

What is a recreational camp for children?

A recreational camp for children is a day or residential (overnight) sports, travel or wilderness program that offers recreational activities and instruction to campers. Such camps have five or more children and typically operate anytime between June 1 and September 30 and/or during school vacations. Please note that there are certain factors, such as length of time the camp is in session and type of entity operating a program, that influence whether a program is considered a recreational camp under applicable Massachusetts law (G.L.c. 111, 127A) and mandated regulations (105 CMR 430.000 et. seq.: Minimum Sanitation and Safety Standards for Recreational Camps for Children). For further information on licensed recreational camps for children, contact the local board of health in the community where the camp is located.

Do recreational camps for children have to be licensed?

Yes. In Massachusetts, recreational camps for children must be inspected and licensed by the local board of health in the city or town where the camp is located. In order to be licensed, the camp must meet all regulatory standards established by the Massachusetts Department of Public Health (MDPH) and any additional local requirements.

Are all summer programs licensed as recreational camps for children?

No. There are certain regulatory requirements that a camp program must meet to be licensed as a recreational camp for children. The definition of a recreational camp for children and specific provisions for its licensure are found in regulations at 105 CMR 430.000. Programs that do not meet the legal definition of a recreational camp for children are not subject to MDPH's regulatory provisions and therefore may not follow the mandatory requirements that apply to licensed recreational camps for children including:

- performing criminal record background checks on each staff person and volunteer prior to employment
- requiring proof of camper and staff immunizations

- requiring proof of appropriate training, certification, or experience for staff conducting or supervising specialized or high risk activities

In addition, neither MDPH nor a local board of health conducts on-site inspections of facilities that are not considered recreational camps for children.

To see if a camp is licensed, contact the local health department (board) in the community where the program is located.

What is the purpose of the regulations?

The regulations establish minimum health, safety, sanitary, and housing standards to protect the well-being of children who are in the care of recreational camps for children in Massachusetts.

Where can I get information on the status of a recreational camp's license?

The local health department/board in the community where the camp is located can confirm if the camp is a licensed recreational camp for children, confirm the status of the camp's license, and provide a copy of the camp's most recent inspection report.

What does the local health department/board evaluate as part of a camp inspection?

The primary purpose of the inspection is to ensure that the camp provides an appropriate environment to protect the health, safety, and well being of the campers. Inspectors look to see that the camp has, for example: safe structures and equipment; adequate sanitary facilities; sufficient supervision of the campers; appropriate plans in case of medical emergencies, natural, and other physical disasters; sufficient health care coverage; and injury and fire prevention plans. Contact the local health department/ board of the community in which the camp is located to find out mandatory requirements, policies and standards.

Are recreational camps required to provide copies of operating plans and procedures?

Yes. You may ask a camp representative to let you see copies of any of the required plans and procedures.

Are there minimum qualifications for camp counselors in Massachusetts?

Yes. All counselors are required to have at least four weeks experience in a supervisory role with children or four weeks experience with group camping. Counselors must also complete an orientation program before campers arrive at camp. Any counselor who supervises children in activities such as horseback riding, hiking, swimming, and other events must also have appropriate specialized training, certification, and experience in the activity. You may ask to see proof that a counselor is certified in a particular activity.

Is the camp required to conduct background checks on camp staff?

Yes. For all camp staff and volunteers, the recreational camp for children must conduct a background check that includes obtaining and reviewing the applicant's previous work history and confirming three positive references. The camp must also obtain a Criminal Offender Record Information (CORI) history/juvenile record history from the Massachusetts Criminal History Systems Board (CHSB) to determine whether the applicant has a juvenile record or has committed a crime that would prevent the applicant from being with campers. The local health department/board will verify that CORI checks have been conducted during their annual licensing inspection. Where an applicant resides in a foreign jurisdiction, where practicable, the camp must also obtain from the applicant's criminal information system board, the chief of police, or other relevant authority a criminal record check or its recognized equivalent. The camp is required to hire staff and volunteers whose backgrounds are free of conduct that bears adversely upon his or her ability to provide for the safety and well-being of the campers.

Is the camp required to check staff and volunteer backgrounds for a history of sexual offenses?

Yes. The operator of the camp must obtain a Sex Offender Registry Information (SORI) report from the Massachusetts Sex Offender Registry Board (SORB) for all prospective camp staff, including any volunteers. The Sex Offender Registry Board is a public safety agency responsible for protecting the

public from sex offenders. The local health department/ board will verify that SORI checks have been conducted during their annual licensing inspection. For more information concerning the Sex Offender Registry Board, and SORI information and policies available to the public, visit the SORB website at www.mass.gov/sorb.

How can I be sure that such background checks have been conducted?

You can request a copy of the camp's written policy on staff background checks from the camp director. Please note, however, that you are not authorized to review the staff person's actual criminal history record.

How old do camp counselors have to be?

There are different age requirements depending on the type of camp. A counselor working at a licensed residential (overnight), sports, travel, trip, or special needs camp must be 18 years of age or have graduated from high school. Counselors working at a day camp must be at least 16 years of age. All counselors at licensed camps in Massachusetts are required to be at least three years older than the campers they supervise.

Is the camp required to have a person on-site who knows first aid and CPR?

Yes. All licensed camps are required to have a health supervisor at the camp at all times who is at least 18 years of age and currently certified in first aid and CPR. The camp must provide backup for the health care supervisor from a Massachusetts licensed physician, physician assistant, or nurse who serves as a health care consultant. Special needs camps, and residential camps where there are a large number of campers and staff, must have a licensed health care provider, such as a physician or nurse, on site.

