Department, Leads the Needham Youth Substance Abuse Prevention Coalition, and Coordinates the Medical Reserve Corps and the Tobacco Control

**Department Information
DSR1**

Department

Public Health Department

Program. The Health Director is on the Steering Committees for CHNA #18, Steering Committee for Region 4B Emergency Preparedness and Steering Committee for Norfolk County-7 Emergency Preparedness.

The Health Department strives to maintain the Essential Public Health Services as defined by the Center for Disease Control (CDC) and National Association of County and City Health Organizations (NACCHO). The time spent on emergency preparedness since 2001 has made it difficult to focus on these services. The Essential Services provide a working definition of public health and a guiding framework or the responsibilities of local public health systems.

1. Monitor health status to identify community health problems.
2. Diagnose and investigate health problems and health hazards in the community.
3. Inform, educate, and empower people about health issues.
4. Mobilize community partnerships to identify and solve health problems.
5. Develop policies and plans that support individual and community health efforts.
6. Enforce laws and regulations that protect health and ensure safety.
7. Link people to needed personal health services and assure the provision of health care when otherwise unavailable.
8. Assure a competent public and personal health care workforce.
9. Evaluate effectiveness, accessibility and quality of personal and population-based health services.
10. Research for new insights and innovative solutions to health problems.

* * * * *

Budgetary Items

The Base Spending request from the Public Health Department for FY 2017 is \$583,961.57, which is a **9.70% reduction** on the amount allocated for FY 2016 at Annual Town Meeting. That includes a substantial reduction in full-time salary line costs, a modest increase in salary costs of temporary staff members **to account for the fact that the Public Health Nurses are no longer located with the rest of the Public Health Department,**² and a modest increase to expense line costs which will support communications and additional training and professional association costs.

Inclusive of new spending requests outlined in the DSR4s, the Public Health Department requests a FY 2017 allocation of \$663,900.57, which would **represent a 3.55% increase** to the amount allocated for FY 2016 at Annual Town Meeting.

² Associated costs include additional per diem nurses to offer Flu and Wellness Clinics in Town Hall since neither of the permanent Public Health Nurses is able to work in Town Hall, as well as additional office coverage for the two occasions per month when the Public Health Department meets as a full staff.

**Department Information
DSR1**

Department	Public Health Department
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Description	FY 2016 ATM	FY 2017 DSR2 Only	% Change
Health Salaries Permanent	512,449.00	437,251.22	-14.67%
Health Salaries Temporary	14,494.00	18,945.35	30.71%
Health Salaries Overtime	2,000.00	2,000.00	0.00%
Health Salaries Stipend	1,500.00	4,000.00	166.67%
<i>Salaries Subtotal</i>	530,443.00	462,196.57	-12.87%
Expenses	110,725.00	116,765.00	5.45%
Total	641,168.00	578,961.57	-9.70%

Description	FY 2016 ATM	FY 2017 DSR2 + DSR4	% Change
Health Salaries Permanent	512,449.00	512,190.22	-0.05%
Health Salaries Temporary	14,494.00	18,945.35	30.71%
Health Salaries Overtime	2,000.00	2,000.00	0.00%
Health Salaries Stipend	1,500.00	4,000.00	166.67%
<i>Salaries Subtotal</i>	530,443.00	537,135.57	1.26%
Expenses	110,725.00	126,765.00	14.49%
Total	641,168.00	663,900.57	3.55%

There are three DSR4 requests for FY 2017.

The highest priority DSR4 requests funding to support a second full-time Environmental Health Agent to address the proliferation of inspectional service requirements and the increasing complexity of those requirements. Funds are requested in the amount of \$74,939 per year. That amount represents the maximum grade of the Town's salary range for the Environmental Health Agent position; the actual costs of hiring a second Environmental Health Agent may be lower.

The second priority DSR4 requests funding to support the IT costs related to the implementation of the Board of Health's Concussion Prevention, Education, and Training regulation. Funding in the amount of \$5,000 per year (estimated, actual costs may be lower) is requested to sustain a system (currently under development with MetroWest Health Foundation grant funds) which will track and maintain records of coaches' trainings in the CDC concussion awareness training Heads-Up. This tracking system and database is being developed to support the Board of Health's pending concussion regulation.

The lowest priority DSR4 requests funding in the amount of \$5,000 per year over a five-year period to support the costs necessary to prepare the Public Health Department to obtain National Accreditation from the Public Health Accreditation Board. Please note that this is the

**Department Information
DSR1**

Department	Public Health Department
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estimated cost to assemble all the materials and develop all the documents (targeted health improvement plan, strategic plan, etc.) that are required components of an accreditation application. The actual cost to apply for an accreditation application review is \$12,720 for a community of Needham's size; this covers accreditation for a five-year period, following which re-application is required.

Overall

In my first year as Director of Public Health, the department has made significant progress. My staff and I have taken steps to modernize and standardize some of the Department's functions, and have brought in new revenue and new staff members.

My long-term goal is to grow and expand the public health department's mission and activities so that it has a profound, positive impact on the health and well-being of Needham's residents. The most immediate challenges to that goal are the limited number of staff members, the limited space in which to work for those staff members, limited opportunities and available funding to support staff training and development, and a limited and constricted information technology function (electronic permitting and inspections and electronic payments are two examples for future growth).

Performance Measures

Spending Request Recap

Description	Base Request DSR2	Additional Request DSR4	Total (DSR2 + DSR4)
a) Salary and Wages	462,197	74,939	537,136
b) Expenses	116,765	10,000	126,765
c) Capital			
d) Other			
e) Other			
f) Other			
g) Total DSR2 & DSR4 Request (a through f)	578,962	84,939	663,901

V2017

Department Expenditure Detail DSR2									
Department				Public Health Department					
Object				Description				Amount	
DSR2A									
Permanent Personnel	Last Year			Current Year			Next Year		
	FT Head Count	PT Head Count	Full Time Equivalent (FTE)	FT Head Count	PT Head Count	Full Time Equivalent (FTE)	FT Head Count	PT Head Count	Full Time Equivalent (FTE)
	4	6	5.9	5	6	6.9	4	6	5.9
Non-Budget Personnel: Will the department rely on grant/revolving fund positions to provide services?						Yes	No	FT Head Count	PT Head Count
						X		2	1
1. Salary and Wage Permanent Positions.									
a.	PRD1 Salary and Wages Base							342,163	
								-17.50% from FY 2016 Annual Town Meeting allocation	
b.	PRD1 Differentials (Conditions, Requirements, Shifts)								
c.	PRD1 Education								
d.	PRD1 Extra Holiday								
e.	PRD1 Longevity							2,641	
								-11.12%	
f.	PRD1 Snow Program								
g.	PRD1 Uniform								
h.	PRD1 Other Compensation								
i.	PRD1 Budget Adjustments								
							PRD1 Sub Total		344,804
									-17.46%
J	DSR3 Other Compensation								
							Sub Total 1		344,804
2. Salary and Wage Seasonal & Temporary Positions (Itemized Below)									
a.	Recording Secretary for Board of Health Meetings & Public Hearings							2,862	
								+4.86%	
b.	Traveling Meals Program – Seasonal Staff Packers and Drivers							9,520	
								+13.97%	
c.	Temporary Department Coverage (note increase due to Nursing Staff at CATH, and inability to hold staff meetings in Town Hall)							6,564	
								+92.39%	
d.	Special Assignment Support for Public Health Department – Emergency and Evening coverage							13,634	
								+0.05%	
e.	DSR3 Total							78,813	
							Sub Total 2		111,393
									+1.98%

