

# PUBLIC HEALTH NUISANCE GUIDANCE DOCUMENT

completed by the

**NH PUBLIC HEALTH NUISANCE TASKFORCE**

and the

**NETWORK FOR PUBLIC HEALTH LAW EASTERN REGION**



The information contained in this document is broad and intended for informational purposes only. This document is not a substitute for legal advice. Since every case is different, should you need specific guidance, you are encouraged to contact your attorney. The information shared in this document is not intended to create an attorney client relationship.

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## BACKGROUND

In April 2010 the New Hampshire Association of Health Officers' general membership expressed a need to better understand and define NH RSA 147 *Nuisances; Toilets; Drains; Expectoration; Rubbish and Waste*, otherwise known in this document as the Public Health Nuisance standard. To achieve this goal, a public health nuisance taskforce was formed comprised of a diverse group of professionals.

Between April 2010 and September 2011 this taskforce met on five occasions working towards the development of guidelines that could be used by state officials and local Health Officers to address public health nuisances. The taskforce wanted these newly developed guidelines to include a general definition of "Public Health Nuisance" in New Hampshire law as well as examples of definition from other states. The goal of the taskforce was to develop guidelines that were not legally binding but rather provide a range of factors for consideration when making a local or state level determination of what falls within Public Health Nuisance based on New Hampshire law and the group of experts gathered to review this subject. Once completed, the taskforce wanted to make this guidance document available to the public through websites of the NH Health Officer Association and the Division of Public Health Services.

Over the course of the seventeen months that the taskforce met, they identified five public health nuisances that they felt were particularly challenging to New Hampshire Health Officers. These high priority public health nuisances included; airborne particulates from outdoor wood furnaces, infestation of pests, sanitation of waste water, moisture and mold and unsanitary living conditions. The taskforce then developed an algorithm to be used when making the determination if something fit the criteria of a public health nuisance. The algorithm included the following reasoning:

- Does the condition meet the general definition of public health nuisance as it is currently presented in NH law?

- Is there evidence that the condition is causing or could have a health impact on members of the public?
- Is the condition already addressed in another federal, state or local law, rule or local ordinance?
- Does the problem require enforcement action?

The taskforce was also interested in developing model language that could be used by cities and towns interested in developing stronger local public health ordinances. To achieve this, they gathered samples and compared the language of ordinances from New Hampshire cities and towns.

The momentum of the taskforce was temporarily slowed down by the vacancy of the Division of Public Health Liaison in November 2012. When this position was filled in 2013, the Division of Public Health Services (DPHS) moved forward and contacted the Network for Public Health Law Eastern Region at the University of Maryland Francis King Carey School of Law about assisting the taskforce in completing this guidance document. The Network for Public Health Law agreed to partner with DPHS to provide and review sample ordinances that are working successfully nationally and identify for New Hampshire a template ordinance for a small, medium and large communities, identify the health impacts relative to each of the five potential public health nuisances, and provide case law research.

Once the draft *Public Health Nuisance Guidance Document* was available for review, the Taskforce reconvened in January 2014. Over the course of several meetings, the Taskforce reviewed the findings of The Network for Public Health Law and the Public Health Resource Section developed by DPHS. In September 2014, this document was released to the public.

## **OVERVIEW OF PUBLIC HEALTH NUISANCE**

A local Health Officer's authority to abate public nuisances is an important tool in protecting the public's health. In general, a nuisance is defined as a "condition, activity, or situation (such as a loud noise or foul odor) that interferes with the use or enjoyment of property; esp., a nontransitory condition or persistent activity that either injures the physical condition of

adjacent land or interferes with its use or with the enjoyment of easements on the land or of public highways.”<sup>1</sup> When this interference substantially and unreasonably affects the use and enjoyment of a single or small group of properties it is considered a private nuisance.<sup>2</sup> When an activity unreasonably interferes “with a right common to the general public,” it is considered a public nuisance.<sup>3</sup> As such, a public nuisance is a “behavior that unreasonably interferes with the health, safety, peace, comfort or convenience of the general community.”<sup>4</sup> A public nuisance could include public health threats such as pest infestations, unsanitary living conditions, improper use of outdoor wood boilers, or properties with unreasonable accumulation of garbage. At times, conduct may be both a private and a public nuisance if it causes both a particular harm to a specific property and a more generalized harm to the greater community.<sup>5</sup> However, the local Health Officer’s focus is to play an important role in addressing the health threat presented by public nuisances.

