

DOVER

Health Reports

2020



Report of the **Board of Health**

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The Board of Health (BOH), a mandated regulatory agency, is responsible for protecting the public health and environment, with legal obligations, authority, and responsibilities as set forth in the Massachusetts General Laws (MGL) and Commonwealth of Massachusetts Regulations. Various federal statutes further lay out the responsibilities of state and local governments to ensure the public health.

The Board's elected members, agents, inspectors, and subcommittee members work to ensure that food, water, soils, and air are protected from contamination that would pose a public health threat. The BOH works to prevent the spread of contagious disease in humans and animals, and to identify and prevent the spread of the growing number of tick-borne diseases. It is also charged by the Commonwealth with ensuring that housing meets minimum health and safety standards. Additional information regarding the BOH can be found on the Town's website (www.doverma.org).

COVID-19 Pandemic

In December 2019, an outbreak of mysterious pneumonia in Wuhan, China, caused by a new, highly contagious coronavirus, began to spread rapidly and soon became a global pandemic. Scientists named the illness COVID-19, an acronym for "coronavirus disease 2019." The Town of Dover recorded a total of 116 cases of COVID-19 between March 1 and December 29, 2020 (see graph, page 161). What follows is a timeline of the pandemic, its widespread impact, and the Town's response.

JANUARY–MARCH

Worldwide: Scientists in China identify the cause of the infection as a novel (new) coronavirus and sequence its genome. The first known death from the virus occurs in China. Cases linked to travelers from Wuhan are detected in several countries on several continents. Wuhan locks down to reduce viral transmission. The World Health Organization (WHO) determines person-to-person transmission is very likely and later declares a "global health emergency."

In February, scientists name the virus “severe acute respiratory syndrome coronavirus 2,” or SARS-CoV-2, and the infection COVID-19, which spreads rapidly in several countries in Asia, Europe, Africa, and North America, with many fatalities reported. Outbreaks also occur on several cruise ships. In March, the virus spreads to at least 114 countries, many of which enact lockdowns and travel bans. The WHO declares a pandemic. Trials begin for COVID-19 vaccines deemed ready for safety testing.

United States: The State Department warns against travel to China, and the Trump Administration restricts travel into the United States from China. The first U.S. infection is reported in Washington state. In February, the Centers for Disease Control (CDC) releases a flawed diagnostic test that causes a significant delay in the availability of accurate diagnostic testing. The first known death from COVID-19 in the nation occurs in Seattle. In March, the nation becomes the hardest hit country worldwide. The CDC recommends a limit on gatherings. An outbreak in a church choir lends strong evidence of the virus’s airborne transmission.

Massachusetts: On February 1, Massachusetts becomes the fifth state to report a COVID-19 case, when a UMass student returning from Wuhan tests positive. On February 29, a Biogen executive who had attended a Biogen conference in Boston develops symptoms consistent with COVID-19. A second case is confirmed on March 2 in a Norfolk County resident returning from Italy. On March 4, Biogen staff report that two European executives attending the conference test positive. Eventually, at least 28 of the 175 attendees test positive in a “super-spreader” event spawning hundreds of thousands of cases nationally and abroad. All state counties report cases, and Governor Charles Baker announces a stay-at-home advisory.

Dover: In January, a six-week trip to China by Dover-Sherborn High School (DSHS) students and one teacher, under the Dover-Sherborn China Exchange Program, is canceled. Early in March, members of the Dover and Sherborn boards of health (D-S BOH) begin regular joint meetings with the Dover-Sherborn public health nurse and representatives of the councils on aging and EMS in both towns. Participants share information, develop strategies, and coordinate with the schools. The boards meet together or individually several times each week, eventually exclusively on Zoom.

Multiple COVID-19 cases occur in Dover and Sherborn. Protocols established by the Massachusetts Department of Public Health are followed for isolating probable cases, contact tracing, and quarantining of close contacts. The D-S BOH and public health nurse also work with travelers returning from areas with large outbreaks. The Dover Board of Health (BOH) and Town counsel develop policy and procedures for addressing violations of isolation and quarantine protocols. The BOH communicates with residents and develops protocols for Town departments, schools, businesses, places of worship, and other organizations. It works on acquiring PPE (personal protective equipment) and discusses EMS protocols for responding to calls at homes with probable or definite COVID-19 cases.

The Board of Selectmen convenes the Dover COVID-19 Preparedness Task Force, composed of representatives from the Town administration, BOH, Police Department, EMS, COA, Parks and Recreation, Building Maintenance, and the Dover-Sherborn Schools. On March 13, D-S Schools close, and on March 17, the Town closes municipal buildings and cancels all programs and activities.

APRIL–MAY

Worldwide: COVID-19 continues to spread. In May, cases soar in Latin America and evidence arises of COVID-19 having been in France since December.

United States: The CDC recommends the use of face coverings in public. U.S. cases top one million. In May, emergency use authorization is granted for remdesivir.