3. Salary and Wage Overtime (Itemized Below)		
a.	Scheduled Overtime (contractually obligated)	2,000 No % change
b.	Training and Development	
c.		
d.		
e.	DSR3 Total	
Sub Total 3		2,000 No % change
4. Other Salary and Wage Expenses – (Itemized Below)		
a.	Incentive Programs	
b.	Pay In Lieu of Accrued Leave	
c.	Program Stipend	4,000 +166.67% (now includes both Animal Inspector and Assistant Emergency Management Director stipend, previously had been separated)
d.	Tuition Reimbursement	
e.	Working Out of Grade	
f.	DSR3 Other Compensation	
Sub Total 4		4,000
5. Total Salary and Wages (1+2+3+4)		
		462,197 -12.87 % from FY 2016 Annual Town meeting allocation
DSR2B		
Object	Description	Amount
Energy (521x)		
Repairs & Maintenance Services (524x – 525x)	5240 – Maintenance @ \$500 Maintenance and Calibrations on Monitoring Equipment for Environmental Health Inspections	500 -2.53%
Rental & Leases (527X)		
Other Property Related Services (529x)		
Professional & Technical Services (530x)	5303- Seminars & Trainings @ \$3,000	86,850

– 531x)	5309 – Licensed & Professional Services @ \$81,350 5311 – Advertising @ \$2,500	+ 3.72%
Communications (534x)	5340 – Graphic Design @ \$1,000 to support the design of community education materials and public health awareness campaigns 5341 – Postage @ \$1,000 for mailing 5344 – Wireless Communications Systems @ \$2,500 covering costs of smart phones for Director, Public Health Nurse, and Environmental Health Agent 5345 – Mailing, Printing, and Photocopying @ \$3,000 for both internal (photocopier) and external printing (includes printing of inspection forms) 5347 – Legal Notices @ \$2,000 for mandated posting of Board of Health regulations	9,500 +9.22%
Recreational & Cultural Services (535x)		
Other Purchased Services (538x)		
Office Supplies (542x)	5420 – Office Supplies @ \$4,500 Office supplies and equipment for 5 full time and 6 part-time/per diem employees, as well as for three committees – Local Emergency Planning Committee, Domestic Violence Action Committee, Coalition for Suicide Prevention, and Coalition for Youth Substance Abuse Prevention	4,500 -19.87%
Building & Equipment Supplies (543x)		
Custodial Supplies (545x)		
Grounds Keeping Supplies (546x)		
Vehicular Supplies (548x)		
Food and Service Supplies (549x)		
Medical Supplies (550x)	5500 – Medical Supplies @ \$1,250 Medical supplies and health materials, largely for public health nursing purposes	1,250 -3.33%
Public Works Supplies (553x)		
Other Supplies & Equipment (558x)	5580 – Other Supplies & Equipment @ \$2,175 This funding is used for Wellness Supplies (examples include Stress Balls, Hand Sanitizer Kits) and unexpected expenses like the purchase of Sharps	2,175 No % change

	Disposal Containers to be provided free of charge for residents with limited resources and the purchase of water bottles as gift to sports coaches that attended a concussion training offered by the Public Health Department.	
Governmental Charges (569x)	5690 – Governmental Charges @ \$75 Annual cost for Environmental Health Agent licensure for MA Division of Professional Licensure	75 Was previously budgeted incorrectly under 5730 Dues & Subscriptions
Travel & Mileage (571x – 572x)	5710 – In-State Travel Expenses @ \$1,000 for in-state registration fees 5711 – Mileage @ \$4,500 for 5 full time and 6 part-time/per diem employees 5720 – Out-of-State Travel Expenses @ \$4,500 for the cost of attendance at regional or national events and trainings such as Public Health Preparedness Summit at the CDC in Atlanta or the CADCA Leadership Institute in Washington D.C.	10,000 +32.01%
Dues & Subscriptions (573X)	5730 – Dues & Subscriptions @ \$1,915 Annual cost for Departmental and staff membership in professional associations and organizations, including the MA Environmental Health Association, the National Association of Local Boards of Health, and the Community Anti-Drug Coalitions of America	1,915 +70.83%
Other Expenses (574 X – 579x)		
6. Total Expenses		116,765 +5.45 % from FY 2016 Annual Town meeting allocation
DSR2C		
Capital Equipment Replacement (587X)		0
7. Total Operating Budget Capital		0
8. Total Base Request (Line 5 + Line 6 + Line 7)		578,962 -9.70 % from FY 2016

			Annual Town meeting allocation	
Will the Department submit any Special Financial Warrant Articles? (DSR5 Form)	YES	X	NO	
Does the Department depend on any Federal or State grants to provide services?	YES	X	NO	
Did the Department submit any requests for FY2016 for the replacement or upgrade of technology or software to the Finance Department?	YES		NO	X
Did the Department submit any requests for FY2016 to the Department of Public Facilities to improve or upgrade a public building or facility?	YES		NO	X
V2017				

Department Personnel Supplement DSR3							
Department		Public Health Department					
	Description	Amount	Amount Reflected DSR2A Section				
			1	2	3	4	
1	Board of Selectmen						
2	Building Monitors						
3	Care of Graves						
4	Coordinator of Ceremonies						
5	Election Workers – Wardens and Clerks						
6	Election Workers - Inspectors						
7	Playground Maintenance Specialist						
8	Emergency Management Program						
9	Parking Clerk						
10	Public Health Nurse – Part-Time	33,995					
		No % Change					
	Public Health Nurses – Per Diem	13,392					
11	Covering flu clinics and wellness clinics at Needham Town Hall since both Full-Time and Part-Time nurses are unable to work in Town Hall due to health considerations.	-7.43%					
12	Program Support Assistant III – Staff member support analysis, data gathering, program assessment, as well as communications	31,426					
		-3.73%					
13	Traffic Supervisors						
14	Drivers						
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
I	Total	78,813					
Sections							
	Amount Reported Under DSR2A Section 1						
	Amount Reported Under DSR2A Section 2						
	Amount Reported Under DSR2A Section 3						
	Amount Reported Under DSR2A Section 4						
II	Total	78,813					

Performance Improvement Funding Request DSR4					
Department	Public Health Department				
Title	Environmental Health Agent	Priority	1		
DSR4					
Expenditure Classification	FTE	Frequency		Total Amount (A + B)	
		Recurring Amount (A)	One Time Only Amount (B)		
1. Salary and Wage	1.0	74,939		74,939	
2. Expense					
3. Operating Capital					
4. Other Costs					
5. Total (1+2+3+4)		74,939		74,939	
Budgetary Considerations				Yes	No
Does this request address a goal of the Board of Selectmen or other Board or Committee				X	
Has this request been submitted in the last three fiscal years and not funded?					X
Are there additional costs to implement this request (except future year operating costs) that are NOT included in this request?					X
Will the assistance of another department be required to provide support (personnel or financial) for this request to be implemented?					X
Will additional staff (beyond the staff requested in this DSR4 submission) be required if the request is approved?					X
Does the request support activities which produce revenue for the Town?				X	
If the request is not approved, will current Town revenues be negatively impacted?				X	
Is there an increased exposure for the Town if the request is not approved?				X	
Is specialized training or licensing required (beyond the initial purchase)?					X
Does this request address a documented health or safety issue?				X	
All "YES" responses must be explained in the narrative					
Description and Explanation					
Overview The Needham Public Health Department Environmental Health Agent provides a broad range of public health services to the community while enforcing the State Sanitary Environmental Codes. These services include policy development, issuance of permits and licenses, ongoing inspection and surveillance, reporting of potential foodborne illnesses, as well as public education through trainings and articles. Implementation and enforcement of state and federal rules and requirements, as well as applicable local laws, assures compliance with standards of environmental quality. The demands on the Environmental Health Agent's time have increased markedly over the past five years; more inspections (Food Service, Pools) and more permits (demolitions, Wells) occur every year thanks to the Town's continued economic development. And in addition to the increased numbers, the complexity of cases is also increasing. A restaurant like Not Your Average Joe's is fairly simple to inspect and permit, but organizations like Olin College, North Hill, and Trip Advisor (with a main restaurant size kitchen, a pair of bars, five floor-specific kitchens, and 10 kitchenettes) take nearly an order of magnitude more time. As the demands of increasingly frequent and increasingly complex inspections, permits, and plan reviews mount, the Environmental Health Agent has does not have the time to enforce new Board of Health regulations adopted at the behest of the Board of Selectmen/Town Manager, nor does she have the ability to research best practices and to make sure that the Public Health Department's processes reflect an evidence-based/data-driven approach to public health.					