To understand the scope of the Health Officer’s power to abate public nuisances, it is helpful to understand the source of this authority - the police powers of the state government. However, to determine the scope of state government authority you must first look to the U.S. Constitution and the concept of federalism. Federalism is the division of power between the federal government and state governments. The basis of federalism in the United States is the 10<sup>th</sup> Amendment, which states that any powers not “delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people.” Under this broad reservation of power, states have police powers. Police powers are the authority to enact and enforce legislation and regulations to protect the welfare, health, and safety of the population. These police powers provide the basis for a state’s nuisance abatement authority. However, the relationship between state and local governments is different than the concept of federalism. Local governments are generally recognized as subsidiaries of their

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<sup>1</sup> Black’s Law Dictionary, Ninth Edition (2009)

<sup>2</sup> Dunlap v. Daigle, 122 N.H. 295, 298 (1982).

<sup>3</sup> Robie v. Lillis, 112 N.H. 492, 495 (1972).

<sup>4</sup> Id.

<sup>5</sup> Urie v. Franconia Paper Co., 107 N.H. 131, 133(1966).

respective states. Any power that local authorities exercise must be delegated from the state. The section below examines the delegation of nuisance abatement authority to local Health Officers and explores the parameters placed on this authority by the state.

## **AUTHORITY TO DRAFT REGULATIONS**

To address the public health threat posed by public nuisances, the state has delegated considerable authority to local Health Officers. New Hampshire RSA 147:1 grants the Health Officers of cities and towns the authority to draft regulations for the “prevention and removal of nuisances, and such other regulations relating to the public health as in their judgment the health and safety of the people require. . . .”<sup>6</sup> For local regulations drafted under this provision to take effect, they must be approved by the selectmen, recorded by the town clerk, and published in a newspaper printed in the town, or posted in two or more public places in the town.<sup>7</sup>

The scope of this authority is intentionally broad to allow Health Officers to address the public health threats specific to their community and to provide a tool that can adapt as new challenges develop within the community. The courts in New Hampshire have respected this expansive delegation of authority and have done little to narrow the scope of the local Health Officer’s nuisance abatement power.

The combination of a broad delegation of regulatory authority and 13 cities, 221 towns, and 25 unincorporated places in New Hampshire creates the potential for a diverse array of local public nuisance ordinances. However, few local jurisdictions have utilized this authority to create public health ordinances that elaborate upon the general definition of public nuisance provided by the State. A survey of these regulations indicates that some jurisdictions have drafted regulations that leave the definition of public nuisance broad, rather than narrowing its scope with specific examples. For example, the City of Portsmouth, New Hampshire, addresses the issue of nuisance in its public health ordinances by stating:

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<sup>6</sup> NH RSA 147:1 (2013)

<sup>7</sup> Id.

The Health Officer shall inquire into all nuisances and all causes of danger to the public health, and whenever he shall know, or have cause to suspect, that any nuisance or other thing injurious to the public health is in any building, vessel, or enclosure he shall make complaint under oath to some justice of the peace who shall issue a warrant directed to the proper authority to search such building, vessel or enclosure and he may enter therein and make search.<sup>8</sup>

Other jurisdictions have taken a different approach by providing a general definition of nuisance and a non-exclusive list of public health threats that qualify as a nuisance. For example, the local regulation in the City of Berlin, New Hampshire defines nuisance, in the vector control section of its public health code, as

any condition or use of premises or of building exteriors which is detrimental to the property of others or which causes or tends to cause substantial diminution in the value of other property in the neighborhood...or shall cause or result in annoyance or disturbance to persons beyond the boundaries of such property; inference to the health and/or safety of the person beyond the boundaries of such property....<sup>9</sup>

The regulation then indicates that this definition of nuisance includes, but is not limited to, the presence on the premises of any of the following:

junk, trash, or debris, abandoned, discarded or unused objects or equipment such as but not limited to automobiles, furniture, paper, cardboard, plastic, glass, crockery, scrap metal, tires, stoves, refrigerators, freezers, cans or containers.<sup>10</sup>

It is also important to note that some jurisdictions also address public nuisance through the provisions of their property maintenance code or zoning regulations. Although these ordinances may look at specific structural issues, they also address public health threats. For example, the Housing Code of Manchester, New Hampshire includes in its definition of public

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<sup>8</sup> Portsmouth, NH, Public Health Ordinance, art. I. § 3.101.

<sup>9</sup> Berlin, NH, Health Regulations § 7-26(7).

<sup>10</sup> Id.

nuisance “[a]ny premises which are unsanitary, or which are littered with rubbish or garbage, or which have an uncontrolled growth of weeds.”<sup>11</sup>

Local jurisdictions outside of New Hampshire utilize the same approaches to public nuisance ordinances in their efforts to protect the public’s health. To ensure that the ordinances we reference in this document represented communities both large and small, over 100 jurisdictions were researched. For your review, the Resource Section of this document provides links to a sampling of local nuisance ordinances from New Hampshire and other states.