How can I coordinate my child's medication administration while at a recreational camp?

Licensed camps are required to keep all medications in their original containers and to store all prescription medications in a locked cabinet. If your child will be participating in off-site activities while taking prescription medication, a second original pharmacy container must be provided to

the camp. The only individual authorized to give your child his/her medication is a licensed health care professional or the camp health supervisor with oversight by the camp health care consultant. (Note that other arrangements may be made for emergency medications such as epi-pens and inhalers.) When your child returns from camp, the medication must be returned to you, if possible, or destroyed.

Can a camp discipline my child?

Yes. Camps are required to have a written disciplinary policy that explains their methods of appropriate discipline, e.g. 'time-out' from activities, sending a child to the camp director's office, etc. Under no circumstances, however, may a camper be subjected to corporal punishment, such as spanking, or punished by withholding food, or by subjecting a camper to verbal abuse or humiliation.

What steps does a camp have to take to protect my child from abuse and neglect?

Public Health Regulation 105 CMR 430.000 requires all camps to have policies and procedures in place to protect campers from abuse and neglect while at camp. You may ask a camp representative for specific information on the camp's policies, as well as its procedures for reporting a suspected incident. In order to protect your child from possible abuse, you should talk openly and frequently with your child about how to stay safe around adults and other children.

Where can I get more information on abuse/neglect?

For guidance on abuse prevention and counseling regarding a possible abuse situation, contact the Department of Social Services' Child-At-Risk Hotline at 1-800-792-5200 or the Massachusetts Child Sexual Abuse Prevention Partnership at www.masskids.org or 617-742-8555 ext.1

What steps can a camp (and parents) take to help protect children from mosquito-and tick-borne disease such as Eastern Equine Encephalitis (EEE), West Nile Virus (WNV) and Lyme disease?

Parents and Camp Administrators can discuss the need for repellent with campers. Use of insect

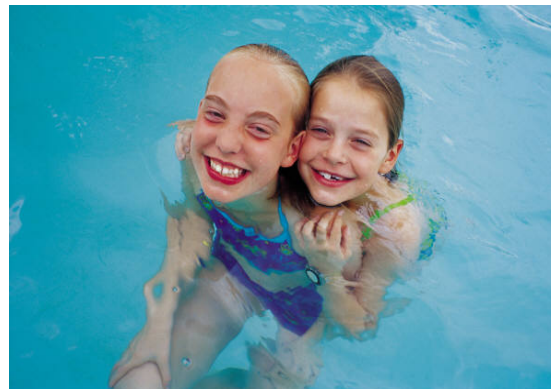
repellents that contain 30% or lower of DEET (N,N-diethyl-m-toluamide) are widely available and have proven to be safe and effective for children (greater than 2 months of age) when used as directed and certain precautions are observed. These products should be applied based on the amount of time the camper spends outdoors, and the length of time protection is expected as specified on the product label.

Should products that contain both insect repellent and sunscreen be used?

No. Use of DEET products that combine repellent with sunscreen are not recommended, as over application of DEET can occur if sunscreens need to be applied more frequently. It is generally recommended to apply sunscreen first, then insect repellent.

What is the best way to apply repellents?

Repellents containing DEET should only be applied to exposed skin, and children should be encouraged to cover skin with clothing when possible, particularly for early morning and evening activities when more mosquitoes are present. DEET products should not be applied near the eyes and mouth, applied over open cuts, wounds, or irritated skin, or applied on the hands of young children (the CDC recommends that adults apply repellents to young children). Skin where the repellent was applied should be washed with soap and water after returning indoors and treated clothing should be washed before it is worn again. Spraying of repellents directly to the face or in enclosed areas should be avoided.



Do not rely on glossy pictures and slick brochures when considering a recreational camp for your child.

Contact the camp director to schedule an appointment for an informational meeting, and tour of the facility prior to registering your child.

Ask the camp for a copy of its policies regarding staff background checks, as well as health care and disciplinary procedures. Ask to see a copy of the procedures for filing complaints with the camp.

Call the local health department/board in the city or town where the camp is located for information regarding inspections of the camp and to inquire about the camp's license status.

Obtain names of other families who have sent their children to the camp, and contact them for an independent reference.

If you would like a copy of the state regulations or additional information concerning recreational camps for children, please visit <http://www.mass.gov/dph/dcs> or call the Massachusetts Department of Public Health, Center for Environmental Health's Community Sanitation Program at 617-624-5757

To order copies of "**Information About Recreational Camps in Massachusetts: Questions and Answers for Parents**" contact the Community Sanitation Program at:
Telephone:617-624-5757
Fax:617-624-5777
TTY:617-624-5286

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Information about Recreational Camps in Massachusetts



Questions and Answers for Parents

Published by the
Massachusetts Department of Public Health
Center for Environmental Health
Community Sanitation Program

PUBLIC HEALTH FACT SHEET

Giardiasis

Massachusetts Department of Public Health, 305 South Street, Jamaica Plain, MA 02130

What is giardia?

Giardia is germ (a parasite) that causes an infectious disease (called “giardiasis”) that affects the stomach and bowels. The giardia germ is a common cause of diarrhea in the United States.

What are the symptoms of giardiasis?