Massachusetts: The state establishes three field hospitals to deal with the case surge. Sewage sample testing begins, revealing that the total number of cases vastly exceeds test-confirmed cases. The state has the third-highest number of cases in the nation and releases town-specific case data. Schools are to remain closed for the rest of the academic year. A major outbreak at Holyoke Soldiers home results in at least 76 deaths. Stay-at-home order remains active. The Contact Tracing Collaborative is established between the state and Partners in Health to help public health nurses manage the contact-tracing load. As cases decline in May, Governor Baker issues a face-covering order and announces a phased reopening plan to begin May 18. An anti-lockdown protest takes place at the State House. The Boston Marathon is canceled.

Dover: Fourteen cases have arisen between February and April, but details are kept private, since non-identifying information can reveal identity in small towns. In joint meetings, the D-S BOH, the public health nurse, the Dover COA, and EMS representatives, along with a representative from State Representative Denise Garlick’s office, discuss the rising number of cases and inevitable surge, cooperation with contact tracing and isolation/quarantine, returning travelers, communication with local hospitals, testing availability, and the promotion of mask use and social distancing in our towns. The community offers volunteer support that the COA employs for outreach to seniors, and there is discussion of establishing a volunteer case management group in Dover to support the public health nurse and the COA. However, it is determined after a few meetings that the Town is not in need of additional services, given the success of the COA volunteer efforts and the rollout of the Contact Tracing Collaborative.

Throughout April, the BOH provides guidance to organizations, businesses, schools, and childcare centers on the management of COVID-19 risk. In May, the BOH’s attention also turns to Town activities associated with graduations, summer camps, Parks and Recreation, churches, and other reopening plans and summer activities. It provides guidance on

reopening the Town House and other facilities, on conducting Town Meeting, and on addressing problems with testing access, test interpretation, and the challenges of isolation/quarantine for Dover residents. Boston College presents Dover with its plan to use the Connors Center on Glen Street as overflow 10-day isolation housing for students with COVID-19. The college does not require the space, however, after successfully controlling the outbreak on its campus.

JUNE–AUGUST

Worldwide: Cases rapidly increase. China approves a vaccine for military use. A man in Hong Kong becomes the first person to have a documented reinfection with coronavirus.

United States: Cases rapidly increase in the South and West. Emergency use authorization for hydroxychloroquine is revoked. Dexamethasone is found to be helpful in treating severely ill COVID-19 patients. Late in the summer, colleges and universities reopen, some in person. Those that institute frequent, widespread surveillance testing keep outbreaks under control for the most part. But elsewhere, the virus surges on campuses and spreads into the surrounding communities. Pfizer and Moderna began phase-three trials of their vaccines.

Massachusetts: Governor Baker announces Phase II of reopening. The Massachusetts transmission rate is the lowest in the country on June 22. Cases slightly rise in late July.

Dover: Few new COVID-19 cases occur during the summer. The BOH continues working with a variety of entities regarding reopening and discusses safety issues related to several special events. Recognizing the role of airborne transmission of COVID-19, the BOH advises the Town and schools to evaluate the air quality in their respective buildings and undertake any necessary remediation. The BOH represents Dover on the Health and Hygiene (H&H) subcommittee of the schools' Fall 2020 Reopening Task Force. H&H reviews protocols developed by the school nurses and develops testing protocols. The BOH responds to questions and concerns from residents about their COVID-19 status or other issues, and it plans a flu immunization clinic.

SEPTEMBER–DECEMBER

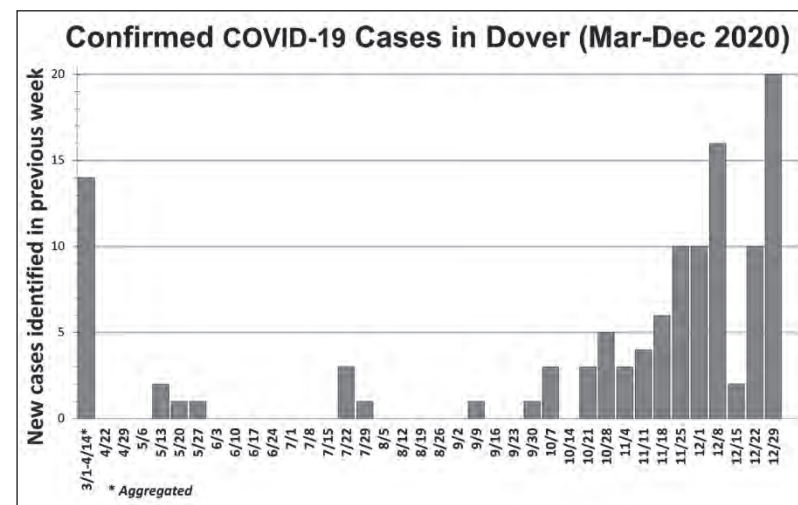
Worldwide: Cases continue to rise rapidly, with the death toll surpassing one million. The United Kingdom and Germany reimpose lockdowns and begin vaccinations. New, more rapidly spreading variants are discovered. In Africa, Latin America, and parts of Asia, data on actual numbers of cases are difficult to access.