## **ENFORCEMENT AUTHORITY**

In addition to drafting public nuisance regulations, Health Officers have a duty to investigate “all nuisances and other causes of danger to the public health.”<sup>12</sup> Regardless of a jurisdiction’s decision to draft regulations pursuant to New Hampshire RSA 147:1, a local Health Officer has the duty to investigate and the authority abate public nuisances.<sup>13</sup>

To investigate a public nuisance claim, a Health Officer will often need access to private property to determine if there is indeed a public health threat. When the property owner or occupant refuses to grant access to the property, an administrative inspection warrant can be procured from a justice of a municipal, district, or superior court.<sup>14</sup> However, there are circumstances when notice is *not* required. First, the owner of the property must be unknown **or** does not reside in the town. Second, the property must be unoccupied **or** the occupant is, in the opinion of the Health Officer, unable to remediate the nuisance. If both of these two conditions are met, the Health Officer can without previous notice remove or destroy the public nuisance.<sup>15</sup>

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<sup>11</sup> Manchester, NH, Housing Code § 150.002(B).

<sup>12</sup> NH RSA 147:3 (2013)

<sup>13</sup> See NH RSA 147:3 (granting authority to investigate nuisances and other dangers to the public health); see also NH RSA 147:4 (granting authority to remove nuisances.)

<sup>14</sup> NH RSA 595-B:1 (2013)

<sup>15</sup> NH RSA147:6 (2013)

This administrative inspection warrant authorizes the inspection of the property. However, to secure the warrant you must show probable cause by affidavit.<sup>16</sup> An affidavit is a written statement of facts made under oath. This affidavit must

describe the place, dwelling, structure, premises, vehicle or records to be inspected and the purpose for which the inspection is to be made. In addition, if testing or sampling is requested, the affidavit shall describe the time and manner of such testing or sampling. In all cases, the affidavit shall contain either a statement that the consent to inspect has been sought and refused, or facts or circumstances reasonably justifying the failure to seek such consent.<sup>17</sup>

Once the administrative inspection warrant is secured it must be executed within 7 days of its issue or it becomes void.<sup>18</sup> However, you may request an extension or a renewal of the inspection warrant from the justice who issues the original warrant.<sup>19</sup> The warrant must be served between 8am and 6pm unless specifically authorized by the issuing justice as necessary.<sup>20</sup> The inspection authorized by the warrant cannot be carried out by a forcible entry unless the warrant specifically authorizes otherwise.<sup>21</sup> To help execute the inspection warrant, the Health Officer can bring law enforcement to assist in the process.<sup>22</sup> During the inspection, a copy of the warrant must be provided to the owner or occupant; or if neither is present then it should be left at the location. In addition, if any samples are taken from the site, a receipt should be given to the owner or occupant; or left at the sampling location.<sup>23</sup> There are occasions when a Health Officer might be called in to accompany other governmental officials on ‘their’ administrative

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<sup>16</sup> NH RSA 595-B:2

<sup>17</sup> Id.

<sup>18</sup> NH RSA 595-B:4

<sup>19</sup> Id.

<sup>20</sup> NH RSA 595-B:5

<sup>21</sup> Id.

<sup>22</sup> Id.

<sup>23</sup> NH RSA 595-B:6

inspection warrant. Please check with your Town/City Attorney to ensure that this is permitted in each specific instance.

If the property owner or occupant of the nuisance property refuses entry when the warrant is presented, they can be found guilty of a Class B Misdemeanor.<sup>24</sup> Class B Misdemeanors are subject to a penalty of up to \$1,200.<sup>25</sup> However, the state can file a notice of intent to seek Class A Misdemeanor penalties which would increase the penalty to a maximum of \$2,000 and a potential of up to one year in prison.<sup>26</sup> For additional information on the administrative inspection warrant process please see the legal resource section of this document.

Once a public nuisance has been discovered, a Health Officer can require the owner or occupant of building, vessel, premises, or property to remove or destroy a public nuisance within a specific time.<sup>27</sup> Generally, the Health Officer must provide the owner or occupant of the property with written notice of this Order. This notice must be given to the individual or left at the owner's or occupant's abode. Having law enforcement serve the document is an efficient way of providing notice. Although not required by law, it may expedite the nuisance abatement process to deliver the notice by certified mail with return receipt requested or through another delivery service with receipt confirmation.