The most common symptoms are diarrhea, foul-smelling soft stools, abdominal cramps, bloating, increased gas, weakness, loss of appetite and weight loss. Symptoms of giardiasis usually appear seven to ten days (but sometimes as long as four weeks) after the germs are swallowed. The symptoms may come and go for weeks in a person who is not treated.

Do all people who are infected with giardia get sick?

No. Some people who are infected with the parasite may only have minor symptoms and some people may not have any symptoms at all.

How is giardiasis spread?

The parasites must be swallowed to cause disease. You can get a giardia infection if you swallow food or water which has been contaminated with the germ. The parasites multiply in the small intestine and are passed out with bowel movements. Giardiasis is often spread when people do not wash their hands with soap and water after using the toilet or changing a diaper. People who get the germs on their hands can infect themselves by eating, smoking, or touching their mouths. They can also spread the germs to things they touch, including food, which can then make others sick. The giardia parasites are mainly spread from person to person, such as in day-care centers and institutions where personal hygiene may be poor due to age (infancy, elderly) or disability. Giardiasis can also be spread this way in a household setting.

Can giardiasis be spread by animals?

Yes. Giardia parasites have been found in the stools of many animals, including rodents, dogs, cats, cattle, and wild animals. Animals living near water supplies, such as beavers and muskrats, have been found to be infected with giardia. When those animals contaminate the water with their stool, people can get sick if they drink or swim in the water.

How can you know for sure if you have giardiasis?

Your doctor, nurse, or health center must send your stool sample to a laboratory. The laboratory will look at the sample with a microscope to see if there are any giardia parasites in it. The germs are often hard to see, so they may need several stool samples from you. This is the most common way of finding out if someone has giardiasis. Giardia can also be diagnosed by a laboratory test of a sample of fluid or a biopsy from the small intestine.

What is the treatment for giardiasis?

There are several medicines that are used to treat giardia infection. They are only available by prescription from your physician. Other treatments for diarrhea, such as drinking more fluids, may also be recommended by your physician.

How can giardiasis be prevented?

Giardiasis can be prevented by practicing good hygiene and by using caution before drinking water from an unknown source.

Some general guidelines are:

- Always wash your hands thoroughly with soap and water before meals, before preparing food, after using the toilet, after changing diapers, and after handling your pets.
- Do not drink untreated water from a surface water supply, such as a pond, lake, or stream. Although the water may appear to be clean, it may contain giardia parasites, which cannot be seen without a microscope. If untreated water is all that is available, boil the water for 1 minute before drinking it.
- If you are taking care of a person with giardiasis, scrub your hands with plenty of soap and water after contact with the person's stool (for example, after changing diapers). Promptly and carefully dispose of any material that has been contaminated with stool, and always wash your hands after such contact.
- If your source of drinking water is a well or a private surface water supply, do not allow humans or animals to defecate (have bowel movements) near the water. Contact your health department for advice on how keep your water supply safe. Also, some water filters can help to get rid of giardia parasites from contaminated water.

Are there any health regulations for people with giardiasis?

Yes. Because giardiasis is a disease that can easily spread to other people, health care providers are required by law to report cases to the local board of health.

In order to protect the public, workers at food-related businesses who have giardiasis must stay out of work until they don't have diarrhea and a lab test on a stool sample shows that there are no giardia parasites. Workers in food-related businesses who have diarrhea and live with someone who has giardiasis must also show that they have no giardia parasites in their stool. Food-related businesses include restaurants, sandwich shops, hospital kitchens, supermarkets, dairy or food processing plants. This regulation also includes workers in schools, residential programs, day-care and health care facilities who feed, give mouth care or dispense medications to clients.

Where can you get more information?

- Your doctor, nurse or clinic
- The Centers for Disease Control and Prevention (CDC) website at: <http://www.bt.cdc.gov/>
- Your local board of health (listed in the telephone directory under "government")
- The Massachusetts Department of Public Health (MDPH), Division of Epidemiology and Immunization at (617) 983-6800 or toll-free at (888) 658-2850 or on the MDPH website at <http://www.mass.gov/dph>



**Wash
your
hands**



**Wash
your
hands**



**Wash
your
hands**



**Wash
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hands**



**Wash
your
hands**

**Handwashing is the
20-second solution
to protecting yourself
from many diseases.**

So remember:

Use soap

Wash often

Wash long enough



clean
Your health is in your hands



For more information about
handwashing, please call the
Massachusetts Department of
Public Health, Division of
Epidemiology and Immunization
at 617.983.6800 or visit the MDPH website at
www.mass.gov/handwashing

April 2004

Printed on recycled paper

**What's the
simplest way
to protect
yourself from**

colds?

flu?

diarrhea?

hepatitis A?

SARS?



Why

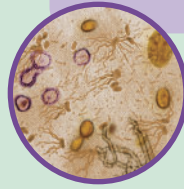
Many outbreaks of foodborne illness are traced to unwashed or poorly washed hands.

Sneezing and coughing can spread cold germs into the air, but most colds are caught and spread through germs on people's hands.

The germs that cause the flu, SARS, hepatitis A and many kinds of diarrhea can also be picked up and spread by your hands.

If these germs are on your hands, touching your mouth or nose to eat, sneeze or cough can make you sick.

Touching a doorknob, pressing an elevator button, grabbing a pole on public transit or shaking hands can spread germs to others.



Imagine looking at your unwashed hands under a microscope. What would you see growing there?