United States: Researchers report that Hispanic and Black residents are overrepresented among deaths from COVID-19. President Trump is infected with COVID-19 and hospitalized. Pfizer and Moderna phase-three vaccine trials demonstrate 95% effectiveness at preventing serious illness. COVID-19

surges in the Midwest, and the U.S. death toll surpasses 300,000. The Food and Drug Administration approves the Pfizer and Moderna vaccines.

Massachusetts: Schools reopen under remote, in-person, or hybrid models. Free testing sites ("Stop the Spread") in high-risk communities are opened to all state residents. In early October, lower-risk communities advance to Phase III, Step II, but later in the month, cases begin rising significantly. In November, Governor Baker announces a voluntary curfew, more restrictive limits on gathering, and a stay-at-home advisory. In December, the state rolls back to Phase III, Step I. First vaccine doses arrive in mid-December.

Dover: An engineering consultancy firm conducts an air-quality assessment for the Town and recommends modifications for municipal and school buildings. The most extensive recommendations apply to the Caryl Community Center, which cannot reopen until mitigation work is completed. The BOH provides guidance on school reopenings, school athletic programs, D-S Youth Soccer and D-S Field Hockey, and holiday gatherings, and it works with Academic Public Health Volunteer Corps members who help design graphics for the Town's COVID-19 alert page. D-S schools reopen under a hybrid educational model. Although COVID-19 cases occur among students, faculty, and staff, there are no documented cases of in-school spread as a consequence of careful attention to social distancing and mask guidance. A large high school party held in Sherborn leads to a delayed reopening of DSHS to await evidence of any resulting COVID-19 cases but, fortunately, none occur. Ice hockey and soccer teams quarantine during the holiday break due to one case occurring on each team, but no additional teammates are infected. The BOH holds a drive-up flu clinic on October 14. The BOH determines that the Town does not meet the requirements to serve as a COVID-19 vaccination site. Cases begin rising steeply after Thanksgiving, a trend that continues through the holiday season.



Water Quality and Supply

Dover residents typically first interact with the BOH on matters related to drinking water and sewage disposal. With the exception of water provided by public water supply (PWS) companies, which are regulated by the Massachusetts Department of Environmental Protection (MassDEP), the BOH is obligated to ensure that drinking water is safe and available, both by its fiduciary responsibility to all residents and by various laws and regulations. The year 2020 was filled with an ever-growing and more complex set of investigations, meetings with developers and residents, and hearings regarding private wells and public water suppliers as land not previously developed has come under discussion, and for which permits have been proposed and taken.

PRIVATE WELLS

In 2020, 63% of approximately 2,200 households in Dover relied on private wells located on residential properties. The BOH well agent reviews plans for the siting of new private wells, and inspects both the construction of new wells and the repairs and modifications made to existing wells. Water quality and quantity tests are required prior to any transfer of ownership of a home, and it is the responsibility of the seller to provide the BOH and the purchaser with copies of the well test report, issued by a certified laboratory, done within the year of transfer of ownership. As residents alter landscaping and introduce retaining or decorative walls along lot lines, the BOH has reasserted the requirement that a well must be accessible from the street to enable maintenance, such as pump replacement or re-drilling.

In 2020, the BOH dealt with matters regarding water quality in private wells, the removal of old “in-house” wells, well location, the decommissioning of wells of houses being demolished, and inspections and permitting for groundwater heat pump wells, among other concerns. Seventeen permits were issued for new potable water supply wells or significant maintenance, six pump tests were performed on existing wells, one well was improved by fracking, and five wells were decommissioned (abandoned). As a result of well-site monitoring, several residents were required to follow proper procedures for well abandonment and closure, including the removal of disused equipment and filling of the well hole, important steps in ensuring public safety.

The BOH also responded to changes in the technology of wells or use of groundwater or deep wells; specifically, the introduction of geothermal systems, a new heating and cooling technology. In 2020, the first set of five geothermal wells were permitted in Dover. As wells necessitate deeper drilling to obtain sufficient flow rates, the Board updated installation rules for potable drinking wells to allow “constant pressure pumps,” Schedule 120 PVC pump hanging pipe instead of cast iron pipe, and solar power as a primary electrical source with electric service back-up.

MassDEP provides valuable information on private wells and water quality standards and certified testing laboratories (<https://www.mass.gov/>

private-wells). In 2020, MassDEP introduced a public web-based searchable database of groundwater wells (<https://www.mass.gov/service-details/well-database>).