If the individual fails to comply with the Order, the Health Officer has the authority to forcibly enter the property and abate the nuisance.<sup>28</sup> In executing the authority to forcibly enter a property, caution should be exercised in these potentially inflammatory situations. It would be prudent to involve law enforcement to help ensure a safe and expedient resolution.

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<sup>24</sup> See NH RSA 595-B:8 (2013)(stating that refusal to grant entry is a misdemeanor); see also NH RSA 625:9 (IV)(c) (2013) (stating that any undesignated misdemeanor is a class B misdemeanor unless it involves an act or threat of violence).

<sup>25</sup> NH RSA 651:2 (2013)

<sup>26</sup> Id.; see also NH RSA 625:9 (IV)(c) (allowing the state to seek class A penalties).

<sup>27</sup> NH RSA147:4 (2013)

<sup>28</sup> Id.

In either case, the Health Officer may enlist the assistance of others to abate a public nuisance.<sup>29</sup> Resisting the efforts of the Health Officer or their assistants during the abatement process is a Class B Misdemeanor,<sup>30</sup> subject to a fine up to \$1,200.<sup>31</sup>

The owner or occupant of a property is liable for the expenses incurred in the abatement of a public nuisance.<sup>32</sup> There are two processes through which a Health Officer may recuperate abatement costs. The Health Officer may bring a civil action in the name of the town<sup>33</sup> or they may issue an “Order for Abatement Costs pursuant to RSA 147:7-b.”<sup>34</sup>

To issue this, an Order for abatement costs, the Health Officer must first obtain the consent of the municipal governing body. Often municipalities issue verbal warnings and advisory letters prior to issuing an Order. When doing this, the Health Officer must be certain that he has thoroughly documented all site visits, discussions, phone calls, meetings, and emails. Once consent is secured, the Order must contain the following elements:

- (1) A copy of the notice sent to owner or occupant. This notice must contain a description of the public nuisance, the date of any inspection, required corrective actions, and a reasonable time line for the correction of the public nuisance. This notice must also indicate that failure to take corrective action may result in action by the municipality and the cost of these actions shall result in a lien against the real estate.<sup>35</sup>
- (2) A statement of the corrective actions taken by the municipality.

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<sup>29</sup> NH RSA 147:5

<sup>30</sup> NH RSA 625:9

<sup>31</sup> NH RSA 651:2

<sup>32</sup> NH RSA 147:7

<sup>33</sup> Id.

<sup>34</sup> NH RSA 147:7-b

<sup>35</sup> NH RSA 147:7-a

- (3) An accounting of the municipality's expenses related to abating the nuisance.
- (4) A statement that indicates that the abatement costs constitute a lien against the real estate that is enforceable in the same manner as real estate taxes and that if no objection is filed with the Health Officer within 30 days; the account will be committed to a tax collector.
- (5) The address of office of the Health Officer, where any objections must be filed
- (6) A copy of N.H. Rev. State Ann. § 147:7-b which address the collection of nuisance costs.

This Order must be served upon the record owner of the property or their agent, and the person to whom the property's taxes are assessed, if they are not the owner of the property. After the Order has been served, the individual may file a written objection to Order with the Health officer. This objection must be filed within 30 days of receiving the Order and must specify the basis for opposing the Order. If an objection is not promptly filed, the Health Officer may initiate the collection process by providing the officer responsible for issuing tax warrants with a copy of the Order, proof of service, and a certification that no objection was received.<sup>36</sup> However, when an objection is filed the Health Officer may file a motion to affirm the Order with the district court of the district in which the property is situated or the superior court, if the amount at issue exceeds the district court's civil damage limits (\$25,000<sup>37</sup>). The court will then conduct a hearing on the motion, at which material and proper evidence may be allowed. After the hearing the court will affirm, correct, or deny the Order for abatement costs.

## **AUTHORITY TO DRAFT AND ENFORCE REGULATIONS**

The authority to draft and enforce local nuisance regulations provides local Health Officers with an important tool in protecting the public health of their community. While the broad

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<sup>36</sup> NH RSA 147:7-b

<sup>37</sup> NH RSA 502-A:14

delegation of regulatory authority may seem unyielding, it is expansive to provide Health Officers with power to address the specific challenges of their community and to adapt as new challenges arise. Likewise the enforcement procedures required by the state may seem detailed, but they provide the due process needed to balance the rights of the individuals with the public health concerns of the community.

## LEGAL RESOURCE SECTION

For further research, we have provided links to the relevant New Hampshire code, a sample of Local New Hampshire Ordinances, and a sample of nuisance ordinances from other states.