When

Always wash your hands

Before you

- touch or serve food
- eat or drink
- put in or take out contact lenses
- treat a cut, scrape, burn or blister
- take care of someone who is sick

After you

- go to the bathroom
- help someone else use the bathroom
- change a diaper (don't forget to wash the baby's hands too!)
- cough, sneeze, blow your nose or wipe a child's nose
- handle uncooked food, especially raw meat, poultry, fish or eggs
- handle garbage
- touch an animal—especially a reptile—or clean up animal waste
- take care of someone who is sick or injured
- use public transportation

How

Washing our hands is a lesson we all learned as children, but when we're busy or in a hurry, we tend to rush or forget to do it. We think our hands are clean, but they're not if we haven't done it right.

Just rinsing your hands isn't washing them, it's wetting them. To get them clean you need to use soap.

A quick rub, even with soap, won't get your hands clean, and the few seconds you save could cost you days if you get sick later.

To make sure your hands are really clean, scrub your palms, between your fingers, the backs of your hands and under your fingernails for at least 20 seconds.

After rinsing, dry your hands with a paper towel. Use the same paper towel to turn off the water and open the restroom door.

Use regular soap. Antibacterial soap isn't necessary. These soaps do kill bacteria, but antibacterial soaps may contribute to the growing problem of antibiotic resistance.

clean
Your health is in your hands



Wet hands



Apply soap & rub for 20 seconds



Rinse



Dry with paper towel



Use towel to turn off faucet

PUBLIC HEALTH FACT SHEET

Lyme Disease

Massachusetts Department of Public Health, 305 South Street, Jamaica Plain, MA 02130

What is Lyme disease?

Lyme disease is caused by bacteria (germs) that are spread by tiny, infected deer ticks. Both people and animals can have Lyme disease.

Where do cases of Lyme disease occur?

In the United States, Lyme disease most commonly occurs in the Northeast and mid-Atlantic regions and in the upper Midwest. In Massachusetts, Lyme disease occurs throughout the state.

How is Lyme disease spread?

Lyme disease is spread by the bite of an infected deer tick. The tick usually must be attached to a person for at least 24 hours before it can spread the germ. Deer ticks in Massachusetts can also carry the germs that cause babesiosis and human granulocytic anaplasmosis (also known as human granulocytic ehrlichiosis). Deer ticks are capable of spreading more than one type of germ in a single bite.

When can I get Lyme disease?

Lyme disease can occur during any time of the year. The bacteria that cause Lyme disease are spread by infected deer ticks. Young ticks (nymphs) are most active during the warm weather months between May and July. Adult ticks are most active during the fall and spring but may also be out searching for a host any time that winter temperatures are above freezing.

How soon do symptoms of Lyme disease appear after a tick bite?

Symptoms of early Lyme disease, described below, usually begin to appear from 3 to 30 days after being bitten by an infected tick. If untreated, symptoms of late Lyme disease may occur from weeks to years after the initial infection.

What are the symptoms of Lyme disease?

Early stage (days to weeks): The most common early symptom is a rash (erythema migrans) where the tick was attached. It often, but not always, starts as a small red area that spreads outward, clearing up in the center so it looks like a donut. Flu-like symptoms, such as fever, headache, stiff neck, sore and aching muscles and joints, fatigue and swollen glands may also occur.

Even though these symptoms may go away by themselves, without medical treatment, some people will get the rash again in other places on their bodies, and many will experience more serious problems. ***Treatment during the early stage prevents later, more serious problems.***

Later stages (weeks to years): If untreated, people with Lyme disease can develop late-stage symptoms even if they never had a rash. The joints, nervous system and heart are most commonly affected.

- About 60% of people with untreated Lyme disease get arthritis in their knees, elbows and/or wrists. The arthritis can move from joint to joint and become chronic.
- Many people who don't get treatment develop nervous system problems. These problems include meningitis (an inflammation of the membranes covering the brain and spinal cord), facial weakness (Bell's palsy) or other problems with nerves of the head, and weakness or pain (or both) in the hands, arms, feet and/or legs. These symptoms can last for months, often shifting between mild and severe.
- The heart also can be affected in Lyme disease, with slowing down of the heart rate and fainting. The effect on the heart can be early or late.

Is there treatment for Lyme disease?

People who are diagnosed with Lyme disease can be treated with antibiotics. **Prompt treatment during the early stage of the disease prevents later, more serious problems.**

What can I do to lower my chances of getting Lyme disease, or any other disease, from ticks?

Prevention begins with you! Take steps to reduce your chances of being bitten by any tick. Ticks are most active during warm weather, generally late spring through fall. However, ticks can be out any time that temperatures are above freezing. Ticks cling to vegetation and are most numerous in brushy, wooded or grassy habitats. They are not found on open, sandy beaches, but may be found in grassy dune areas. When you are outside in an area likely to have ticks (e.g. brushy, wooded or grassy places), follow these simple steps to protect yourself and your loved ones:

- Use a repellent with **DEET** (the chemical N-N-diethyl-meta-toluamide) or **permethrin** according to the instructions given on the product label. DEET products should not be used on infants under two months of age and should be used in concentrations of 30% or less on older children. Permethrin products are intended for use on items such as clothing, shoes, bed nets and camping gear, and should not be applied to skin. More information on choosing a repellent and how to use repellents safely is included in the MDPH Public Health Fact Sheet on Tick Repellents at www.mass.gov/dph/cdc/factsheets/factsheets.htm. If you can't go online, contact the MDPH at (617) 983-6800 for a hard copy.
- Wear long, light-colored pants tucked into your socks or boots, and a long-sleeved shirt. This may be difficult to do when the weather is hot, but it will help keep ticks away from your skin and help you spot a tick on your clothing faster.
- Stay on cleared trails when walking or hiking, avoiding the edge habitat where ticks are likely to be.
- Talk to your veterinarian about tick control options (tick collars, repellents) for your pets.