PUBLIC WATER SUPPLIERS

Thirty-seven percent of households in Dover (786 homes) are serviced by seven PWS companies regulated by Massachusetts Department of Public Utilities (MassDPU) and MassDEP. The Town is in its third year of a three-year extension of the Colonial Water Company water supply contract to provide drinking water to its municipal buildings and to residents in the Town Center who are connected to the original distribution piping. The resident PWS companies in Dover and customers they serve are:

- **Dover Water Department:** Town-owned PWS serving only Chickering Elementary School and providing drinking water in the fields. The Town continues to own and be responsible for the water distribution system (pipes, valves, and other infrastructure) that supplies 78 homes in and around the Town center, as well as the public and commercial buildings located there. These customers are provided water and billed by Colonial Water Company.
- **Colonial Water Company:** 1,844 residents/646 households and buildings in or near the Town center; commercial buildings in the Town center. Of these numbers, as stated above some 78 homes and most commercial and public buildings are connected by Town-owned infrastructure.
- **Glen Ridge Resident Trust:** 122 residents/44 households (sourced from Natick Public Works)
- **Meadowbrook Water Trust:** 57 residents/26 households (sourced from Natick Public Works)
- **Old Farm Road Water Trust:** 40 residents/15 households
- **Precious Beginnings:** daytime preschool
- **County Street, Route 109:** 132 residents/55 households (sourced from Walpole Public Works)

Water contamination occurred in two significant events during 2020 in the Colonial Water Company system. “Boil water” orders were issued by MassDEP and required the Board to interact with citizens, town officials, and with MassDEP employees.

WATER RESOURCES

At the request of the Board of Selectmen (BOS), the BOH established the Water Resource Committee (WRC). In Article 12 of the 2018 Annual Town Meeting, the BOH requested and received approval for \$150,000 to engage an engineering consultant to assist in preparing the town-wide hydrology report. For a full report on WRC activities in 2020, see page 170.

Sewage Disposal

Since there is no access to a public sewage system in Dover, buildings require a private sewage system, typically a septic tank and distribution field. Subsurface sewage disposal systems require proper operation and maintenance. Proper operation includes not pouring grease, fats, and oil down the drain; not using garbage grinders; not using hazardous chemicals for laundry; and promptly repairing leaking toilet tanks and faucets. Proper maintenance includes having the septic tank pumped every other year by a licensed vendor to remove solids and septage to keep the system functioning well. Although pumping and maintenance costs might run into the hundreds of dollars, septic system failure can lead to remediation costs of more than \$30,000. Note that certain pumps or other mechanical or electric devices installed in technology-based septic systems (Eljen, FAST, etc.) require maintenance according to the manufacturer's maintenance schedule.

The Massachusetts State Environmental Code, Title 5, and State Sanitary Code, Chapter 2, regulations require that towns provide for septage disposal. The Town of Dover has an agreement with the Charles River Pollution Control District in Medway to have its septage accepted at their sewage treatment facility. The fee paid by residents to the licensed pumper includes both a pumping charge and treatment facility disposal fee. Title 5 requires that a septic system inspection be made by a state-certified Title 5 inspector when a house is put up for sale, when ownership is otherwise transferred, or when there is a change of footprint that may result in the requirement of a septic system upgrade.

In 2020, the BOH resolved several disputes between residents regarding the placement or maintenance of septic systems.



Photo by Beth Zaffino.

Permitting: Title 5 requires that homes built before 1995 and put up for sale must undergo a soil evaluation performed by a licensed soil evaluator. As building teardowns continue, the BOH is increasingly ordering and overseeing the replacement of archaic cesspools with Title 5-compliant septic systems. As land deemed “easy to build on” has become occupied, the BOH now regularly sees properties where a conventional gravity feed system is not feasible. During the review and approval of a construction plan, a lien prohibiting the installation of a garbage grinder is now commonly applied on a property.

In 2020, the BOH issued following permits:

- 20 for upgraded septic systems for existing homes
- 2 for new home construction on vacant lots
- 4 for system upgrades for teardowns, followed by new home construction
- 7 for distribution box replacements
- 0 tank replacements
- 6 for ejector pumps
- 10 for alternative system installations (FAST/Eljen/other)
- 3 for installations using pump chambers
- 3 for general repairs (pipes, other)
- 44 Title 5 inspections reported, reviewed, and with some comments
- 11 pool permits
- 14 soil evaluations
- 10 house plan reviews

Other Related Activity: Title 5 design calls for sizing a home's septic system based on projected usage, which in turn is based on bedrooms. Converting rooms into bedrooms post-occupancy—thus exceeding an existing septic system's capacity—not only violates state regulations but will stress a system to failure. The BOH has therefore clarified and incorporated into Section 217-3 of the Town of Dover Code the definition of “bedroom” as now including both rooms comparable to those found upon inspection or in plans and rooms not originally designated as bedrooms, but which have been converted for use as bedrooms either during building or post-occupancy.

A failure of a sewage treatment system at the Dover Farms housing development over Thanksgiving weekend required extensive communication and involvement in seeking repairs, so as to prevent the issuance of noxious sewage odors.

In 2020, the BOH was involved in multiple significant decisions regarding home septic systems. Proposed multi-unit housing developments under MGL Chapter 40B and similar larger developments required extensive plan review and interaction with the Planning Board and the Conservation Commission.