1. New Hampshire Public Nuisance Code

<http://www.gencourt.state.nh.us/rsa/html/NHTOC/NHTOC-X-147.htm>

2. Sample New Hampshire Nuisance Ordinances

- a. City of Portsmouth

<http://www.cityofportsmouth.com/cityclerk/ordinances/Chapter3.pdf>

- b. Claremont City

<http://library.municode.com/index.aspx?clientId=12246>

- c. Town of Kingston

[http://www.kingstonnh.org/sites/vth-kingston/files/file/file/ordinance book titleiii section1300 article1303 vectorcontrol\\_04\\_07\\_09.pdf](http://www.kingstonnh.org/sites/vth-kingston/files/file/file/ordinance%20book%20titleiii%20section1300%20article1303%20vectorcontrol_04_07_09.pdf)

- d. City of Berlin

<http://www.berlinnh.gov/Pages/FV1-000288C9/FV1-000317B8/S00C11EC7>

- e. City of Somersworth

<http://www.somersworth.com/uploads/%7B6A358E86-F1E9-48A6-9007-17B2B8618EE5%7D.PDF>

3. Sample Nuisance Ordinances from Other States

- a. Story County, Iowa

<http://www.storycountyiowa.gov/DocumentCenter/Home/View/975>

- b. Kent County, Michigan

[http://www.accesskent.com/Health/Publications/pdfs/Nuisances\\_Regulations.pdf](http://www.accesskent.com/Health/Publications/pdfs/Nuisances_Regulations.pdf)

- c. Borough of Pennington Mercer County, New Jersey

<http://www.penningtonboro.org/BOH%20Ordinance%202008-1%20-%20Nuisance%20Code.pdf>

- d. LaSalle County, Illinois

<http://www.lasallecounty.org/hd/eh/pubs/Pbnuisan.pdf>

- e. Weymouth, Massachusetts

[http://www.weymouth.ma.us/CMS200Sample/uploadedfiles/17\\_Reg\\_Nuisances.pdf](http://www.weymouth.ma.us/CMS200Sample/uploadedfiles/17_Reg_Nuisances.pdf)

- f. Norfolk, Virginia

<http://www.norfolk.gov/index.aspx?nid=1167>

- g. Clermont County, Ohio

<http://www.clermonthealthdistrict.org/NuisanceCompRegulations.pdf>

- h. Cerro Gordo County, Iowa

[http://www.co.cerro-gordo.ia.us/Supervisors/Ordinances/11B\\_Amended\\_Nuisance\\_Ordinance.pdf](http://www.co.cerro-gordo.ia.us/Supervisors/Ordinances/11B_Amended_Nuisance_Ordinance.pdf)

- i. Model Nuisance Ordinance from Massachusetts Association of Health Boards

<http://www.mahb.org/bohregs/nuisance.htm>

4. RSA 595-B Administrative Inspection Warrants
  - a. Administrative Inspection Warrant Statute  
<http://www.gencourt.state.nh.us/rsa/html/LIX/595-B/595-B-mrg.htm>
  - b. Guide To District Court Enforcement of Local Ordinances and Codes  
<https://www.nh.gov/oep/resource-library/laws-rules-cases/documents/2001-nhba-district-court-enforcement-guide.pdf>
  - c. Sample#1 Petition for an Administrative Inspection Warrant  
[http://www.nhhealthofficers.org/manual/sample\\_files/Request\\_Administrative\\_Inspection\\_Warrant.pdf](http://www.nhhealthofficers.org/manual/sample_files/Request_Administrative_Inspection_Warrant.pdf)
  - d. Sample#2 Petition for an Administrative Inspection Warrant  
[http://www.nhhealthofficers.org/manual/sample\\_files/Administrative\\_Inspection\\_Warrant\\_DistCrt.pdf](http://www.nhhealthofficers.org/manual/sample_files/Administrative_Inspection_Warrant_DistCrt.pdf)

## **PUBLIC HEALTH RESOURCE SECTION**

### **Airborne Particulates from Outdoor Wood Furnaces**

According to the World Health Organization (WHO) and supported by federal agencies that include Centers for Disease Control and Prevention and US Environmental Protection Agency (EPA), fine particulate matter that is generated by wood smoke is associated with a broad spectrum of acute and chronic illness, such as lung cancer and cardiopulmonary disease. According to the EPA, toxics in the wood smoke emissions from outdoor wood furnaces include carbon monoxide, PM2.5, PM10, methane, volatile organic compounds, benzene, sulfur dioxide, nitrogen oxides, ammonia, formaldehyde, acetaldehyde, phenol, naphthalene, cresols, acrolein, 1,3-butadiene, benzopyrene, mercury, dioxins and furans. The size of particles is directly linked to their potential for causing health problems. Small particles less than 10 micrometers in diameter pose the greatest problems, because they can get deep into the lungs, and some may even get into the bloodstream. Among these particles are “fine particles,” which are 2.5 micrometers in diameter and smaller. These fine particles can affect both your lungs and your

heart. Numerous scientific studies have linked particle pollution exposure to a variety of problems, including increased respiratory symptoms, such as irritation of the airways, coughing, or difficulty breathing; decreased lung function; aggravated asthma; development of chronic bronchitis; irregular heartbeat; nonfatal heart attacks; and premature death in people with heart or lung disease. Supporting documentation includes:

*Health Effects of Breathing Wood Smoke* – U.S. Environmental Protection Agency website.

[http://www.epa.gov/burnwise/pdfs/woodsmoke\\_health\\_effects\\_jan07.pdf](http://www.epa.gov/burnwise/pdfs/woodsmoke_health_effects_jan07.pdf)

*Biomass smoke exposures: Health outcomes measures and study design* – Centers for Disease Control and Prevention.

[http://www.cdc.gov/nceh/airpollution/airquality/pdfs/mtbiomass\\_conference\\_health\\_outcomes.pdf](http://www.cdc.gov/nceh/airpollution/airquality/pdfs/mtbiomass_conference_health_outcomes.pdf)

*The Dangers to Health From Outdoor Wood Furnaces* – Environment & Human Health, Inc.

[http://www.ehhi.org/reports/woodsmoke/woodsmoke\\_report\\_ehhi\\_1010.pdf](http://www.ehhi.org/reports/woodsmoke/woodsmoke_report_ehhi_1010.pdf)

*Human Health Risks Associated with Particulate Matter in the Ambient Environment* – US Environmental Protection Agency.

<http://www.epa.gov/ncer/science/pm/2008sab/091508summary.html>

United States Environmental Protection Agency. (2008 May). Particulate Matter. Retrieved on June 9, 2008 <http://www.epa.gov/oar/particlepollution/>

*Air Trends: Particulate Matter* - United States Environmental Protection Agency. (2008 April).

<http://www.epa.gov/airscience/air-particulatematter.htm>

*Outdoor Pollution* - World Health Organization

[http://www.who.int/phe/health\\_topics/outdoorair/en/](http://www.who.int/phe/health_topics/outdoorair/en/)

## **Infestation of Pests**

The second half of the 20th century and the beginning of our current century have witnessed important changes in ecology, climate and human behavior that favor the development

of pests that include rats, mice, cockroaches, fleas, house flies, mosquitos, dust mites and regional habitat of these pests. People can no longer assume that pest-borne diseases are relics of the past. According to the World Health Organization, Centers for Disease Control and Prevention, and the US Environmental Protection Agency, public health risk posed by various pests can include West Nile Virus, Lyme Disease, Histoplasmosis, Hantavirus, Plague, Salmonellosis, Leptospirosis, rat bites, and mouse, dust mite and cockroach allergens that can trigger asthma. Health effects associated with increased use of certain pesticides to combat these pests can include eye, nose, and throat irritation, skin rashes, stomach cramps, nausea, central nervous system and kidney damage, and increased risk of cancers. RSA 48-A:14, Housing Standards <http://www.gencourt.state.nh.us/rsa/html/III/48-A/48-A-mrg.htm> was updated in January 2014 to include inspection and remediation standards for property owner of rental properties infested with insects and rodents. Supporting documentation includes:

*Public Health Significance of Urban Pests* - World Health Organization  
[http://www.euro.who.int/\\_data/assets/pdf\\_file/0011/98426/E91435.pdf](http://www.euro.who.int/_data/assets/pdf_file/0011/98426/E91435.pdf)

### **Sanitation of Standing and Surface Water**

Approximately 40 percent of New Hampshire residents rely upon private wells as a primary source of drinking water. Unregulated for portability, these private wells are at risk for high levels of coliform bacteria, radon, arsenic, and chemical contamination. Coliform bacteria, which include fecal bacteria such as *Escherichia coli* (*E. coli*), are microscopic organisms that originate in the intestinal tract of warm-blooded animals and are also present in soil and vegetation. Based on state lab test results from private wells, 19% of private wells indicate the presence of coliform bacteria in private well water. Coliform bacteria, though harmless for many, are a risk for children, pregnant woman, and immuno-compromised people. The presence of coliform Bacteria in well water may indicate other disease-causing bacteria, viruses or parasites (pathogens) of fecal origin are present.

