

# Public Health Notes

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*NH DHHS Mission Statement: To join communities and families in providing opportunities for citizens to achieve health and independence.*

## Antimicrobial Resistance

The term antimicrobial refers to antibiotics and similar drugs that are used to fight infections by bacteria. They were originally developed about 70 years ago, the most prominent one being penicillin in the 1940s.

According to the Centers for Disease Control and Prevention (CDC), each year in the United States, at least 2 million people become infected with bacteria that are resistant to antibiotics and at least 23,000 people die each year as a direct result of these infections.



Antibiotic/antimicrobial resistance is the ability of microbes to resist the effects of drugs—that is, the germs are not killed, and their growth is not stopped. These drug-resistant bacteria can then go on to infect someone else, and it becomes much more difficult to treat the person infected because the choice of medications that will work is limited.

Scientists and doctors are very concerned that soon there may be bacteria and other microbes that cannot be treated by any available drugs. The pace at which new antibiotics are being developed is much slower than the bacteria are evolving.

Bacteria will inevitably find ways of resisting the antibiotics developed by humans, which is why

## Important Dates

*November is American Diabetes Month*

American Diabetes Association

[www.diabetes.org](http://www.diabetes.org)

*November is National Healthy Skin Month*

American Academy of Dermatology

[www.aad.org](http://www.aad.org)

*November is Prematurity Awareness Month*

March of Dimes Birth Defects Foundation

[www.marchofdimes.com](http://www.marchofdimes.com)

*November 14 is World Diabetes Day*

International Diabetes Federation

[www.worlddiabetesday.org](http://www.worlddiabetesday.org)

*November 17 is the Great American Smokeout*

American Cancer Society

[www.foodsafetymonth.com](http://www.foodsafetymonth.com)

*November 19 is International Survivors of Suicide Day*

American Foundation for Suicide Prevention

(AFSP)

[www.afsp.org/survivorday](http://www.afsp.org/survivorday)

*December is International AIDS Awareness Month*

International HIV/AIDS Alliance

[www.aidsalliance.org](http://www.aidsalliance.org)

*December 1 is World AIDS Day*

AIDS.gov

[www.aids.gov](http://www.aids.gov)

*December 4–10 is National Influenza Vaccination Week*

Centers for Disease Control and Prevention

[www.cdc.gov/flu/nivw](http://www.cdc.gov/flu/nivw)

*December 4–10 is National Hand Washing Awareness Week*

Henry the Hand Foundation

[www.henrythehand.com](http://www.henrythehand.com)



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aggressive action is needed now to keep new resistance from developing and to prevent the resistance that already exists from spreading. View this [CDC infographic](#) to better understand how antimicrobial resistance happens.

Here are some actions the CDC, clinicians and healthcare facilities, and other branches of the government are taking to help prevent antimicrobial resistance:

- Improving the prescribing of antibiotics. Up to half of antibiotic prescriptions are unnecessary, so make sure prescriptions are only for bacterial infections first.
- Developing new drugs and treatments.
- Preventing the spread of infections in the first place, such as improving infection control practices in hospitals.
- Encouraging major food producers to commit to phasing out unnecessary antibiotic use.

Here are the steps that the DHHS Division of Public Health Services is taking:

- DHHS received full requested funding from CDC to work to enhance surveillance infrastructure and develop prevention steps
- Convening a statewide stakeholder workgroup

Here are actions we can all take to help prevent antimicrobial resistance:

- Take all antibiotics exactly as prescribed.
- Do not take medication that belongs to someone else.
- Finish a prescription if it is prescribed.
- Do not demand antibiotics for illnesses they will not help, such as a cold, the flu, or other viral illnesses.
- Wash hands well and often with non-antibacterial soap.
- Always follow safe food preparation techniques to prevent the spread of bacteria.
- Get all your immunizations and keep them up to date.
- Follow safe sex practices and get tested if you are unsure of your health status.
- Ask your doctor what vaccines and medicines you need in advance of any travel outside of the

United States.

For more information, visit [www.cdc.gov/getsmart/community/about/antibiotic-resistance-faqs.html](http://www.cdc.gov/getsmart/community/about/antibiotic-resistance-faqs.html) or [www.cdc.gov/drugresistance](http://www.cdc.gov/drugresistance).

## The Great American Smokeout: The Perfect Time to Try Quitting Tobacco



Cigarette smoking still causes more than 480,000 deaths each year in the United States. This is nearly one in five deaths.