**Performance Improvement Funding Request
DSR4**

Department	Public Health Department		
Title	Environmental Health Agent	Priority	1

The Public Health Department respectfully requests funding to support the employment of a second full-time environmental health agent.

Licensing

The Environmental Health Agent protects the public's health by monitoring and regulating a variety of establishments in the town. The following establishments are licensed and inspected by the Environmental Health Agent.

- Retail and food service establishments (including mobile food vendors, home kitchens, caterers, etc.) at least every 6 months
- Temporary food events, including Needham Farmers Market, Needham Business Association Street Fair and Harvest Fairs, as well as the Souper Bowl Contest and the PanMass Challenge at Olin College.
- Retail Tobacco establishment inspections (every six months) & unannounced quarterly compliance checks.
- Public/ semi-public pools and special purpose pools.
- Domestic Animals
- Establishments that use medical sharps (needles/syringes) within the community
- A bottling company
- Septage /Grease / Medical Waste Haulers
- Trash Haulers
- Wells, both geothermal and irrigation

Plan Reviews

The Environmental Health Agent actively reviews proposed plans and conducts inspections of the following:

- New or renovated food establishment design plans, additions or renovations to homes on septic system, well permit applications (Irrigation and Geothermal).
- New or upgraded Title Five septic system installations or repairs and septic abandonment/connection to municipal sewer forms.
- Subdivision lots prior to the release of off-street drainage bonds.
- Chapter II Sanitary Housing inspections.
- Special Permit and Zoning Board of Appeals proposed plans.

Complaints

The Environmental Health Agent follows-up on a variety of complaints including food, nuisance (odor, dust, trash, noise), and housing, and workplace tobacco complaints. In FY 2015, this included 43 complaints and 47 follow-ups, which is a 6.8% increase from FY 2014.

Education

Another primary focus of the Environmental Health Agent is to improve community awareness of public health issues and to help reduce the incidence of seasonal public health concerns by providing health education and information to Needham residents and also to business owners. This is accomplished through newspaper articles, cable news segments, on-site trainings, and by providing in-house brochures and state/federal website links which contain up to date public health information.

Collaborative Effort

The Environmental Health Agent actively works with other town departments to provide environmental risk assessment and control, and she collaborates extensively with the Public Health Nurse, Substance Abuse Prevention Education

**Performance Improvement Funding Request
DSR4**

Department	Public Health Department		
Title	Environmental Health Agent	Priority	1

Coordinator, and the Assistant Director/Social Worker at the Council on Aging on social support issues in the community including cases of hoarding and residential or institutional pest infestations (bed bugs at Charles River ARC, for example).

Activities: Time Commitment, Volume Trends, and Collaboration

Food Service & Retail Establishments

Approximately half of the Environmental Health Agent's workload is dedicated to monitoring and regulating food service and retail establishments. This includes activities such as plan reviews for new/renovated food establishments, licensing, inspections, and investigating complaints. The time dedicated to retail and food service establishments is growing as more restaurants open in the Town of Needham. Figure 1 shows how the number of Food Service/Retail Permits has increased dramatically since 2010.

For a new Food Establishment inspection, especially a large food establishment such as Trip Advisor, the Environmental Health Agent works on Plan Reviews for these establishments for many months. She initially received the first set of Trip Advisor plans back on April 25, 2014, and held the initial Food Permit Plan Review in early May; comments were submitted back to Trip Advisor on May 28, 2014. The initial plan review comments were received back from Trip Advisor on October 31, 2014, and the Environmental Health Agent continued this plan review process up until March 2015.

Trip Advisor's Food permit application was officially received on March 11, 2015. The Environmental Health Agent conducted four on-site meetings on this Plan Review Process that were more than an hour each. Six pre-operation inspections were conducted before issuing Town food permit in June 2015.

At Not Your Average Joe's, which is an existing food establishment, routine inspections are conducted twice per year, and inspection time averages one hour per inspection. The Public Health Department may need to conduct a follow-up inspection to verify that items have been addressed, which may take 30 minutes to conduct, and may also need to conduct additional inspections and report reviews when evidence of pests are observed on site, or when the Department receive a food or nuisance (trash) complaint, which can average another 30 minutes per inspection.

For new Food Establishments, six or more hours is spent on conducting plan reviews on new restaurant kitchen designs. The Environmental Health Agent also reviews new food service equipment spec sheets and other paperwork (i.e. ServSafe Food Training certificates, Food Allergy Training certificates, Menus, etc.). Once a new establishment is ready to open, multiple pre-operation food inspections are conducted to ensure proper Federal, State and local Food Code requirements are met. The Environmental Health Agent's time on these Plan Reviews varies, but she usually ends up reviewing these plans and submitting her review comments, which can take four to six hours, depending on the size of the establishment, and the amount of plan review items that need to be reviewed. The Environmental Health Agent usually issues additional plan review requests, once the initial requests get returned, so that adds more plan review time. Then the pre-operation inspections take anywhere from one hour (initial inspections) down to 30 minutes, when the establishment is getting ready to open.

An example of a complex and time consuming plan review for a new establishment is the re-opening of New Garden. The Public Health Department issued its Food Permit Plan Review Packet to the owner back on January 29, 2014. The Environmental Health Agent consulted with the owner on October 30, 2014, and again on January 12, 2015, since the owner of New Garden had not submitted his completed plan for the Environmental Health Agent's review. The Environmental Health Agent received a copy of the proposed plans, along with equipment spec sheets, on March 6, 2015. Initial plan review comments were submitted back to the owner on March 10, 2015 along with a request for additional information and clarifications. Additional follow-up correspondence was sent over the summer of 2015, and a supplemental plan review was conducted in late September. In total, six pre-operation inspections were conducted at New Garden.

**Performance Improvement Funding Request
DSR4**

Department

Public Health Department

Title

Environmental Health Agent

Priority

1

Table 1. Food Permit Plan Review Steps

Date	Activity
01/29/14	Food Permit Plan Review Packet issued to Owner
10/20/14	Checked in with Owner
01/12/15	Checked in with Owner
03/6/15	Received copy of proposed plans and equipment spec sheets
03/10/15	Initial plan review comments submitted to Owner
07/24/15	Follow-up email sent to Owner
09/21/15	Follow-up email sent to Owner

Environmental Health Agent, Tara Gurge:

“We just completed a Food Permit Plan Review and issued a new Food Permit to open for an on-going Food Establishment renovation that has taken over three years. I worked closely with the food establishment owner throughout the years, and walked them through the process. We conducted multiple plan reviews and I had meetings with the owner to help them ensure that all Federal, State and local Food Code requirements were met. Numerous food permit pre-operation inspections were conducted to ensure they were in compliance with the Food Code requirements. They are also looking to receive a Tobacco permit. They are currently first in line on our Tobacco Permit waiting list. We will continue to work with them on that permitting process.”

The Environmental Health Agent collaborates with the Building Department to ensure that that all Federal, State and local Food Code requirements are met prior to the issuance of their Certificate of Occupancy. The Environmental Health Agent also works closely with the Massachusetts Department of Public Health Food Protection Program to ensure that all Food Code items are met.