All applicants seeking a septic system, swimming-pool construction, or well permit are advised to carefully review state and town regulations to ensure compliance. For more information on Title 5 regulations, call the BOH office at 508-785-0032, extension 232, or visit the MassDEP at www.mass.gov.

Garbage Collection

MassDEP prohibits the disposal of food waste with trash, which considerably increases the cost of operating the Transfer Station. Residents who ignore the regulation incur an additional cost borne by all Town residents. Although many residents have installed kitchen food grinders or disposals, the Board strongly advises against using food grinders because the small particulate matter created will clog a septic system's drip field over time and cause septic system failure at great cost to the resident.

The Recycling Committee operates a food-waste drop-off program at the Transfer Station where it maintains drop receptacles. See the Recycling Committee report, page 209, for more information on this program.

Communicable Disease Prevention

Soon after the beginning of 2020, the BOH became very active, expending thousands of hours engaged in work related to the COVID-19 pandemic caused by the novel coronavirus SARS-CoV-2 (see "COVID-19 Pandemic," page 157).

In 2020, the BOH held its annual influenza vaccination clinic, during which almost 500 doses of flu vaccine were administered in a special "drive-through, nearly contactless" process conducted at the Highway Department's facility. The assistance of the Highway Department, Police Department, CVS, and volunteers from the Council on Aging was greatly appreciated in helping residents register online instead of in person.

A minority of parents question the safety and value of immunizing their children. When a large proportion of the community is vaccinated, the resulting "herd immunity" considerably lowers everyone's exposure to disease. Avoiding vaccination is, simply put, dangerous. Extensive scientific research on the demonstrated safety and efficacy of vaccination is widely available.

Environmental Health

Late in 2020, MassDEP introduced new proposed standards of water quality that focus on the presence of per- and polyfluoroalkyl substances (PFAS), a group of manmade chemicals that include PFOA, PFOS, GenX,

and many other chemicals that do not degrade over time, and for which questions have arisen regarding the degree of harm they pose to human health. The Board spent considerable time throughout the year attending meetings of the MassDEP and other health officials that led to the release by MassDEP of a set of proposed standards (<https://www.mass.gov/info-details/per-and-polyfluoroalkyl-substances-pfas>). The BOH also attended MassDEP meetings throughout the year as the agency developed testing and quality standards for the allowable content of PFAS in potable water, as these contaminants also pose a danger to groundwater supplies.

In its follow-up to newly issued EPA advisories regarding the increased risk of cancer attributable to the exposure to perfluoroalkyl sulfonate (PFOS), a PFAS chemical that is a component of fire-suppressing foam, the Board informed the Fire Department of the need to monitor and record such usage.

Massachusetts law prohibits the disposal of medical sharps and items containing mercury in household trash. The BOH maintains an approved sharps receptacle at its office located on the first floor of the Town House, where sharps may be safely discarded during office hours. Mercury recycling is also available at the BOH office, the Council on Aging office in the Caryl Community Center, the Town Garage, and the Transfer Station.

Food and Refreshments

The BOH adheres to the Massachusetts State Sanitary Code when issuing food permits. All food establishments, commercial kitchens, and summer camps are required to undergo inspection before a permit is issued. Commercial vendors providing food at charitable events and caterers providing food for private functions must also apply for a permit. The BOH normally receives applications for one-day or temporary food permits for school and organization events and festivals; however, as a result of the pandemic, all such activities were postponed or suspended. Please contact the BOH if your organization is unsure of how these regulations apply to your planned event.

Household Hazardous Waste

The BOH, in coordination with the Recycling Committee, conducts the annual Hazardous Waste Collection Day each spring. Most Dover households generate some amount of household hazardous waste (HHW), yet only 10% to 15% of Town residents take advantage of the one-day HHW collection.

Disposing excess, outdated, or unwanted medications into a household sink or toilet is forbidden because the chemicals of the medications disperse into the ground near your house and then drain off into the groundwater. Studies have shown such disposal is causing endocrine changes in animals and possibly humans.

Likewise, disposing accumulated HHW into trash and septic systems is inappropriate and can pose health, safety, and environmental risks to

property owners, neighbors, and the Town in general. The annual HHW collection offers an acceptable alternative, and the Board urges all residents to take advantage of the event. Residents can also drop off their hazardous waste on collection days held by other Charles River Household Waste Consortium member towns (Ashland, Bellingham, Franklin, Holliston, Medfield, Milford, Norfolk, Sherborn, and Walpole).

Public Health Awareness/Substance Abuse

During 2020, BOH members attended online meetings and seminars in participation with MassDPH, the Massachusetts Health Officers Association, and the University of Massachusetts regarding various health matters, including the regulation of septic systems and groundwater contamination, and the growing health risk of tick-borne diseases.