Smoking has been linked to:

- Heart disease
- Lung, bladder, colon, liver, and other cancers
- Stroke
- Chronic obstructive pulmonary disease (COPD)
- Preterm birth
- Type 2 diabetes
- Cataracts
- Rheumatoid arthritis
- Sudden infant death syndrome (SIDS), and more.

Every year, on the third Thursday of November,



smokers across the nation take part in the American Cancer Society's Great American Smokeout event. They may use the date to make a plan to quit, or they may plan in advance and quit smoking that day. The Great American Smokeout event challenges people to stop using tobacco and helps people learn about the many tools they can use to help them quit.

Let's face it, it's difficult to quit tobacco. Research

shows that smokers are most successful in kicking the habit when they have support, such as:

- Telephone smoking-cessation hotlines
- Stop-smoking groups
- Online quit groups
- Counseling
- Nicotine replacement products
- Prescription medicine to lessen cravings
- Encouragement and support from friends and family members

Using two or more of these measures to quit works better than using any one of them alone.

For information on quitting in New Hampshire, call the NH Tobacco Helpline at 1-800-QUIT-NOW or visit [www.QuitWorksNH.org](http://www.QuitWorksNH.org).

## Drought



You may not realize it but New Hampshire is currently experiencing a drought. Hundreds of wells have run dry over the past few months, causing hardship for many families and businesses. Recent weather conditions, such as lower than average snowfall and a mild winter meant little snowpack to melt and refill our groundwater this past spring. This past summer was also very warm and dry, so much of the State is now in severe to extreme drought (see map). As you may have heard in the news, the Northeast climate is getting warmer, and wetter, with more severe weather patterns such as droughts and floods.

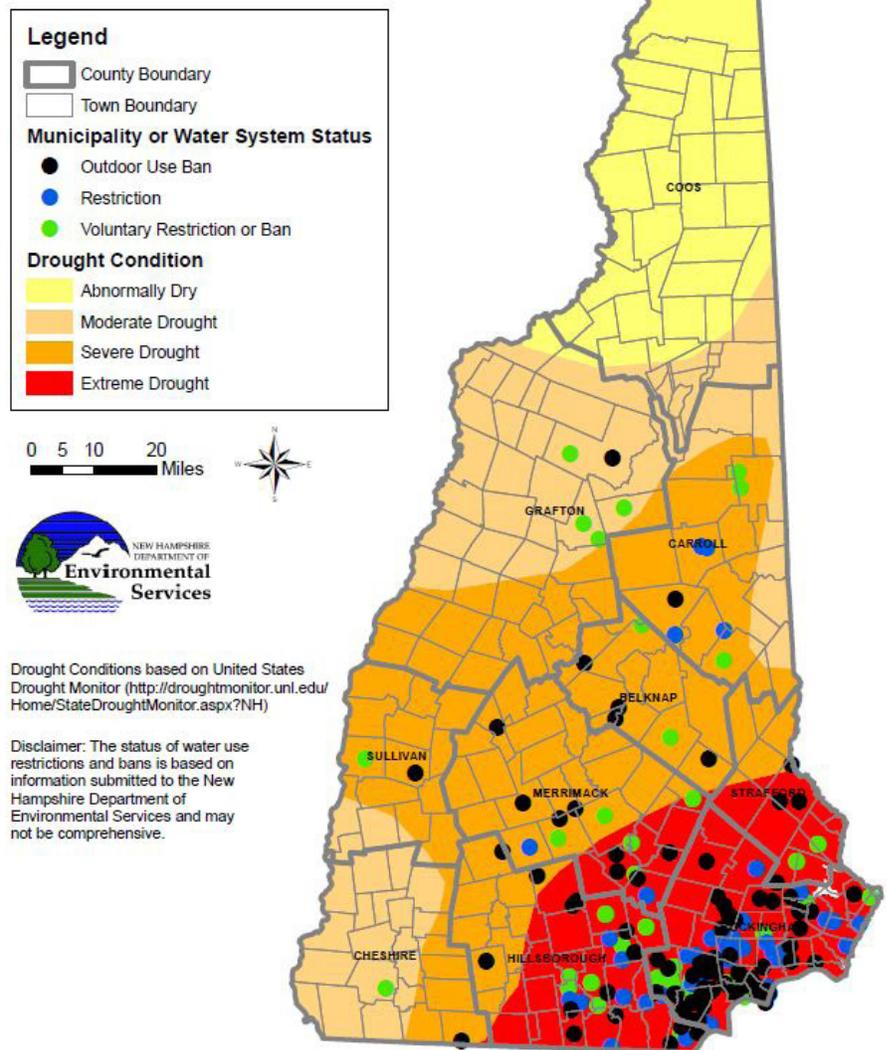
In New Hampshire, decisions about water restrictions or bans are under the jurisdiction of the cities and towns. To see a list of current restrictions, visit the [NH Department](#)

of [Environmental Services website](#). Across the State, residents are encouraged to conserve water. Some simple ways to use less water include:

- When washing dishes by hand, don't let the water run; fill one basin with wash water and one with rinse water.
- Run full loads of laundry and dishes only.
- Soak dirty pots and pans instead of running water while you scrape them clean, or boil water in the pan on the stove to loosen stuck on food.
- Wash your car with a bucket, sponge, and a hose

## Known Water Use Restrictions and Bans

Last Update: October 27, 2016



[http://des.nh.gov/organization/divisions/water/dwgb/water\\_conservation/documents/waterban.pdf](http://des.nh.gov/organization/divisions/water/dwgb/water_conservation/documents/waterban.pdf)

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with a self-closing nozzle. First check if your town has an outdoor water use ban.

- Take a shorter shower.
- Use less water in the bathtub.
- Don't let the water run down the drain when waiting for it to heat up or while washing fruits and vegetables; collect it in a bowl and use it to water house plants, the garden, to flush the toilet, or for your pets.
- Don't let the faucet run while washing hands, brushing teeth, or shaving.
- Install a water-saver shower head.
- Older toilets use more water, to reduce the amount place a half gallon plastic jug of water in the toilet tank to reduce the amount of water used.
- Keep a pitcher of cold water in the refrigerator rather than running water until it is cold.
- "Not a drop down the drain." Make it a game with your children by teaching them ways to save water and help the planet.
- Power plants use a great deal of water in the generation of power, so using less electricity will also save on water.



There are also public health implications of drought. For example, drought conditions may lead to dry wells, contaminated well water, wildfires, poor hygiene, and mental stress. Wildfires can be a significant risk when there are drought conditions. Even if the brush or forest fire does not reach homes, the pollution caused by the burning can affect lung conditions such as asthma and COPD. The lack of water can lead to insufficient sanitation and hygiene, which can be linked to food safety and germ control. For example, if people do not



have sufficient water they may not wash their hands as often as they should and cooking routines are disrupted which may lead to the inadvertent spread of germs.

Lower water levels in lakes, rivers, and ponds can increase the water temperature which increases the likelihood of certain organisms, such as algae. Lower water levels also increase the chances of recreational injuries, such as during boating. The lack of rainfall can have an economic impact on businesses, which can also lead to increases in stress, depression, and anxiety.

To learn more about drought in New Hampshire, visit the NH Department of Environmental Services at [www.des.nh.gov](http://www.des.nh.gov). To learn more about the health effects of drought, visit [www.cdc.gov/features/drought/](http://www.cdc.gov/features/drought/).

## Social Vulnerability Index Pinpoints At-Risk Communities

Every community must prepare for and respond to hazardous events, whether a natural disaster, such



as a hurricane or a disease outbreak, or a human-made event, such as a harmful chemical spill. How a community responds to a disaster and helps people get back to normal depends on many factors.

A number of factors, including poverty, lack of access to transportation, and crowded housing, can weaken a community's ability to prevent human suffering and financial loss in the event of disaster. After a disaster, these vulnerability factors may also increase reliance on the social safety net.

The Social Vulnerability Index (SVI) is a web-based tool that is part of the New Hampshire Environmental

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Public Health Tracking Program. The tool provides data at the census tract level in three domains: socioeconomic, demographic, and housing. The website allows users to examine which communities may be most vulnerable to external stressors such as floods, forest fires, power outages, and storms. Emergency responders can determine how best to plan for and respond to emergencies using a vulnerability assessment.

Emergency responders can use the SVI to:

- estimate the amount of needed supplies such as food, water, medicine, and bedding
- help decide how many emergency personnel are required to assist people
- identify areas in need of emergency shelters
- plan the best way to evacuate people
- identify communities that will need continued support following an emergency

To access the Social Vulnerability Index go to <http://nhvieww.maps.arcgis.com>. To learn more about NH Environmental Public Health Tracking visit <https://wisdom.dhhs.nh.gov/EPHT>.

## Mumps

Mumps is no longer very common in the United States. From year to year, mumps cases can range from roughly a couple hundred to a couple thousand. For example in 2010, there were 2,612 cases reported to CDC, and in 2012, there were 229. Before the U.S. mumps vaccination program started in 1967, about 186,000 cases were reported each year, but the he or plan to become pregnant within 4 weeks of receiving

actual number of cases was likely much higher due to underreporting. Since the vaccine was developed, there has been a more than 99% decrease in mumps cases in the United States. In New Hampshire, on average since 2011 there have been 3 cases of mumps reported per year.