Data from the NH Department of Environmental Services studies indicate that 1 in 5 bedrock wells in the state are likely to exceed the revised and more stringent US Environmental Protection Agency (EPA) arsenic drinking water standard of 0.010 milligrams per liter (mg/L). Further study by the United States Geologic Survey found a positive correlation between the

prevalence of private well use and bladder cancer mortality rates in the region. Bladder cancer rates in New Hampshire are 29% above the national average and are increasing over time.

Standing water plays a critical role in the spread of insect-borne diseases because many insects, such as mosquitos, breed around water. Infected insects can transmit deadly disease to humans through their bite, such as malaria, dengue fever, and West Nile encephalitis. According to the Center for Disease Control and Prevention, worldwide, over one million people die each year due to mosquito-borne diseases. New Hampshire is especially vulnerable to West Nile virus, and Eastern equine encephalitis virus (EEE). EEE is transmitted to humans by the bite of an infected mosquito. Adult mosquitos make their home in weeds, tall grass, and bushes and they lay their eggs in standing water. Unkempt pools, hot tubes, lawn ornaments, tires, tin cans, roof gutters, wheel barrows, and un-aerated garden ponds present attractive places for mosquitos to lay eggs. As New Hampshire's climate continues to transition to warmer temperatures with increased precipitation and severe weather events, we can anticipate increased rain events that will lead to flooding. This will directly impact the number of mosquitoes and other insects that breed around standing water collecting in containers, potentially creating high-risk environments for disease.

RSA 48-A:14, Housing Standards <http://www.gencourt.state.nh.us/rsa/html/III/48-A/48-A-mrg.htm> prohibits defective internal plumbing or back up of sewerage caused by faulty septic or sewerage system. Supporting documentation includes:

RSA 147, Nuisances; Toilets; Drains; Expectoration; Rubbish And Waste - <http://www.gencourt.state.nh.us/rsa/html/NHTOC/NHTOC-X-147.htm>

*Global WASH-Related Diseases and Contaminants*, Center for Disease Control and Prevention, [http://www.cdc.gov/healthywater/wash\\_diseases.html](http://www.cdc.gov/healthywater/wash_diseases.html)

*Vector or Insect-borne Diseases Associated with Water* - Center for Disease Control and Prevention, [http://www.cdc.gov/healthywater/wash\\_diseases.html#vector](http://www.cdc.gov/healthywater/wash_diseases.html#vector)

*Water-related Diseases, Contaminants, and Injuries by Type* - Centers for Disease Control & Prevention, <http://www.cdc.gov/healthywater/disease/type.html>

*Sanitation & Hygiene* - Centers for Disease Control & Prevention, <http://www.cdc.gov/healthywater/global/sanitation/index.html>

*Public Health Consequences of a Flood Disaster* - US Environmental Protection Agency, Iowa, 1993, <http://www.cdc.gov/mmwr/preview/mmwrhtml/00021451.htm>

*Waters (by type)* - US Environmental Protection Agency, <http://water.epa.gov/type/>

*Publications of water, sanitation and health* - World Health Organization, [http://www.who.int/water\\_sanitation\\_health/publications/en/](http://www.who.int/water_sanitation_health/publications/en/)

*Before the Swarm, Guidelines for the Emergency Management of Mosquito-Borne Disease Outbreaks* - The Association of State and Territorial Health Officials (ASTHO) <http://www.astho.org/Programs/Environmental-Health/Natural-Environment/Before-the-Swarm/>

*West Nile Virus* – Centers for Disease Control and Prevention <http://www.cdc.gov/westnile/index.html>

*Lyme Disease* – Centers for Disease Control and Prevention <http://www.cdc.gov/lyme/>

*Arsenic Information* - NH Department of Environmental Services - <http://des.nh.gov/organization/divisions/water/dwgb/capacity/arsenic.htm>

## **Moisture and Mold**

According to the Centers for Disease Control and Prevention, the World Health Organization, Occupational Safety and Health Administration and the American College of

Occupational and Environmental Medicine, the growth of molds in home, school, and office environments has been cited as the cause of a wide variety of human ailments and disabilities. Molds and other fungi may adversely affect human health through three processes: 1) allergy; 2) infection; or 3) toxicity. Microbial pollution is a key element of indoor air pollution. It is caused by hundreds of species of bacteria and fungi, in particular filamentous fungi (mold), growing indoors when there is high air humidity, condensation and water damage. These moist conditions promote the survival and growth of dust mites and fungi, resulting in increased exposure to mite and fungal allergens and fungal toxins and irritants. Damp indoor environments may also contain bacteria, bacterial endotoxins and other microorganisms.