Did you know?

You don't have to be a hiker on Cape Cod to worry about ticks. In Massachusetts, you may be bitten in your own backyard. There are lots of things you can do around your own backyard to make it less inviting for ticks! Visit the MDPH Tickborne Disease Website at www.mass.gov/dph/cdc/epii/lyme/lymehp.htm for suggestions.



After spending time in an area likely to have ticks, check yourself, your children and pets for ticks.

Young ticks, called nymphs, are the size of a poppy seed. Adult deer ticks are the size of a sesame seed. Both nymph and adult deer ticks can spread the bacteria that cause Lyme disease; however, nymphs are of more concern. They are aggressive feeders and so tiny that it can be difficult to see them on the body, unless you are looking carefully. When doing a tick check, remember that ticks like places that are warm and moist. Always check the back of the knees, armpits, groin, scalp, back of the neck and behind the ears. If you find a tick attached to your body, remove it as soon as possible using a fine-point tweezers. Do not squeeze or twist the tick's body, but grasp it close to your skin and pull straight out with steady pressure.

Know the symptoms of Lyme disease as described in this fact sheet. If you have been someplace likely to have ticks and you develop symptoms of Lyme disease, or any other disease carried by ticks, see your health care provider right away.

Where can I get more information?

- **For questions about your own health**, contact your doctor, nurse, or health care clinic.
- **For questions about Lyme disease or other diseases spread by ticks**, contact the MDPH at (617) 983-6800 or toll free at (888) 658-2850 or online at <http://www.mass.gov/dph>. You may also contact your local Board of Health (listed in the telephone directory under "Government").
- **For questions about tick repellents**, read the MDPH Public Health Fact Sheet on Tick Repellents at www.mass.gov/dph/cdc/factsheets/factsheets.htm. If you can't go online, you may ask for hard copies of MDPH fact sheets by calling the MDPH number above.

Meningococcal Disease and Camp Attendees: Commonly Asked Questions

August 2011

What is meningococcal disease?

Meningococcal disease is caused by infection with bacteria called *Neisseria meningitidis*. These bacteria can infect the tissue (the “meninges”) that surrounds the brain and spinal cord and cause meningitis, or they may infect the blood or other organs of the body. In the US, about 1,000-3,000 people get meningococcal disease each year and 10-15% die despite receiving antibiotic treatment. Of those who survive, about 11-19% may lose limbs, become deaf, have problems with their nervous system, become mentally retarded, or have seizures or strokes.

How is meningococcal disease spread?

These bacteria are passed from person-to-person through saliva (spit). You must be in close contact with an infected person’s saliva in order for the bacteria to spread. Close contact includes activities such as kissing, sharing water bottles, sharing eating/drinking utensils or sharing cigarettes with someone who is infected; or being within 3-6 feet of someone who is infected and is coughing and sneezing.

Who is at most risk for getting meningococcal disease?

People who travel to certain parts of the world where the disease is very common, microbiologists, people with HIV infection and those exposed to meningococcal disease during an outbreak are at risk for meningococcal disease. Children and adults with damaged or removed spleens or terminal complement component deficiency (an inherited immune disorder) are at risk. People who live in certain settings such as college freshmen living in dormitories and military recruits are at greater risk of disease.

Are camp attendees at increased risk for meningococcal disease?

Children attending day or residential camps are **not** considered to be at an increased risk for meningococcal disease because of their participation.

Is there a vaccine against meningococcal disease?

There are currently 2 types of vaccines available in the US that protect against 4 of the most common of the 13 serogroups (subgroups) of *N. meningitidis* that cause serious disease. Meningococcal polysaccharide vaccine is approved for use in those 2 years of age and older. There are 2 licensed meningococcal conjugate vaccines. Menactra® is approved for use in those 9 months – 55 years of age. Menveo® is proved for use in those 2 to 55 years of age. Meningococcal vaccines are thought to provide protection for approximately 5 years.

Should my child receive meningococcal vaccine?

Meningococcal vaccine is **not** recommended for attendance at camps. However, this vaccine is recommended for certain age groups; contact your child’s health care provider. In addition, parents of children who are at higher risk of infection, because of certain medical conditions or other circumstances, should discuss vaccination with their child’s healthcare provider.

How can I protect my child from getting meningococcal disease?

The best protection against meningococcal disease and many other infectious diseases is thorough and frequent handwashing, respiratory hygiene and cough etiquette. Individuals should:

1. wash their hands often, especially after using the toilet and before eating or preparing food (hands should be washed with soap and water or an alcohol-based hand gel or rub may be used if hands are not visibly dirty);
2. cover their nose and mouth with a tissue when coughing or sneezing and discard the tissue in a trash can; or if they don’t have a tissue, cough or sneeze into their upper sleeve.
3. not share food, drinks or eating utensils with other people, especially if they are ill.

You can obtain more information about meningococcal disease or vaccination from your healthcare provider, your local Board of Health (listed in the phone book under government), or the Massachusetts Department of Public Health Division of Epidemiology and Immunization at (617) 983-6800 or toll-free at (888) 658-2850 or on the MDPH website at www.mass.gov/dph.