Mumps is a disease caused by a virus that infects the salivary glands. This leads to swelling of the glands, usually in the neck. Mumps typically occurs in school-age children, although young adults may also catch the disease. Almost everyone born before 1957 has already had mumps. The disease usually occurs in late winter and spring. In recent years, there has been an increase in mumps in the United States, and numerous outbreaks among college students have been reported. A major factor contributing to outbreaks is being in a crowded environment, such as attending the same class, playing on the same sports team, or living in a dormitory with a person who has mumps.

The main symptoms of mumps are fever, headache, and swelling and tenderness of one or more of the salivary glands, usually the ones located just below the front of the ear. Approximately one third of infected people do not exhibit symptoms.

The virus that causes mumps is spread by direct contact with saliva and discharges from the nose and throat of infected persons. It can be spread by coughing, sneezing, or simply talking. Also, certain behaviors that result in exchanging saliva, such as kissing or sharing utensils, cups, lipstick or cigarettes, might increase spread of the virus.

The incubation period (time from infection to symptoms) for mumps is usually 16–18 days, although it may vary from 12–25 days. A person with mumps can spread the disease to others about 2 days prior until 5 days after the onset of symptoms.

There is a vaccine that is recommended for children at 12 months of age, with a second dose recommended at 4 to 6 years of age. This vaccine is given as a measles-mumps-rubella combination (MMR) vaccine.

People of any age who are unsure of their mumps disease history and/or vaccination history should be vaccinated, especially if they are likely to be exposed to the disease, such as through their employment. Women should not get the vaccine if they are pregnant



Neck swelling caused by mumps. Courtesy of the CDC.

or plan to become pregnant within 4 weeks of receiving the vaccine. The vaccine provides lifelong protection for 78% of people who receive one dose and 88% of people who receive two doses. If a vaccinated person does get mumps, they will likely have less severe illness than an unvaccinated person. Someone who has had mumps cannot get mumps again.

Sometimes the virus can infect other organs causing complications. In up to 0.3–10% of postpubertal males, the disease leads to inflammation of the testicles causing swelling, pain, soreness, and fever and can lead to sterility. Since the vaccine has been in use, among all persons infected with mumps, reported cases of meningitis, encephalitis, pancreatitis and deafness have all been less than 1%. Meningitis involves inflammation of the membranes around the brain and spinal cord, causes fever, headache, and a stiff neck.

The single most effective measure against mumps is maintaining the highest possible level of immunization in the community. People who are sick with mumps should not attend school, work, or other communal settings during their infectious period. Covering coughs and sneezes, washing hands frequently, and not sharing food or eating utensils can also help.

For questions about mumps, contact the DHHS Bureau of Infectious Disease Control at 603-271-4496. For further information, refer to the Centers for Disease Control and Prevention website at [www.cdc.gov/mumps](http://www.cdc.gov/mumps) or the DHHS website at [www.dhhs.nh.gov](http://www.dhhs.nh.gov).

## Prediabetes

**PREDIABETES** **COULD IT BE YOU?**

**86 MILLION** 86 million American adults—more than 1 out of 3—have prediabetes

**1 OUT OF 3**

**9 OUT OF 10** people with prediabetes do not know they have it

**TYPE 2 DIABETES** **PREDIABETES** **NORMAL**

Prediabetes is when your blood sugar level is higher than normal but not high enough yet to be diagnosed as type 2 diabetes

Prediabetes increases your risk of:

- TYPE 2 DIABETES**
- HEART DISEASE**
- STROKE**

If you have prediabetes, losing weight by:

- EATING HEALTHY**
- BEING MORE ACTIVE**

can cut your risk of getting type 2 diabetes in **HALF**

Without weight loss and moderate physical activity **15–30% of people with prediabetes** will develop type 2 diabetes within 5 years

People who have diabetes are at higher risk of serious health complications:

- BLINDNESS**
- KIDNEY FAILURE**
- HEART DISEASE**
- STROKE**
- LOSS OF TOES, FEET, OR LEGS**

**YOU CAN PREVENT TYPE 2 DIABETES**

**FIND OUT IF YOU HAVE PREDIABETES —** See your doctor to get your blood sugar tested

**JOIN A CDC-RECOGNIZED diabetes prevention program**

- eat healthy
- be more active
- lose weight

LEARN MORE FROM CDC AND TAKE THE **PREDIABETES RISK QUIZ** AT <http://www.cdc.gov/diabetes/prevention>