According to the Division of Public Health Asthma Control Program, New Hampshire has the eleventh *highest* asthma rate in the nation. Approximately 110,000 adults (10%) and 25,000 children (10.4%) in the state have asthma. For a small state with a population of 1,323,459 (2013 Census), by any measure, this is significant. Each year, an average of eight New Hampshire residents die from asthma. Moisture and mold in the home is known to make asthma worse and can trigger an asthma attack. Some people with chronic lung illnesses, such as obstructive lung disease, may develop mold infections in their lungs.

In 2004 the Institute of Medicine (IOM) found there was sufficient evidence to link indoor exposure to mold with upper respiratory tract symptoms, cough, and wheeze in otherwise healthy people; with asthma symptoms in people with asthma; and with hypersensitivity pneumonitis in individuals susceptible to that immune-mediated condition. The IOM also found limited or suggestive evidence linking indoor mold exposure and respiratory illness in otherwise healthy children. The most important means for avoiding adverse health effects is the prevention (or minimization) of persistent dampness and microbial growth on interior surfaces and in building structures.

RSA 48-A:14, Housing Standards <http://www.gencourt.state.nh.us/rsa/html/III/48-A/48-A-mrg.htm> prohibits roofs, and wall that leak consistently. It also prohibits defective internal plumbing, and floors, walls, or ceilings with substantial holes. Supporting documentation includes:

*Mold* - Center for Disease Control and Prevention, <http://www.cdc.gov/mold/basics.htm>

*WHO Guidelines for Indoor Air Quality: Dampness and Mould* - World Health Organization, [http://www.euro.who.int/\\_data/assets/pdf\\_file/0017/43325/E92645.pdf](http://www.euro.who.int/_data/assets/pdf_file/0017/43325/E92645.pdf)

*Adverse Human Health Effects Associated with Molds in the Indoor Environment*, American College of Occupational and Environmental Medicine - [http://www.acoem.org/AdverseHumanHealthEffects\\_Molds.aspx](http://www.acoem.org/AdverseHumanHealthEffects_Molds.aspx)

*Mold*, Occupational Safety and Health Administration - <https://www.osha.gov/SLTC/molds/>

### **Unsanitary Living Conditions**

The role of housing as a contributor to health has been known for decades. In the early 1800s, the relationship between housing conditions and health was recognized among public health practitioners in the United States and Europe and led to the sanitary reform movement. Fast forward 100 years and partners from the U.S. Department of Housing and Urban Development (HUD); Department of Energy; Centers for Disease Control; Environmental Protection Agency (EPA); U.S. Department of Agriculture (USDA), US Surgeon General, National Institute of Environmental Health Sciences (NIEHS), and National Institute of Standards and Technology have come together to form the Federal Interagency Healthy Homes Workgroup to establish and champion a comprehensive Federal strategy to promote healthy homes and to support delivery of safe and healthy housing for all.

According to the National Center for Healthy Housing, the costs associated with unhealthy housing is estimated to be in excess of \$54.9 billion per year and does not include lost work days from school or work. These costs are associated with lead poisoning, neurobehavioral disorders, asthma, childhood cancer, injury, carbon monoxide, unsanitary water, fire, and carbon monoxide poisoning. Today's home visiting agencies (i.e. weatherization, visiting nurses, special medical services) are seeing families with a variety of mental wellness issues that can include hoarding, child abuse, elder abuse, unsanitary conditions, animal hoarding, electrical and fire issues. Each one of these issues on their own is unsafe, put them together and they are monumental.

RSA 48-A:14, Housing Standards <http://www.gencourt.state.nh.us/rsa/html/III/48-A/48-A-mrg.htm> is the minimum standards for rental properties in the state of New Hampshire. This

standard is the starting point for unsanitary living conditions. Supporting documentation includes:

*Healthy Homes*, National Center for Healthy Housing - <http://www.nchh.org/>

*Healthy Homes*, Center for Disease Control and Prevention - <http://www.cdc.gov/healthyplaces/newhealthyhomes.htm>

*Healthy Homes*, US Department of Housing and Urban Development - [http://portal.hud.gov/hudportal/HUD?src=/program\\_offices/healthy\\_homes/hhi](http://portal.hud.gov/hudportal/HUD?src=/program_offices/healthy_homes/hhi)

*Animal Hoarding and Public Health*, The Animal Hoarding Research Consortium - <http://vet.tufts.edu/hoarding/pubhlth.htm>

Management of animal hoarding and other animal cruelty issues,  
<http://www.nh.gov/humane/documents/animal-cruelty-manual.pdf>

Foodborne Illness and Contamination – U.S. Food and Drug Administration,  
<http://www.fda.gov/Food/FoodborneIllnessContaminants/default.htm>