Animal Inspection and Quarantine

JENNIFER CRONIN, ANIMAL INSPECTOR

The animal inspector annually inspects cattle, horses, goats, sheep, swine, and other non-domestic animals, as well as the conditions under which they are kept. As population changes occur, the BOH updates its inventory of locations of where animals are stabled or kept. Active barns are inspected, during which time notations are made of tuberculin and brucellosis testing, equine Coggins testing, encephalitis vaccinations, and whether the animals appear free from contagious disease.

Animal Inspections: Unlike all previous years, no barn or site inspections were undertaken, pursuant to instructions from the Division of Animal Health, Massachusetts Department of Agricultural Resources (MDAR) to not perform this work because of the COVID-19 pandemic.

Operators of farms in Dover are either removing or composting manure and feces in compliance with revised BOH regulations and are therefore protecting the environment.

Zoonosis Control

The BOH oversees many activities related to controlling animal-to-human disease transmission (zoonosis), including tick-borne diseases, mosquito-borne diseases, and infection from animal bites and other interactions with animals.

Eastern equine encephalitis (EEE) and West Nile Virus (WNV) will continue to be of concern and require vigilance. The viruses are maintained in nature through a bird-mosquito cycle and are transmitted to other animals and humans by mosquito bite. Horses should be protected from both Eastern and Western strains of the encephalitis by annual vaccinations.

The BOH continues to work closely with the Norfolk County Mosquito Control District to ensure that its activities are effective and conducted in a safe manner. Homeowners wishing to exempt their property from mosquito-

control spraying must file the proper paperwork with the Town Clerk prior to the first of March.

Following the 2019 EEE outbreak, the BOH attended numerous meetings with MassDPH and MDAR, which resulted in a new form of updated and more informative communications by MassDPH during the summer and early fall months when EEE and WNV are typically a concern. Possibly because of limitations on multi-person activities and sporting events arising from the pandemic, EEE and WNV were much reduced in 2020.

The annual rabies clinic was not held in 2020 because of health issues associated with the COVID-19 pandemic. MassDPH mandates the vaccination for rabies of all dogs, cats, and ferrets at six months of age or older, or within one month of entering the Commonwealth without proof of vaccination, and at least once every three years thereafter. Vaccination orders, under the management of Animal Inspector Jennifer Cronin, also apply to other domestic animals.

MassDPH sets forth stringent quarantine requirements for the prevention of the spread of rabies. Dogs and cats exposed by direct contact, by proximity, or by having received a wound of unknown origin, are assumed to have been infected by a rabid animal. If a dog or cat is currently vaccinated, but for longer than a month prior to exposure, or if it is not currently vaccinated but proof exists of a previous vaccination, the animal must immediately receive a booster vaccination and be strictly quarantined for 45 days. The animal inspector may order that unvaccinated animals be immediately vaccinated and placed under confinement for four months or, failing that, to be euthanized. Vaccination for other domestic animals is also required. Lacking that vaccination may result in an order by the animal inspector.

The BOH continues to review the need for further animal health measures, including vaccination or control of the incidence of diseases in pet animals, such as leptospirosis and worms, in particular, which are a hazard to human health through transmission from animal urine, feces, or saliva.

Elder Services

The BOH contracts with the Natick Walpole Visiting Nurse Association to provide many health clinic services, which are offered through the Council on Aging to Dover's senior citizens. For more information on available programs, see the association's report on page 177.

Communications

The BOH publishes occasional newsletters with timely health information, and it provided continuing information for updating the Town's website on matters relating to the pandemic.

Report of the Water Resource Committee

Gerald L. Clarke ScD, Chair
Gregory M. Kahoun
Justine Kent-Uritam
Carol Lisbon
Ronald Myrick Jr.

Dover residents are provided their drinking water through a variety of services. Residences, public buildings, and commercial enterprises obtain their water from on-location private wells or local public water supply (PWS) entities. These PWS companies include the Dover-based utilities of Colonial Water Company, Dover Water Department (Chickering Elementary School), Old Farm Road Water Trust, Precious Beginnings, and the out-of-town PWS utilities of Natick and Walpole.

The issue of water availability has figured significantly in numerous discussions, in professional and local studies, and in meetings going back decades. The 2018 Town Meeting authorized (Article 12) the Board of Health's Water Resource Committee (WRC) to obtain evidenced-based information on Dover's groundwater supplies, and it provided funding of \$150,000 for that purpose. The 2019 *Dover Town Report* details this study and its results.

Committee Activities

The final report by the contractor, Kleinfelder Inc., was issued in March 2020 after several revisions were suggested by the WRC. The report, its supporting graphics, along with the video and transcript of the open meeting at which the report was presented, can be found online at <https://tinyurl/y9nwu5op>.

Winter 2019–20 was one of very sparse snow cover, which resulted in a drastically lowered contribution of water to the groundwater supply. The following spring and summer were periods of insufficient precipitation, so that by late summer, Dover, with an annual rainfall average of approximately 49 inches, was in deficit by more than 9 inches or almost 20% diminished precipitation.