Additionally, there are many temporary food events in the Town, including the Needham Farmer’s Market which was established in 2012. The number of vendors at the Market has increased in recent years, as seen in Figure 2, and will likely continue to grow in the future.

Oversight of temporary food event entails communicating with the food event coordinator to ensure that they are aware of the Temporary Food Event requirements. A memo, which states the requirements, along with a copy of the Temporary Food Event Permit Application, is sent to the coordinator which they can forward to each proposed vendor. All applications that are submitted are reviewed to ensure that all supplemental information is included (i.e. Completed application and fee, copies of permits from other towns, copies of state permits, copies of ServSafe and Food Allergy certificates if applicable, copy of proposed menu item list, etc.). Follow-up with each vendor is usually required to secure the documentation and to talk about food sampling requirements and the BOH regulation requirements banning Trans Fat.

If the vendor is planning to have the event in Powers Hall, additional information is needed from the vendor and the Town Selectman need the Public Health Department to sign off on the Hall Rental Form. Once all materials are reviewed, a permit is issued. Inspections need to be conducted the day of the event to verify that proper food safety protocols are followed.

Figure 1. Food Service/Retail Permits by Fiscal Year 2010-2015

Fiscal Year	2010	2011	2012	2013	2014	2015
Permits	144	151	143	157	166	170
% Change	--	4.9%	-5.3%	9.8%	5.7%	2.4%

**Performance Improvement Funding Request
DSR4**

Department	Public Health Department		
Title	Environmental Health Agent	Priority	1

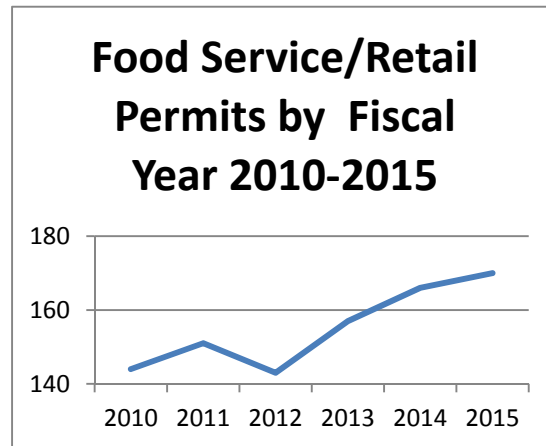
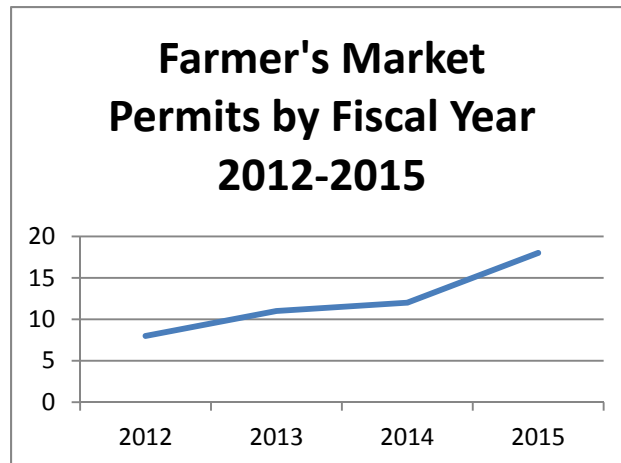


Figure 2. Farmer's Market Permits by Fiscal Year 2012-2015

Fiscal Year	2012	2013	2014	2015
Permits	8	11	12	18
% Change	--	37.5%	9.1%	50.0%



Demolitions

The Environmental Health Agent worked on approximately 100 demolition cases in 2015. For each demolition, the Environmental Health Agent performs a plan review, which includes a review of the application, the pest control report, the abutter letters, and asbestos control reports (i.e., the initial report submitted by the asbestos inspector, the abatement report, the final air testing report and the Mass DEP Asbestos Notification Form). The Environmental Health Agent collaborates with Building and Fire Departments to ensure proper public health and safety protocols are followed. The

**Performance Improvement Funding Request
DSR4**

Department

Public Health Department

Title

Environmental Health Agent

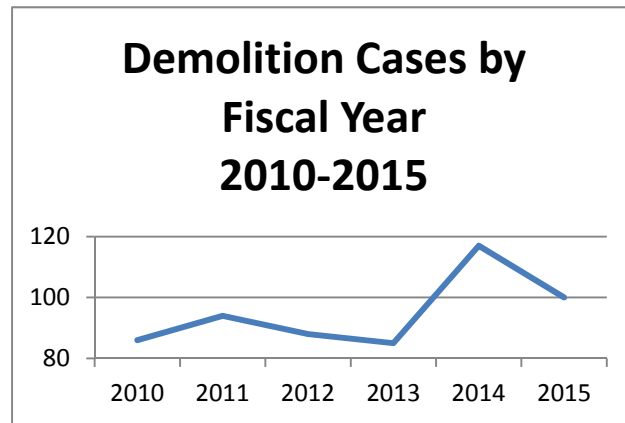
Priority

1

Fire Department needs to ensure that the Demolition Contractor hires a Town of Needham Fire Department Water Truck, which needs to be present during the demolition, so that dust debris can be controlled and prevented from migrating onto neighboring properties. In general, the number of demolitions in the Town since 2010 has been increasing, as shown in Figure 3.

Figure 3. Demolition Cases by Fiscal Year 2010-2015

Fiscal Year	2010	2011	2012	2013	2014	2015
Cases	86	94	88	85	117	100
% Change	--	9.3%	-6.3%	-3.4%	37.6%	-14.5%



Septic Systems

The number of septic system cases that the Environmental Health Agent works on each year is variable. A single septic system case requires a plan review, and multiple septic installation inspections. This area of environmental health may be growing in future years as existing septic tanks may require updating. The Environmental Health Agents collaborates with the Town Engineering Department to determine feasibility of municipal sewer connections and also with the Conservation Commission to ensure that all setbacks are met for those septic systems that are close to wetlands.

Environmental Health Agent, Tara Gurge:

“One septic system upgrade that was recently completed took over a year to process and complete. Approximately 50 hours of time was spent on this particular septic issue. This was due to the correspondence back-and-forth with the septic engineer and homeowner, as well with the Mass Dept. of Environmental Protection, regarding whether this property was feasible to connect to the municipal sewer system. Once the property was found not to be feasible to connect to municipal sewer, we then dealt with the brutal winter weather. Septic installations cannot proceed when the ground is frozen, for obvious reasons. That frustrated the septic engineer and the homeowner, but we had to ensure that they understand the local and state regulations. We maintained open communication with the septic installer and the homeowner, to ensure that everyone was kept in the loop on the progress of this septic system installation.”

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Table 2. A Complex Septic System Inspection Process

Participants	Step	Activity	Time Estimate
Health Agent Owner Engineer Soil Evaluator Licensed Septic Installer	Soil Test Application Review	Owner fills out application which requests that they work with an Engineer and Soil Evaluator in conducting a Soil Test and Percolation Test. They must work with a licensed septic installer off permit list.	2 hours
Health Agent System Designer	Septic Installer License Review Exam/Review	Needed to have new installer fill out and return back his Septic System Installer permit application for our review and approval. We needed to call references to verify experience. This new installer also had to come into the office to sit for the required exam.	5 hours
Health Agent Town Engineer Mass DEP Homeowner	Verify with Town Engineer about feasibility of connecting to the municipal sewer system	After initial request is reviewed, the Health Agent checks with the Town Engineer to verify whether it's feasible to connect to the municipal sewer system. If not feasible, we proceed to the next step. Also worked closely with the state on guidance on this feasibility determination. (In this case we had multiple meetings and phone calls with the MassDEP, Town Engineer, System Designer and the homeowner re: this feasibility determination.)	20 hours
Health Agent Installer Engineer Soil Evaluator	Soil Test/Percolation Test	Arrange testing date and meet at the site.	2 hours
Health Agent Engineer	Proposed Septic Upgrade Plan	Give a copy of the Septic Design Checklist, and review plan. A copy is mailed to Brian as well. After review, comments are mailed to Design Engineer.	2-4 weeks time frame to return comments. Total hours = 5 hrs.
Health Agent System Designer Homeowner	Updates on status of scheduling septic system installation	On-going calls to discuss capability to conduct system installation (which was held up due to weather)	5 hours
Health Agent	Installation Inspections	6 inspections conducted	6 hours
Health Agent	Submit Deed Restrictions	May need to (not always) submit deed restrictions to the Norfolk County Registration of Deeds	1 hour
Health Agent	Final Septic As-Built Plan Review	Once upgraded system is complete, we conduct a final septic as-built plan review.	2 hours (since revised plan needed to be submitted.)

