Norovirus

In the community, you may hear Norovirus called “stomach bug” or “food poisoning”. Norovirus is a highly contagious virus which causes the stomach or intestines to become inflamed, which leads to stomach pain, nausea, and diarrhea and vomiting. People can get Norovirus from an infected person, contaminated food or water, or by touching contaminated surfaces. Anyone can become infected with Norovirus; however, Norovirus can be serious for young children, immune-compromised individuals and the elderly.

According to the Centers for Disease Control (CDC) and Prevention, each year Norovirus causes about 21 million illnesses and contributes to about 70,000 hospitalizations and 800 deaths.

What are the symptoms of Norovirus?
The most common symptoms of Norovirus are diarrhea, vomiting, nausea, and stomach pain. Other symptoms include fever, headache, and body aches. People infected with Norovirus can feel very ill. They can vomit and have diarrhea many times within a day. With the loss of body fluids, dehydration can occur. People with Norovirus should drink plenty of liquids to replenish the fluids lost during the illness.

How do people become infected with Norovirus?
Anyone can become infected. There are many different types of Norovirus which means people can become infected more than once in their lifetime. Norovirus can be found in the stool (feces) even before you start feeling sick. The virus can remain in the stool for 2 weeks or more even after you feel better. Infected individuals are most contagious when:

* They have symptoms of Norovirus; and
* During the first 3 days (72 hours) after recovering from the illness.

Norovirus can spread quickly in places such as the following: child care centers, nursing homes, schools, and cruise ships. According to the CDC, in the United States, most Norovirus outbreaks happen from November to April.

Preventing Norovirus
To prevent becoming infected with Norovirus, people must remember to practice proper hygiene, stay home when sick, and clean and disinfect all potentially contaminated surfaces.

- Practicing proper hygiene means washing your hands with soap and water. Alcohol-based hand sanitizers can be used after proper hand washing but hand sanitizers should NOT replace hand washing. The use of hand sanitizers alone is not effective at killing Norovirus.
- Stay home when sick. The virus can still be shed in the stool (feces) for up to 2 weeks after you recover. CDC recommends that sick individuals stay home at least 3 days after symptoms have subsided.
- Clean and disinfect all contaminated surfaces. The CDC recommends using a bleach solution of 1000 to 5000 ppm. To prepare this solution, as well as follow the CDC’s cleaning procedures, visit http://epi.publichealth.nc.gov/cd/norovirus/child_care.html and http://www.cdc.gov/norovirus/preventing-infection.html.

For info and posters on preventing Norovirus, go to: www.cdc.gov/norovirus/
http://www.disinfect-for-health.org/resources

Treatment for Nororvirus
Unfortunately, there is no specific treatment for Norovirus. Viruses like Norovirus cannot be treated with antibiotics. However, people can be treated for dehydration.
Summer is the time of year for picnics and cookouts. Did you know that foodborne illnesses increase during the summer? Follow these basic food safety tips for keeping your food safe during the summer:

- **Keep clean.** Wash your hands frequently. Proper hand washing is the single most important thing you can do to prevent spread of illness.

- **Chill Out.** Keep foods cold. Due to bacterial growth, do not let foods remain at room temperature for more than 2 hours (including prep, storage and serving). Keep coolers full of ice or freezer packs to keep food cold. Keep coolers in shaded areas out of the sun. This will help food in coolers stay cold.

- **Summer Sizzle.** Keep hot foods hot. Due to bacterial growth, never let foods remain at room temperature for more than 2 hours.

- **The Thrill of the Grill.** When grilling foods, preheat coals on your grill for 20-30 minutes prior to cooking. Use a meat thermometer to ensure all meats are cooked to proper internal temperature. To keep food safe, follow the internal cooking temperatures listed below:
  
  *Poultry, stuffed meats=165°F  
  *Ground meat=155°F  
  *Seafood=145°F

Real foods are foods which are in their natural state without being altered in any way. Dietitians always tend to stress a plant-based diet. These are foods that give our bodies the nutrients they need to be healthy.

Processed foods often lack the nutrients that wholesome, real foods provide. Processed foods can also add bad fats (saturated and trans/hydrogenated oil), sodium and sugar with little to no nutritional value. Processed foods oftentimes give us a lot of calories, but leave us wanting more! Whole foods, on the other hand, give us healthy fats, fiber and protein – “feel-full” nutrients. Frequently, we do not put the proper fuel in our body’s tank. Think about it like this….A car is not going to run properly or very long when the wrong type of fuel is continually fed into the tank….the same can be said for our bodies.

Other than the obvious (to make foods sweeter), food companies frequently add sugar to improve and maintain the food’s color, texture and shelf life. Some sugars, however, occur naturally. Two examples are lactose in milk and fructose in fruit. These foods contain nutrients our bodies need so they are acceptable (and needed) in moderation.

For consumers not quite ready to leave the convenient boxes on the shelf, what should they look for when grocery shopping? Most importantly, look at the nutrition facts label and read the ingredients, which are listed by weight. *If the product has no milk or fruit in the ingredients, then all of the sugars have been added.* Corn sweetener, corn syrup, high fructose corn syrup, dextrose, maltose, sucrose, fruit juice concentrate, malt syrup, molasses, cane juice and cane syrup are some of the ingredients you may find. Any ingredient with ‘ose’ is likely a form of sugar. You can also check ‘Total Carbohydrate,’ of which sugar is only part of this total value (dietary fiber and starch, commonly left out, are the other two carbohydrate forms).

What is the recommended daily amount of Total Carbohydrates for children and adults? It is similar for both. Ideally, a healthy balanced diet should include 50% to 60% of calories consumed from carbohydrate food sources.