Throughout 2020, WRC members actively participated in online (virtual) meetings held by the Massachusetts Water Resource Commission and the Drought Management Task Force. Throughout the summer and into the fall, Massachusetts was in a declared state of drought. For some communities, the drought of 2020 was worse than the drought of 2016. With that in mind, the WRC endeavored to influence residents to conserve water by limiting the use of outdoor watering and irrigation systems. Banners and signage were posted throughout the Town.

MWRA and Elm Bank

Under Massachusetts Water Resources Authority (MWRA) Operating Procedure 10, Dover cannot qualify for participation in the MWRA water distribution system. The Town might, at some future date, execute its allowable access to water pumped from Elm Bank. This access falls under a cooperative agreement with the Town of Natick, which has installed a pumping station in Dover. The towns of Natick, Dover, Wellesley, and Needham hold a restrictive right under Massachusetts law (1986) to access the Charles River aquifer at Elm Bank for the purposes of pumping water for public domestic use. Only Natick currently does this, subject to an agreement with Dover. If Dover should ever require the use of Charles River water, it has the legal right to use water drawn at Elm Bank.



Lilies on Springdale. Photo by Amelia Slawsby.

Report of the Tick-Borne Disease Committee

Stephen Kruskall, MD, Chair
Tim Holiner
Matthew Schmid

Jim Palmer, Deer Management Agent
Mike Francis, DMP Representative
Jay Walsh, DMP Representative

Mission

The mission of the Board of Health's (BOH's) Tick-Borne Disease Committee (TBDC), formerly known as the Lyme Disease Committee, is to seek the reduction of tick-borne diseases in the Town of Dover by informing residents about personal and property protection against ticks, disease transmission and recognition, and methods for overall tick density reduction. The TBDC makes recommendations to the BOH and the Town's governing bodies for implementing these goals.

Personal and Property Protection

One of the TBDC's major efforts is to educate residents about personal and property protection. It does so by distributing materials produced by the TBDC, the Massachusetts Department of Public Health, and the Centers for Disease Control and Prevention. Materials are made available at several locations throughout Dover, including the Town House, the Town Library, the Post Office, and the Police Department, as well as through e-mails to parents of school-aged children. The TBDC updates the Town of Dover website with tick alerts and other helpful data and provides additional information on its own website (www.doverlyme.com).

Deer Management Plan

Since 2010, the TBDC has implemented a yearly Deer Management Plan (DMP), a regulated hunting program based on the experience and guidance of the Massachusetts Division of Fisheries & Wildlife (MassWildlife) and on Dover-specific rules and regulations, the most specific of which is that only bow hunting from tree stands is allowed. The plan is administered on Town-owned and other conservation land, as well as on private properties with signed permission from the landowners. As in past years, extensive signage was posted along trails and at entrances to all properties participating in the DMP.

Fifty-six hunters were certified for the 2020 hunting season, during which hunting was permitted on various Town properties (a downloadable map of public lands should be available on the TBDC website). By season's end on December 31, a total of 22 deer had been harvested. This year's total continues to be in line with the average of previous years' individual harvests and will hopefully maintain the deer population in Dover at least at a stable level, if not reduce it slightly. Most importantly, no injuries or complaints were reported to the Police Department, the TBDC, the BOH, or the deer management agent.

The BOH and TBDC believe that the current three-pronged approach to managing tick-borne diseases—personal hygiene, property management, and deer and tick density management—has been successful in reducing tick-borne disease incidence rates in our area.

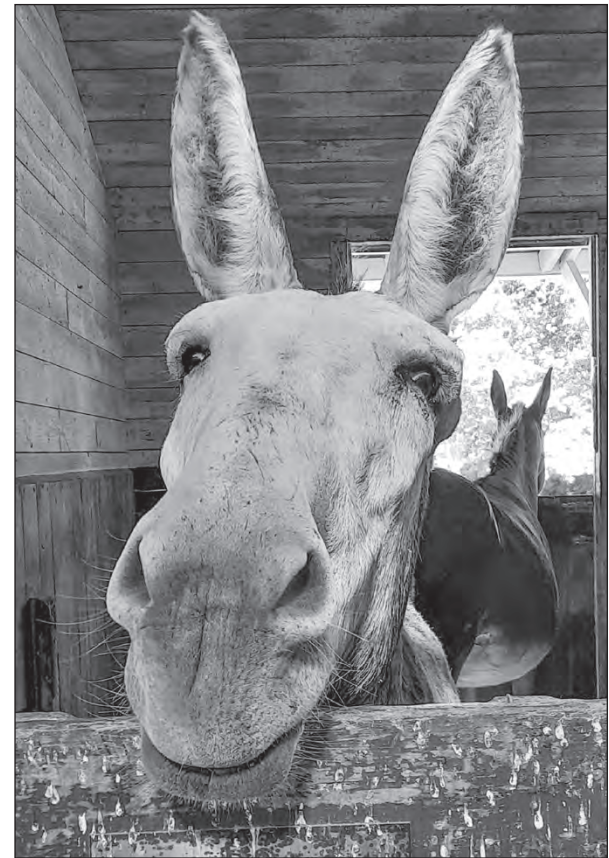


Photo by Jennifer Luethy.