**Performance Improvement Funding Request
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Pools

Currently the Town of Needham has four indoor pools and four outdoor pools that the Environmental Health Agent permits and inspects. For the indoor pools, the Environmental Health Agent spends approximately one week in the spring and one week in the fall completing initial and follow-up inspections. The outdoor pools require inspections in the summer before opening for the season. The Environmental Health Agent collaborates with the Building Department to ensure that all Pool Code requirements are met prior to the issuance of the Certificate of Occupancy. The Environmental Health Agent also works closely with the Massachusetts Department of Public Health Community Sanitation Department to ensure that Pool Code items are met. The plan to rebuild the Rosemary Pool will increase this workload in the future. Pool permit plan reviews for new pools or updated pools also come up throughout the year, where the Health Department needs to conduct a pool plan review, and additional inspections may be required.

Environmental Health Agent, Tara Gurge:

"We recently had a new indoor pool open in town. This new Pool Plan review took over a year to complete. This is due to the fact that the Pool Designer was out of state, and was not familiar with the MA Pool Code requirements. Multiple pool plans were reviewed and changes had to be made in order to meet the MA Pool Code requirements. Many hours of time was spent to review revised plans. Meetings were also conducted with the new pool owner to review the MA state requirements. Also with a new pool, many pre-operation inspections are typically conducted to ensure that all Pool Code requirements are met."

Domestic Animal Permits

In 2015, there were 15 animal permits distributed in the Town of Needham, which is an increase from past years as shown in Figure 4. An Animal Permit plan review needs to be conducted for all new Animal Permit Applications; animal permits are required for any resident who wishes to maintain animals such as chickens, horses, sheep, goats, and other animals that might be considered "livestock".

Certain cases that require a variance from the Needham Board of Health are more time consuming for the Environmental Health Agent, as they often must be approved at a Board of Health hearing. The Environmental Health Agent and Animal Control Officer work together on these cases to ensure that animals have enough living space to assure a clean and sanitary property in accordance with Article 4, the Needham Board of Health Keeping of Domestic Animals Regulation.

The Environmental Health Agent works with the Building Department to determine if the proposed structure to keep the animals in requires a Building Permit. The Conservation Commission is consulted with cases that may be close to wetlands. Also, the Environmental Health Agent works with the Planning Board for new application reviews/comments.

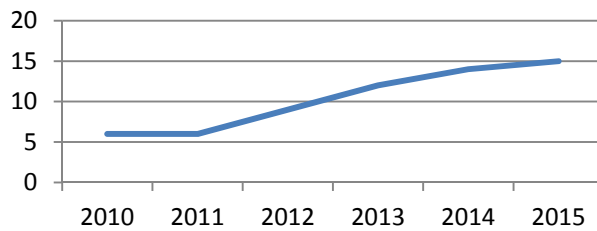
Figure 4. Domestic Animal Permits by Year 2010-2015

Year	2010	2011	2012	2013	2014	2015
Permits	6	6	9	12	14	15
% Change	--	0.0%	50.0%	33.3%	16.7%	7.1%

**Performance Improvement Funding Request
DSR4**

Department	Public Health Department		
Title	Environmental Health Agent	Priority	1

**Domestic Animal
Permits by Fiscal Year
2010-2015**



Wells

The Environmental Health Agent reviews plans for wells (Irrigation and Geothermal) in the Town. In 2015 there were 14 new wells, which is a significant increase from the previous year when there were only five new wells. This may indicate that the number of wells in future years will continue to grow, which will require more time for the Environmental Health Agent to conduct plan reviews for Ground Source Heat Pump (Geothermal) Wells. The Environmental Health Agent collaborates with the following departments on well permit application reviews and approvals: Town Engineering, Department of Public Works Water and Sewer, Conservation Commission, and Building Department (for Geothermal wells). She also collaborates with the Massachusetts Department of Environmental Protection to receive Underground Injection Control (UIC) registration numbers for all proposed Ground Source Heat Pump (Geothermal) Wells. She works with the Water and Sewer Department in coordinating the final well inspection, prior to the issuance of the well permit, which allows the well to open for use.

Table 3. Well Application Review Process

Participants	Step	Activities	Time Estimate
Health Agent Well Driller Six other Town Departments	Well Application submitted by Well Driller	Application reviewed and Town Departments submit comments. May need to ask for additional information regarding setback distances, requirement of a stamped plan, etc.	2 hours
Health Agent Well Driller Six other Town Department	Revised Plan submitted and approved	(Note: if Geothermal Well, we also confirm with MassDEP that a UIC Registration number has been issued for the well.)	2 hours
Well Driller Health Agent	Approval to Drill Issued to Driller		1 hour
Health Agent Town Water Dept.	Receive Final Well Inspection report from Town Water Department	Once well is drilled, we receive final well inspection report back from Town Water Department which states that the well is all set.	2 hours
Health Agent Well Driller	Receive Final Well Completion Report from Driller & Issue permit	Once we receive Final Well Completion Report from Driller, we issue the permit for the well to open for use.	1 hour

**Performance Improvement Funding Request
DSR4**

Department	Public Health Department		
Title	Environmental Health Agent	Priority	1

Sharps Disposal

The number of establishments in the Town that require sharps disposal has remained steady at six to seven in recent years. The Environmental Health Agent spends approximately one week per year completing inspections for these establishments in the fall. The Environmental Health Agent collaborates with the Fire Department to ensure proper Hazardous Waste materials are held properly on site and are properly disposed of off-site.

Trash, Septage, Medical Waste and Grease Haulers

Since April of 2014, the Environmental Health Agent has been responsible for inspecting trash haulers in the Town. The truck inspections take approximately two weeks per year; there are currently 29 trash haulers in the Town, which is an increase from 24 in 2014. This may indicate the number of trash haulers will continue to increase in future years, requiring more time to complete these inspections.

The Environmental Health Agent also conducts a permit renewal process for septage, grease and medical waste haulers. The number of septage, grease and medical waste haulers in the town has been consistent in recent years at approximately 25. The Environmental Health Agent collaborates with the Town Treasurer's Office for the annual Trash Hauler permit renewals, since the Treasurer Department issues these trash haulers stickers in order to use the Town Recycling and Transfer Station to dispose of their waste. The Environmental Health Agents updates them on when trash truck inspections have been conducted throughout the renewal time period, so they can then issue their stickers. The Public Health Department aligned the Trash Hauler permit renewal time frame based on the Treasurer's Office sticker renewal mailing period to simplify the process for the RTS staff. The Environmental Health Agent also collaborates with the Director of the Recycling and Transfer Station, to update them on currently permitted trash haulers.