PUBLIC HEALTH FACT SHEET

Meningitis

Massachusetts Department of Public Health, 305 South Street, Jamaica Plain, MA 02130

What is meningitis?

Meningitis is an infection of the tissue (called the “meninges”) that surrounds the brain and spinal cord.

What causes meningitis?

Many different kinds of viruses and bacteria (germs) can cause meningitis. A sample of spinal fluid, usually collected by a spinal tap, is needed to find out if someone has meningitis and to see what caused it.

What kinds of bacteria can cause meningitis?

Neisseria meningitidis are bacteria that can cause illness in people of any age. At any time, about 5-15% of people have these bacteria in their throats or noses without getting sick. The bacteria are spread through saliva (spit) during kissing, sharing of food, drinks or cigarettes, and by close contact with infected people who are sneezing or coughing. People who have come in close contact with the saliva of a person with meningitis from this type of bacteria may have to get antibiotics (medicine) for protection. Meningitis caused by these bacteria is called “meningococcal.” There are vaccines, which can be used to help prevent this kind of meningitis.

Haemophilus influenzae type b bacteria, called Hib, can also cause meningitis. There is a vaccine called “Hib vaccine” that prevents infants and young children from getting Hib disease. Most adults are resistant to this type of meningitis, and thanks to the vaccine, most children under 5 years of age are protected. Certain people who have come in close contact with the saliva of a person with meningitis from this type of bacteria may have to get an antibiotic for protection.

Streptococcus pneumoniae are bacteria that cause lung and ear infections but can also cause “pneumococcal” meningitis. These bacteria are usually found in the throat. Most people who have these bacteria in their throats stay healthy. However, people with chronic medical problems or with weakened immune systems, and those who are very young or very old, are at higher risk for getting pneumococcal meningitis.

Meningitis caused by *Streptococcus pneumoniae* is not spread from person-to-person. People in close contact with someone who has pneumococcal meningitis do not need to get antibiotics.

Other bacteria can also cause meningitis, but meningitis from these other bacteria is much less common and usually not contagious.

What about viruses?

Viral meningitis, also called **aseptic meningitis**, is much more common than bacterial meningitis. A group of viruses called *enteroviruses* is the most common cause of viral meningitis. These viruses are found in the throat and feces (stool) of infected people. The virus is most likely to be spread when people do not wash their hands after using the toilet or changing a diaper or soiled sheets, then touch their own mouths, prepare food for others, or touch others with their contaminated hands. These viruses can also be spread by the kind of close face-to-face contact that is common in families.

Many enteroviruses don’t cause people to feel very sick. Others may cause only mild diarrhea or vomiting. People with viral meningitis are usually less sick than people with bacterial meningitis. They usually get better on their own. People who are close contacts of viral meningitis patients do not need to be treated with antibiotics. However, they should wash their hands often with soap and warm water or use alcohol-based hand rubs or gels to stop the spread of these viruses. There are usually more cases of viral meningitis in the late summer and early fall.

What are the symptoms of meningitis?

Symptoms of meningitis may appear suddenly. Fever, severe and constant headache, stiff neck or neck pain, nausea and vomiting, and rash can all be signs of meningitis. Changes in behavior such as confusion, sleepiness, and trouble waking up can also be important symptoms. In some infants, the only signs of meningitis may be crankiness or tiredness and poor feeding. Babies with meningitis usually run a fever, but not always. Anyone who has or observes these symptoms should contact a health care provider right away.

How is meningitis spread?

Many of the viruses that cause meningitis are spread through saliva (spit) or feces (stool). The bacteria that can cause meningitis are usually spread from person-to-person through contact with infected saliva. Most people may already have immunity (natural protection) against many of these germs.

How can meningitis be prevented?

If a person is exposed to the saliva of someone with meningitis caused by certain types of bacteria, public health officials or your health care provider may recommend an antibiotic to prevent disease.

Frequent handwashing with soap and water or use of alcohol-based hand rubs or gels can help stop the spread of many viruses and bacteria. Not sharing food, drinks, or eating utensils with other people can also help stop the spread of germs.

There are 5 vaccines that can help prevent meningitis:

- ***Haemophilus influenzae* (Hib) vaccine** is usually given at 2, 4, 6 and between 12 and 15 months of age. The total number of doses depends on the age at which the series was begun. Children over 5 years of age usually do not need this vaccine. But, some older children or adults with special health conditions should get it.
- **Pneumococcal conjugate vaccine 7-valent (PCV7)** is recommended for all children less than 24 months old and in certain high-risk children between the ages of 24 and 59 months. It is usually given at 2, 4, 6, and between 12 and 15 months of age. The total number of doses depends on the age at which the series was begun.
- **Pneumococcal polysaccharide vaccine 23-valent (PPV23)** is used in high-risk individuals 2 years of age or older. (High-risk children less than 5 years of age should also receive PCV7.) This vaccine is also recommended for everyone 65 years of age and older.
- **Meningococcal polysaccharide vaccine** protects against 4 types of the 13 serogroups (subgroups) of *N. meningitidis* that cause serious disease. It is licensed for use in people 2 years of age and older and provides protection for about 3-5 years.
- **Meningococcal conjugate vaccine** also protects against 4 types of the 13 serogroups (subgroups) of *N. meningitidis* that cause serious disease. It is approved for use in people 11-55 years of age and is expected to help decrease disease transmission and to provide more long-term protection.