Report of the Norfolk County Mosquito Control District

David A. Lawson, Director

The Norfolk County Mosquito Control District (NCMCD) takes an Integrated Pest Management (IPM) approach to mosquito control that is rational, environmentally sensitive, and cost effective.

Surveillance

We engage in an intensive monitoring process through weekly field collections and data analysis, in collaboration with the Massachusetts Department of Public Health, to detect disease-vectoring mosquitoes. Virus isolations help us focus our surveillance on hot zones, allowing us to alert nearby towns of a potential epidemic. Public requests for service alert us to high numbers of nuisance mosquitoes. We had 124 requests for service in 2020. We submitted 21 samples and one West Nile virus isolation was found.



Photo by Ford Spalding.

Water Management Activities

An important component of IPM is the management of existing flow systems that, if neglected, can contribute to mosquito breeding. In addition to performing drainage system maintenance, NCMCD personnel are engaged in: communication with residents and town, state, and federal officials; site visits; monitoring; wildlife management; and land surveys. Maintaining regulatory compliance is integral to the management of waterways that may contribute to mosquito breeding. Pre- to post-management documentation allows us to assess the efficacy of our work. Tire collections remove a common breeding site of mosquitoes.

- Culverts cleared: 59
- Drainage ditches checked/hand-cleaned: 2,230 feet
- Hydrants shoveled when needed during culvert work: 0
- Intensive hand-cleaning/brushing: 0 feet*
- Mechanical water management: 0 feet
- Tires collected: 0

**Combination of brush cutting and clearing of severely degraded drainage systems or streams by hand.*

Larval Control

When mosquito larval habitat management is not possible, larvicide application to control larval mosquito populations is the most environmentally friendly and effective method of disease control. An intensive monitoring program aids in our decision to effectively target culprits locations.

- Spring aerial larvicide applications (April): 113.3 acres
- Summer aerial larvicide applications (May–August): 0 acres
- Larval control (briquette and granular applications by hand): 12.3 acres
- Abandoned/unopened pools or other manmade structures treated: 0 briquettes

Adult Mosquito Control

Adult mosquito control is necessary when public health and quality of life are threatened by disease agents, overwhelming populations, or both. Our rigorous surveillance program, along with service request data and state-of-the-art GPS and computer equipment, helps us effectively target treatments. In 2020, the NCMCD sprayed 2,793 acres with aerosol ultra-low-volume applications of insecticide.

Report of the Animal Control Officer

Lorilyn Sallee

Type of Call	# Calls
Loose, Missing, Returned Animals	136
Dogs Hit by Motor Vehicles	3
Dog Bites	10
Other Animal Calls	91
Deer Hit or Killed	15
Total Calls	255

Citations Issued	101
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Mallard at Channing Pond. Photo by Beth Zaffino.

Report of the Natick Walpole Visiting Nurse Association

Board Officers

Sheila Ahmed, President

Callum Maclean, Treasurer

Virginia Fettig, JD, Secretary

Agency Leadership Team

Elaine D. Stephens, RN, MPH, FHHC, CEO

Alyssa Kaiser, RN, BSN, Public Health Nurse Specialist

Simone Carter, RN, BSN, Public Health Nurse Specialist

The Natick Walpole Visiting Nurse Association (VNA) is a nonprofit, community-based, Medicare-certified home care agency providing high-quality home health, palliative, and public health programs and services to people of all ages in Dover and more than 40 surrounding communities.

The VNA's nursing services include physical, occupational, and speech therapy; medical social work; home health aides; maternal and child health services; pediatric nursing; and the services of a geriatric nurse practitioner. The agency also has nurses who are certified in intravenous therapy and wound care. The agency delivers telehealth services, which encompass various technologies and tactics for delivering virtual medical, health, and education services.

Alyssa Kaiser serves as the agency's public-health nurse specialist, whose primary role is to provide public health services and educational programs for the towns we serve. This year we added Simone Carter, RN, BSN, who is a public-health nurse specialist. The COVID-19 pandemic increased the volume of communicable disease follow-up that was needed and made it necessary to have two nurses. We also wanted to have a back-up nurse at such a critical time.

The VNA provides the Town of Dover with the following health services:

Home Care promotes good health and maximum functioning for disabled residents of all ages. The VNA provides nursing, therapy, social work and home health-aide services to residents who have been referred to the VNA by physicians, hospitals, and nursing homes. Telehealth services, wound-care specialists, and high-tech nursing care for complex care needs are also available. The VNA conducts home assessments and provides both home care and health promotion visits for Dover residents with chronic illnesses or conditions or who might need information or access to services. Families interested in learning more about available community resources and Town