Tobacco

There are 12 tobacco sales permits in the Town of Needham. The Environmental Health Agent and Needham Police Department collaborate to perform compliance checks on retail tobacco stores in the Town to ensure that retailers are not selling tobacco products to those under the age of 21 in compliance with Article 1, Needham Board of Health Tobacco Regulation. Previously, these compliance checks took place two to three times per year; however the frequency is being increased to four times per year. Tobacco compliance is a high priority for the Board of Health, and Needham's combination of policy change (raising the purchase age to 21) combined with regular inspections and enforcement through unannounced compliance checks have made Needham a national success story for how to reduce youth smoking rates; the Town's success in this area was the subject of a major published paper in the Journal Tobacco Control in June 2015, and it was covered in both the *Boston Globe*³ and the *New York Times*.⁴

Prior to each compliance check, the Environmental Health Agent spends approximately one day preparing. However, the scheduling of the student who assists in conducting these checks can take additional time. The Public Health Department works with the local colleges in town to find a student and then once there is a student that is interested, the Environmental Health Agent coordinates the proposed compliance check dates with the Police Department's schedule. In the case that there are illegal sales made during the compliance checks, more time is spent on this area of environmental health as the retailer must attend a Needham Board of Health Hearing, and additional site visits need to be conducted for all retail stores that sold tobacco or tobacco products to underage patrons.

An amendment to the Tobacco Regulation will take effect January 1, 2016. These new aspects to the Tobacco Regulation include a flavored tobacco ban for all tobacco vendors with the exception of specialty retail tobacco stores (e.g. cigar shops), as well as packaging and labeling requirements. As a result, the Environmental Health Agent will spend increased

³ Rocheleau, M. (2015, June 17). Smoking among Needham high schoolers plunged after legal age rose to 21. *Boston Globe*. Available at: <https://www.bostonglobe.com/2015/06/17/smoking-among-needham-high-schoolers-plunged-after-legal-age-rose/k0KDLz110EWI7W7TxCrOXJ/story.html>

⁴ Bakalar, N. (2015, June 17). To Cut Teen Smoking, Raise Tobacco Sales Age. *New York Times*. Available at: http://well.blogs.nytimes.com/2015/06/17/to-cut-teen-smoking-raise-tobacco-sales-age/?_r=0

**Performance Improvement Funding Request
DSR4**

Department	Public Health Department		
Title	Environmental Health Agent	Priority	1

time working with tobacco vendors to ensure that stores comply with the new regulation. Other towns including Newton and Arlington have reported that enforcement of the flavored tobacco ban has been difficult, since many flavored tobacco products are not labeled as such. Researching various tobacco products to determine which are flavored will be time consuming.

The Health Agent also follows up on nuisance smoking complaints, to verify that smokers maintain a 20 foot distance to an entrance to a workplace, or respond to apartment units where smoke is reported in a common area (that may have migrated out of a neighboring unit).

Housing Complaints

The Environmental Health Agent investigates housing and nuisance complaints that are reported to the Needham Health Department. These calls come in from residents, tenants, or the Fire and Police Departments.

In reference to housing, the Public Health Department may receive a call from a tenant about their unit not meeting the Massachusetts Housing Code requirements. If requested by the tenant, the Environmental Health Agent conducts an inspection to verify the reported items. If found to be in non-compliance, the Public Health Department issues an Order Letter to the landlord, and sets strict time frames for the violations to be addressed. This can be very time consuming as multiple follow-up inspections are typically required.

The Public Health Department may also receive a Housing Complaint regarding excessive clutter or hoarding in a home. These cases tend to be more time consuming as there may be sanitation issues, Fire/egress concerns, and pest issues. The Public Health Department typically receives these calls from neighbors, the Police Department or Fire Department. In recent years, these housing cases have become more complex and time consuming as more residents involved need additional mental health or other social services.⁵ Each complaint requires a varied amount of follow-up, including site visits, inspections, and phone calls, depending on the situation. The Environmental Health Agent works closely with co-workers on these cases, such as the Public Health Director and the Public Health Nurses. The Public Health Department also collaborates with the Social Worker at the Council on Aging and the Building Commissioner on these cases.

Environmental Health Agent, Tara Gurge:

“I recently worked with the Director and the Nurses on an incident that was reported by the Fire Department. We spent many hours working with the landlord and multiple state agencies to ensure resources were available to this landlord for the tenant and their family. The unit that was in question had to be cleaned out, with the permission of the family member. The Building Commissioner joined us on an inspection, where additional housing code items were noted. We are continuing to work with the landlord on setting up a time frame to have the items addressed. “

Nuisance Complaints

The Environmental Health Agent follows-up with a variety of nuisance public health complaints as they relate to noise, odors, dust, and trash. A report can be issued in person by a resident, or called in, or submitted electronically. The Health Agent works closely with the complainant to ensure that the issue is addressed and that all Nuisance Regulation requirements are being followed. Typically, follow-up site visits, phone calls, and letters are required for these cases. In 2015, there were 43 nuisance complaints submitted to the Needham Public Health Department. The Environmental Health Agent collaborates with many Town Departments on nuisance complaints, including Town Selectmen and Town Manager’s office, Planning Department, Building Department, and the Police and Fire Departments.

Special Permits & Subdivisions

In 2015 there were 12 special permits. Subdivisions have been consistent at approximately seven per year in recent years.

⁵ Please see also memo from Jamie Gutner and Timothy McDonald to Christopher Coleman in mid-October entitled “Request for Redirection of Salary for Social Work Services” along with the three accompanying case vignettes.

**Performance Improvement Funding Request
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Department	Public Health Department		
Title	Environmental Health Agent	Priority	1

The Environmental Health Agent collaborates with the Planning Board and the Zoning Board of Appeals on these cases. For Subdivisions, the Environmental Health Agent assures compliance with off-street drainage requirements, including the following:

- 1) Lots should be graded to the limits of construction as to have no standing water or otherwise create a public health nuisance;
- 2) Grading shall not improperly shed or illegally increase drainage onto adjacent properties;
- 3) All subsequent developers or builders should be notified of the off street drainage requirements;
- 4) If there are difficult or unusual conditions as determined in the field from the approved grading plan, or other circumstances or objections received from abutters, the Board of Health may require an as-built plan;
- 5) Following the Board of Health off-street drainage guidelines, a drainage surety of \$3,500 should be set for each lot.

New Regulations

Bodyworks Regulation

At the request of the Board of Selectmen and Police Chief Phil Droney, the Needham Board of Health adopted Article 18, Bodywork Regulation in September of 2015. The regulations will require that both bodyworks establishments and practitioners apply for licensure from the Public Health Department and will subject them both to announced inspections and unannounced compliance checks. Both the inspections and the compliance checks will be conducted cooperatively by the Environmental Health Agent, and a member of the Needham Police Department. The Massachusetts Division of Professional Licensure will also be involved with conducting these coordinated inspections. This regulation will take effect on January 1, 2016, giving all practitioners time to apply for formal licensure. The Public Health Department began an outreach campaign to more than 20 establishments and practitioners to inform them about the regulation and its effects through a mailing

The Public Health Department will need to coordinate these inspections with the Police and the Massachusetts Division of Professional Licensure. These inspections will be very comprehensive and time consuming. The Environmental Health Agent will ensure that all Bodywork Regulation requirements are met by verifying that the therapists that are present on site are licensed, and that all establishment requirements are met. Inspections could be more time consuming initially to ensure that the Bodywork Establishment owners are well-versed in the regulation requirements. Multiple site visits may be necessary initially to ensure compliance.

The Public Health Department will be required to conduct a pre-operation inspection of the establishment prior to the issuance of the permit. The Health Agent may need to do a follow-up pre-operation inspection as well, to ensure that all regulation requirements are met, prior to the issuance of the permit. Then the Health Agent will conduct one announced inspection, and one unannounced inspection. These inspections may take up to an hour or so. Depending on the results of those inspections, a follow-up inspection may be necessary to verify compliance.