Meningococcal vaccine is now recommended for children 11-12 years of age, for adolescents at high school entry (15 years of age) and freshman and other newly enrolled college students living in dormitories and other congregate living situations (such as fraternities and sororities). Other high-risk groups include anyone with a damaged spleen or whose spleen has been removed, those traveling to countries where meningococcal disease is very common and people who may have been exposed to meningococcal disease during an outbreak. Children and adults with terminal complement component deficiency (an inherited immune disorder) should also receive the vaccine.

Where can I get more information about meningitis?

- Your health care provider
- The Massachusetts Department of Public Health, Division of Epidemiology and Immunization at (617) 983-6800 or toll-free at (888) 658-2850 or on the MDPH website at <http://www.mass.gov/dph>
- Your local health department (listed in the phone book under government)

PUBLIC HEALTH FACT SHEET

Mosquito Repellents

Massachusetts Department of Public Health (MDPH), 305 South Street, Jamaica Plain, MA 02130

What is a mosquito repellent?

A mosquito repellent is a substance put on skin, clothing, or other surfaces which discourages mosquitoes from landing or crawling on that surface.

Why should I use a mosquito repellent?

Mosquitoes can spread viruses that cause serious diseases. In Massachusetts, the diseases spread by mosquitoes are West Nile virus (WNV) and eastern equine encephalitis (EEE). Mosquito repellents can reduce your chances of being bitten by a mosquito and can reduce the risk that you will get one of these diseases.

When should I use a mosquito repellent?

Use a mosquito repellent when you are outside and exposed to mosquitoes. Mosquitoes are generally most active between dusk and dawn, though some types may also be out during the day. Mosquitoes usually start to become active during early or mid-spring and remain active until the first hard frost (when the ground freezes).



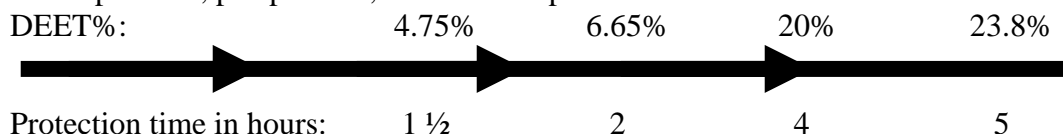
Did you know?

Every year from approximately late May until the first hard frost, mosquito samples are collected from various locations around the state and tested for WNV and EEE virus. Visit the MDPH website at www.mass.gov/dph/cdc/wnv/wnv1.htm during the mosquito season to see where positive mosquito samples have been found.

Which repellent should I use?

Different repellents work against different bugs. It is important to look at the active ingredient on the product label. Repellents that contain **DEET** (N, N-diethyl-m-toluamide), **permethrin**, or **picaridin** (KBR 3023) provide protection against mosquitoes. In addition, **oil of lemon eucalyptus** [p-methane 3, 8-diol (PMD)] has been found to provide as much protection as low concentrations of DEET when tested against mosquitoes found in the United States.

DEET products should not be used on infants under 2 months of age. Children older than two months should use products with DEET concentrations of 30% or less. DEET products are available in formulations up to 100% DEET, so always read the product label to determine the percentage of DEET included. Products with DEET concentrations higher than 30% do not confer much additional protection, but do last longer. In a study that looked at how long different concentrations of DEET worked against mosquitoes, the results ranged from 1½ to 5 hours. However, the length of protection time will vary widely depending on temperature, perspiration, and water exposure.



Permethrin products are intended for use on items such as clothing, shoes, bed nets and camping gear and should not be applied to skin. Apply the permethrin to your clothes before you put them on and follow the product's instructions.

Oil of lemon eucalyptus products should not be used on children under the age of three years.

Always Use Repellents Safely

- ❖ Follow the instructions given on the product label. If you have questions after reading the label, such as how many hours does the product work for, or if and how often it should be reapplied, contact the manufacturer.
- ❖ Don't use repellents under clothing.
- ❖ Don't use repellents on cuts or irritated skin.
- ❖ Don't use repellents near the mouth or eyes and use them sparingly around the ears. When using spray products, spray the product onto your hands first, and then apply it to your face.
- ❖ Use just enough product to lightly cover exposed skin and/or clothing. Putting on a larger amount does not make the product work any better.
- ❖ Don't let children handle the product. When using repellents on children, put some on your hands first, and then apply it to the child. Don't put repellents on a child's hands.
- ❖ When you come inside, wash your skin and the clothes that had repellent on them.
- ❖ **If you develop a rash or other symptoms you think were caused by using a repellent**, stop using the product, wash the affected area with soap and water, and contact your doctor or local poison control center. If you go to the doctor, bring the product with you to show him or her.

Do “natural” repellents work?

A number of plant-derived products are available for use as mosquito repellents, including oil of lemon eucalyptus. Limited information is available regarding how well most of these products work and how safe they are. The information that is available shows that most of these products generally do not provide the same level or duration of protection as products like DEET or permethrin, except for oil of lemon eucalyptus, which has been found to provide as much protection as low concentrations of DEET.

I'm concerned about using repellents on my infant. What else can I do to protect my infant from mosquitoes?

Mosquitoes are most active between dusk and dawn, so try to avoid outdoor activities with your infant during these times. When your infant is outside, use mosquito netting on baby carriages or playpens and consider going indoors if you notice a lot of mosquito activity.

Where can I get more information?