Medical Marijuana

Four medical marijuana establishments have expressed interest in opening a Registered Marijuana Dispensary (RMD) in Needham during the first months of FY 2016. Given that there is potential for a RMD to open in Needham in the near future, the Board of Selectmen and the Town Manager have requested that the Board of Health consider adopting regulations to govern the operation of any RMDs in Needham.

The Public Health Department has begun drafting a Medical Marijuana Regulation which would ensure the safe operation of these establishments. This would add another area of responsibility to the Environmental Health to the Health Agent's workload. The draft regulation would require that the RMD apply for a Board of Health permit, and be subject to periodic unannounced inspections. The regulation would also require a plan review of marijuana-infused products, as well as reviews of plans for trash collection and waste disposal.

**Performance Improvement Funding Request
DSR4**

Department	Public Health Department		
Title	Environmental Health Agent	Priority	1

Revenue

The Environmental Health Agent is responsible for generating the majority of the revenue produced by the Public Health Department. Virtually all of the revenues from permits, plan reviews, fee, and fines are generated by the Environmental Health Agent. As the demands of increasingly frequent and increasingly complex inspections, permits, and plan reviews mount, the Environmental Health Agent has does not have the time to enforce new Board of Health regulations, which will begin to affect the revenue generated by the Public Health Department (and may have broader health effects over time).

Table 4. FY 2015 Public Health Revenue

Category	FY 2015 Revenue
Food	\$44,317.50
Camps	\$1,325.00
Hotels	\$330.00
Biotech	\$860.00
Animals	\$1,250.00
Pools	\$2,665.00
Wells	\$2,450.00
Bottling	\$500.00
Demos	\$3,680.00
Septic	\$8,510.00
Waste Haulers	\$3,965.00
Tobacco	\$8,400.00
Med. Waste Haulers	\$765.00
Electronic Burial *	\$2,300.00
Total	\$81,317.50

Conclusion

The Needham Environmental Health Agent is responsible for a wide variety of public health services in the Town. Many of the areas the Health Agent works on are rapidly expanding in either the total number of cases⁶, complexity of cases⁷, or both. These include food and retail establishments, the Needham Farmer's Market, demolition cases, domestic animal permits, pools, wells and trash haulers. With the growth of these areas, the Health Agent will spend more time on plan reviews and inspections.

Furthermore, areas of environmental health such as housing, nuisance complaints, tobacco, and septic cases are becoming more complex and time consuming, requiring more follow-up from the Health Agent. Finally, new regulations including the recently adopted Bodywork Regulation and the possibility of a Medical Marijuana Regulation will introduce new areas of Environmental Health that the Health Agent will be responsible for monitoring. Environmental Health services are essential to the Town of Needham, and require the dedication of sufficient resources to match the expanding workload.

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⁶ The areas in which total inspections or reviews have increased include Domestic Animals, Pools, Septic, Trash Hauler, Wells, Food Service Inspections and Re-Inspections, Food Service Annual Permits and Temporary Permits, and Plan Reviews.

⁷ In particular, nuisance and housing complaints have become increasingly complex, as have food inspections at establishments like Olin College, North Hill, and Trip Advisor.

Special Warrant Article Request DSR5			
Sponsor	Public Health Department		
Title	Substance Use Prevention, Mental Health Promotion, and Public Health Education Revolving Account		
Text of the Proposed Article			
To see if the Town will vote to establish a revolving fund for the purposes of raising awareness of, and enhancing knowledge about, issues of public health concern, especially alcohol and other drug use, mental health conditions, and suicidality. This Revolving Account would also fund resident support services and referrals for Needham residents of all ages. The Revolving Account would be populated with the revenues generated by permit and license fees from the sale of tobacco, alcohol, and other drugs regulated by the Town of Needham, as well as any associated fines imposed on license or permit holders.			
Article Information			
Appropriation Amount		TBD	
Funding Source		Permit and license fees from the sale of tobacco, alcohol, and other drugs regulated by the Town of Needham, and any associated fines imposed on license or permit holders.	
Disclosures (see instruction #7)			
			YES
			NO
1. Was this request submitted last year and not approved for funding?			X
2. Does this request address a goal of the Board of Selectmen or another Board or Committee?			X
3. Is this a recurring special financial warrant article?			X
4. Is this a matching grant funding request?			X
5. Is this a CPA funding request?			X
6. Is this a revolving fund request?			X
7. Is this a lease request?			X
8. Is this a pilot program request?			X
9. Is this a study?			X
10. Is this a program that is planned to be in place for more than one year?			X
11. Is this required by a court or other jurisdictional order?			X
12. Is this a personnel related request?			X
13. Is this a local option acceptance request?			X
14. Is this a request to fund a type of reserve?			X
All "YES" responses must be explained Below			
Disclosure Explanation			
The Public Health Department requests the creation of a revolving fund for the purposes of raising awareness of, and promoting education about, issues of public health concern, especially alcohol and other drug use, mental health conditions, and suicidality. The fund would also support consultation, provision of resources, and referrals for Needham residents of all ages. The revolving account would be populated with the revenues generated by permit and license fees for substances (tobacco, alcohol, and other drugs) regulated by the Town of Needham, as well as any associated fines imposed on license or permit holders.			

Special Warrant Article Request DSR5	
Sponsor	Public Health Department
Title	Substance Use Prevention, Mental Health Promotion, and Public Health Education Revolving Account
The Revolving Account would support: 1) Community health and wellness education and promotion, and 2) Direct support services and referrals for all age residents. Community health and wellness educational campaigns might consist of print and limited on-line media messages targeting pressing health gaps such as the severe disparity amongst Needham High School students about the perception of risk for drunk driving versus the perception of risk for drug-impaired driving. 86% of Needham High School seniors indicate that they think riding in the car with a driver who has been drinking is very dangerous, but when the same question is asked about being a passenger in the car of someone who is under the influence of marijuana, only 38% of seniors think that is dangerous. Additionally, 12% of seniors indicated that they had been a passenger of someone who was drinking within the last 30 days, while 33% had been a passenger with an impaired driver in the same period.⁸ Having a dedicated source of funding would allow the Public Health Department to work with partners including the Police Department, Youth Services, Needham Public Schools, and others (driving schools, for example) to clearly communicate a message about the dangers of impaired driving. Direct support services and referrals for all age residents might include additional resources (Needham-specific brochures, pamphlets, and wallet cards) for substance use, addiction, mental health, self-harm, and suicidality, as well as health and wellness presentations at community meetings and consultation (by phone and in-person meetings) for guidance about substance use and mental health issues with related referral to clinical treatment.	
V2017	

8 2014 MetroWest Adolescent Health Survey, Figure 4-2B. Perceptions of Risk and Passenger Behaviors Related to Impaired Driving by Grade, 2014. MetroWest Health Foundation and EDC.

Performance Improvement Funding Request DSR4				
Department	Public Health Department			
Title	Technology Costs for Concussion Training Database Hosting and Related Expenses		Priority	2
DSR4				
Expenditure Classification	FTE	Frequency		Total Amount (A + B)
		Recurring Amount (A)	One Time Only Amount (B)	
1. Salary and Wage				
2. Expense		5,000		5,000
3. Operating Capital				
4. Other Costs				
5. Total (1+2+3+4)		5,000		5,000
Budgetary Considerations				Yes No
Does this request address a goal of the Board of Selectmen or other Board or Committee				X
Has this request been submitted in the last three fiscal years and not funded?				X
Are there additional costs to implement this request (except future year operating costs) that are NOT included in this request?				X
Will the assistance of another department be required to provide support (personnel or financial) for this request to be implemented?				X
Will additional staff (beyond the staff requested in this DSR4 submission) be required if the request is approved?				X
Does the request support activities which produce revenue for the Town?				X
If the request is not approved, will current Town revenues be negatively impacted?				X
Is there an increased exposure for the Town if the request is not approved?				X
Is specialized training or licensing required (beyond the initial purchase)?				X
Does this request address a documented health or safety issue?				X
All "YES" responses must be explained in the narrative				
Description and Explanation				
The Town of Needham's Public Health Department seeks funding support from Annual Town Meeting to sustain a system (under development with grant funds) which will track and maintain records of coaches' trainings in the CDC concussion awareness training Heads-Up. This tracking system and database is developed to support the Board of Health's pending concussion regulations; it is currently under development as of October 2015. Background Concussions have oft been in the news of late, especially in the context of the National Football League. While public awareness and understanding of concussions has grown, there are still a number of misconceptions and misunderstandings. ^{1,2,3} The Needham Board of Health knows that concussions, especially when not properly diagnosed and managed, may have serious and				

1 "Alan Schwarz on concussion in American Football: A Public Health Issue," *The Economist* online. Published December 29, 2011. Available at: <http://www.economist.com/blogs/gametheory/2011/12/alan-schwarz-concussions-american-football>

2 Bakalarnach, Nicholas. Study Suggests That Hitters' Production Dips After They Return from Concussions. *The New York Times*, March 21, 2015 Available at: <http://www.nytimes.com/2015/03/22/sports/baseball/study-suggests-that-hitters-production-dips-after-they-return-from-concussions.html>

3 Reynolds, Gretchen. A Simple Flashcard Test to Detect Concussions. *The New York Times*, March 11, 2015. Available at: <http://well.blogs.nytimes.com/2015/03/11/a-2-minute-test-to-detect-concussions/?r=0>

**Performance Improvement Funding Request
DSR4**

Department	Public Health Department		
Title	Technology Costs for Concussion Training Database Hosting and Related Expenses	Priority	2

lasting impacts on a person's health. Those impacts, according to the U.S. Centers for Disease Control and Prevention, may include headaches and nausea, memory and concentration difficulties, and even mood and personality changes. And those effects may be especially pronounced for youths—because a child's brain is still growing, he or she may take longer to safely recover from a concussion.

In June 2010, the Massachusetts Department of Public Health promulgated concussion regulations ([105 CMR 201](#)) to protect youths in grades 6 to 12 participating in school sports. The Needham Board of Health is in the midst of drafting regulations to expand concussion coverage even further so that it protects younger children and those not participating in school-affiliated sports. The draft regulation has four elements: coach and volunteer training and education; parental education and notification; consistent removal from, and return to, play protocols; and information and data collection.

Target Population

The aim of the Board of Health's concussion regulations is to protect the health and safety of Needham's youths, especially those participating in non-school based sports such as Needham Soccer or Needham Girls Youth Lacrosse. The town has 6,268 youths between the ages of 5 years old and 18 years old, according to the last US Census, and the vast majority play one or more sports. While the majority of older children are involved in athletic activities through school⁴, at the younger grade levels there are no rules or regulations mandating concussion education for coaches or the utilization of safe removal from, and return to, play protocols.

The Challenge

The Board of Health held a public hearing on its proposed Concussion regulation in February 2015. The hearing attracted feedback and comments almost exclusively from coaches and league officials, many of whom were also residents in Needham and parents. The Needham Times wrote an editorial about the public hearing and concussions more generally, saying:

“There's no question that youth sports leaders in town favor protecting children from concussions and their sometimes long-lasting effects just as much as the Board of Health and Health Department do. But at a hearing last week about proposed regulations relating to concussions suffered through participation in club sports, sports organizers expressed many concerns about logistics, documentation, record-

⁴ Data provided to the Public Health Department by the Director of School Nursing in the Needham Public Schools found that of the 133 students in NPS grades 6 -12 diagnosed with a concussion, only 50 received the injury while playing a school-based sport. More than 77 concussions occurred in sports based outside of school (and this is only for grades 6 to 12, there is no information on concussions in younger grades). The remainder occurred from accidents and incidents in the school building, e.g. slips and falls.

Performance Improvement Funding Request DSR4			
Department	Public Health Department		
Title	Technology Costs for Concussion Training Database Hosting and Related Expenses	Priority	2
<i>keeping, communication and any fines that could be associated with not following all the new rules.”⁵</i> <u>Proposed Solution</u> The concussion education method recommended by the Needham Board of Health is the CDC’s Heads-Up Concussion training. Unfortunately, that online training does not require any registration and so keeps no record of completion. A certificate may be printed out at the end, but there is no option offered to save the completion certificate, and this presents a challenge both to less tech-savvy coaches and also to sports leagues struggling to maintain dozens or hundreds of paper records for coaches, the majority of whom are last-minute volunteers. To address the logistical barriers to the proposed regulation like record keeping and documentation mentioned, the Public Health Department pursued (and received) a grant from the MetroWest Health Foundation to develop a system that “wraps” the CDC training with a Needham-based registration page and a completion page that will both send a PDF copy of the completion certificate to the individual that completed training and the leagues with whom s/he is affiliated, but also populate a simple database of training completions that will be maintained by the Public Health Department. <u>Funding and Sustainment</u> The Town of Needham’s Public Health Department is currently developing that system with a \$20,000 grant from the MetroWest Health Foundation. This DSR4 spending request seeks to sustain the use and maintenance of the system that is currently under development by the Public Health Department. This project is being supported with guidance and information by the Town of Needham’s Information Technology Department. This funding request will support costs related to the maintenance and support of the concussion training tracking system. It will not be used for staff time, which is anticipated to be a very modest (less than 5 hours per month) commitment of staff time to update content and ensure that all links to the website and application are active and functional, as well as to perform some modest database management activities.			
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⁵ *The Needham Times*. “Protect youth from concussions but streamline logistics, make accountability priority”. Editorial. Published March 6, 2015. Available at: <http://needham.wickedlocal.com/article/20150306/NEWS/150308373/2013/OPINION>

Performance Improvement Funding Request DSR4					
Department	Public Health				
Title	National Public Health Accreditation	Priority	3		
DSR4					
Expenditure Classification	FTE	Frequency		Total Amount (A + B)	
		Recurring Amount (A)	One Time Only Amount (B)		
1. Salary and Wage					
2. Expense		5,000		5,000	
3. Operating Capital					
4. Other Costs					
5. Total (1+2+3+4)		5,000		5,000	
Budgetary Considerations				Yes	No
Does this request address a goal of the Board of Selectmen or other Board or Committee				X	
Has this request been submitted in the last three fiscal years and not funded?					X
Are there additional costs to implement this request (except future year operating costs) that are NOT included in this request?				X	
Will the assistance of another department be required to provide support (personnel or financial) for this request to be implemented?					X
Will additional staff (beyond the staff requested in this DSR4 submission) be required if the request is approved?					X
Does the request support activities which produce revenue for the Town?				X	
If the request is not approved, will current Town revenues be negatively impacted?					X
Is there an increased exposure for the Town if the request is not approved?					X
Is specialized training or licensing required (beyond the initial purchase)?					X
Does this request address a documented health or safety issue?					X
All "YES" responses must be explained in the narrative					
Description and Explanation					
This is a five year process to obtain National Accreditation from the Public Health Accreditation Board at an estimated cost of \$5,000 per year. National Accreditation will be necessary in the next few years to be eligible for federal and State Health Grants. Please note that this is the estimated cost to assemble all the materials and develop all the documents (targeted health improvement plan, strategic plan, etc.) that are required components of an accreditation application. The actual cost to apply for an accreditation application review is \$12,720 for a community of Needham's size; this covers accreditation for a five-year period, following which re-application is required.					
V2017					