- **For more information on repellents (such as choosing the right repellent, using repellents on children or pregnant women, or detailed toxicology information)**, contact the National Pesticide Information Center (NPIC) toll free at 1-800-858-7378 or online at npic.orst.edu/wnv/pesticideinfo.htm#repellents.
- **For questions on health effects of pesticides**, contact the MDPH, Center for Environmental Health at 617-624-5757.
- **For questions on diseases spread by mosquitoes**, contact the MDPH, Division of Epidemiology and Immunization at 617-983-6800 or online at www.mass.gov/dph.

PUBLIC HEALTH FACT SHEET

Rabies

Massachusetts Department of Public Health, 305 South Street, Jamaica Plain, MA 02130

What is rabies?

Rabies is a disease of the brain and spinal cord and is caused by a virus. Rabies is a fatal disease. Rabies in humans is very rare in the U.S., but rabies in certain animals—especially wildlife—is common in many parts of the country, including Massachusetts.

How is rabies spread?

The rabies virus lives in the saliva (spit) and nervous tissues of infected animals and is spread when they bite or scratch. The virus may also be spread if saliva from an infected animal touches broken skin, open wounds or the lining of the mouth, nose, or eyes. In caves crowded with many bats, it may be possible to inhale the virus floating on bat saliva in the air.

What kinds of animals spread rabies?

The rabies virus can infect any mammal (if it has hair or fur, it is a mammal), but is more common among certain ones like bats, skunks, foxes, and raccoons. Cats, dogs, and livestock can also get rabies—and spread it to their owners—if they do not have special shots to protect them. Rabies is very rare among small rodents like squirrels, rats, mice, and chipmunks. Fish, reptiles (such as snakes, turtles and lizards), amphibians (such as frogs and salamanders), and insects (bugs) cannot get or spread rabies.

How common is animal rabies in Massachusetts?

Hundreds of animals are found to have rabies each year in Massachusetts. Wild animals most commonly found to be rabid include raccoons, skunks, bats, woodchucks and foxes. Over one hundred cats have tested positive for rabies in Massachusetts.

How can you tell if an animal is rabid?

Rabid animals often behave strangely after the virus attacks their brains. Rabid animals may attack people or other animals for no reason, or they may lose their fear of people and seem to be unnaturally friendly. Not all rabid animals act in these ways, however, so you should avoid all wild animals – especially bats, skunks, foxes, and raccoons. Also, you should not feed or touch stray cats and dogs.

What should you do if you think you've been exposed to rabies?

If you have been bitten or scratched by a stray or wild animal, or by a pet or farm animal that has been behaving oddly, follow these steps:

1. Wash the wound with soap and water **right away** for at least ten minutes.
2. Call your health care provider and local board of health as soon as you finish washing. They will help you decide if you need to be treated for rabies. It is important to follow their instructions exactly.
3. Contact your local animal control officer to catch or find the animal that scratched or bit you. Your local board of health can tell you how to have it tested by the State Rabies Lab, if appropriate.
4. If your pet has been bitten or scratched by an animal that you think may be rabid, put on gloves before touching your pet. Follow the steps above but call your pet's veterinarian instead of your own doctor as in step 2.

What is the treatment for people exposed to rabies?

The treatment for people exposed to rabies involves two medications. One, called rabies immune globulin (or RIG), contains antibodies to fight the virus and is given once. The other medication is rabies vaccine, which ensures long-lasting protection, and is given as five shots over the course of a month. (Rabies shots are no longer given in the stomach.) People who received the full series of rabies shots in the past need only two rabies vaccine shots. To work best, the medications should begin as soon as possible after the bite or scratch. However, if the animal has been caught and will be tested for rabies, you can wait for the test results to see if the shots are necessary.

How can you prevent rabies?

- Avoid wild animals, especially bats, skunks, foxes, and raccoons. Do not feed or pet strays. Avoid any animal—wild, farm or pet—that you do not know. Report any animal that behaves oddly to your local animal control official.
- Teach your children to avoid wildlife, strays, and all other animals they do not know well.
- Do not handle dead, sick, or injured wild animals yourself; call the police or animal control officer. If you must handle the animal, use heavy gloves, sticks or other tools to avoid direct contact.
- Make sure your pets are vaccinated against rabies and that their shots are up-to-date. By law, all dogs, cats and ferrets must be vaccinated against rabies.
- Feed pets indoors and keep them indoors at night. If they are outside during the day, keep them on a leash or fenced in so they cannot wander. It is possible for vaccinated pets to get rabies. Pets allowed to roam freely are more likely to get rabies and possibly expose people and other pets in your home.
- Fasten trash can lids tightly. Garbage attracts animals (like skunks, raccoons, and strays) looking for an easy meal.
- It is against state law to keep wild animals such as skunks or raccoons as pets. There are no rabies vaccines for most wild species.
- Cap your chimney with screens and block openings in attics, cellars, and porches to keep wild animals like bats and raccoons out of your home.
- If you have bats in your house, talk to a professional about bat-proofing your home.
- Animal control officers, veterinarians, their assistants, and others who have a lot of contact with strays or wildlife should get routine rabies vaccinations to protect themselves before they are exposed to the virus.

Where can you get more information?

- Your doctor, nurse or health center
- Your local board of health (listed in the phone book under local government)
- Massachusetts Department of Public Health, Division of Epidemiology and Immunization at (617) 983-6800 or toll-free at 1-888-658-2850 or on the MDPH website at <http://www.gov/dph>

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