For more information about REAL FOODS, how to read nutritional labels or other nutrition questions, contact CCPHD Dietitian, Zach Deaton at zach@chathamnc.org.
Outdoor Learning Environments

Part of keeping children healthy and safe involves monitoring their outdoor environment. Before allowing children to enter and use the outdoor learning areas and playgrounds, staff should perform the following tasks:

- Check the playground area(s) for any standing water
- Remove and dispose of any broken or dilapidated equipment and any debris
- Cut back spring growth on and near fences
- Check play equipment for wasps and other stinging insects and their nests
- Look for fire ant mounds
- Have sunscreens ready before hot weather arrives
- Check to see that wells, grease traps, cisterns and utility equipment are inaccessible to children
- Cover sandboxes when not in use to prevent animals from entering and leaving excrement behind
- Chromate copper arsenate (CCA) pressure-treated wood structures (including fences, decks, playground equipment or other structures) should be sealed using an oil-based, semi-transparent sealant; oil-based clear stain; or a water-based clear stain applied at least once every two years

In addition, it is recommended to follow the daily air quality forecast to determine any necessary restrictions. Some guidelines are as follows:

- On days with a Code Orange (unhealthy for sensitive groups) forecast, children shall not be outside participating in physical activity between noon and 8:00 PM for more than one hour.
- On days with a Code Red (unhealthy) forecast, children shall not be outside participating in physical activity between noon and 8:00 PM for more than 15 minutes.
- On days with a Code Purple (very unhealthy) forecast, children shall not be outside participating in physical activity between noon and 8:00 PM.
- It is recommended that provisions be made for children with diagnosed asthma or with coughing or wheezing symptoms to participate in physical activity indoors on days with a Code Orange, Red or Purple air quality forecast. Here is the link to the North Carolina Air Quality Forecast Center - [http://xapps.enr.state.nc.us/aq/ForecastCenter](http://xapps.enr.state.nc.us/aq/ForecastCenter)

Playground Injuries Fact Sheet (CDC) - [http://www.cdc.gov/homeandrecreationalsafety/playground-injuries/playgroundinjuries-factsheet.htm](http://www.cdc.gov/homeandrecreationalsafety/playground-injuries/playgroundinjuries-factsheet.htm)

Recreational Water & Pool Safety

Who is at risk?...According to the CDC, drowning is the second leading cause of death (behind motor vehicle accidents) in children 1 to 14 years old and the fifth leading cause of death overall in all ages. Males and African-Americans have higher drowning rates. Here are some tips to avoid drowning and water-related injuries and illnesses:

- Learn how to swim!
- Always use the buddy system...never swim alone
- If possible, choose swimming sites that have lifeguards
- Do not be distracted while supervising children (e.g., do not talk on the phone, read, play cards, etc.)
- Learn life-saving skills like CPR
- Wear a life jacket around natural bodies of water (e.g., oceans, ponds, lakes) and in pools (for weaker swimmers). Do not rely on foam or air-filled toys (e.g., water wings) as a replacement for a life jacket.
- If you own a pool, install a fence completely around the pool with self-closing and self-latching gates. This can aid in deterring children from entering the pool area unsupervised.
- Do not consume alcohol before or during swimming or supervising children who are swimming
- Do not dive into shallow waters
- Do not hyperventilate prior to going underwater or try to hold your breath for long periods of time underwater
- Be aware of dangers due to the weather (e.g., thunderstorms with lightning, strong winds, etc.)
- Always shower before entering a pool to remove fecal matter and sweat, which can create poor water quality and potential recreational water illnesses

Avoid Feeding The Ticks

Ticks are not insects, but are arthropods more closely related to mites, spiders and scorpions. They transmit germs that cause Rocky Mountain Spotted Fever (RMSF), Lyme Disease, Ehrlichiosis, Southern tick-Associated Rash Illness (STARI) and other tick borne diseases. The best way to protect yourself from getting a tick borne disease is to avoid ticks, remove ticks promptly and properly, and prevent ticks from infesting areas where you and your children play.

To avoid ticks:

- Use tick repellent according to label directions
- When walking in the woods, wear light colored clothing, long sleeves and long pants. Tuck your shirt into your pants and your pants legs into your socks. Walk on paths, if possible.
- Check yourself and your kids for ticks when returning from being outdoors. Be especially watchful around the waist, groin and neck.
- After safely removing a tick, document the location of attachment, the day the tick was removed and watch for signs of illness such as rash, fever, muscle aches or headache. If you experience these symptoms, see your health care provider and let them know you were recently bitten by a tick. Also, wash your hands immediately after removing a tick.

For more information, including links to an educational brochure, posters and slide shows for children and adults, and information on how to safely remove a tick, visit this Web link: [http://www.chathamnc.org/index.aspx?page=1540](http://www.chathamnc.org/index.aspx?page=1540). These items will help you identify the various types of ticks, spell out which diseases are associated with each one, provide instructions on how to properly remove them and more.

Keeping the Lead Out

Although lead-based paint (LBP) and lead-containing items seem like things of the past, they are still very much an issue. CDC estimates that at least 4 million homes have children residing in them who are being exposed to lead. Homes and buildings constructed prior to 1978 are more likely to have LBP present ([http://www.cdc.gov/nceh/lead/](http://www.cdc.gov/nceh/lead/)).

Lead can also be found in a variety of other items. Some examples are car keys, vinyl mini-blinds, antique furniture, ceramics and pottery, leaded crystal, cosmetics, jewelry, fishing weights, drinking water, casting bullets, stained glass and the list goes on. For a more extensive list go to [http://www.healthyhomesandleadsafety.org/where.html](http://www.healthyhomesandleadsafety.org/where.html).

Since lead exposure can often occur with no noticeable symptoms, it frequently is not recognized. Some of the health effects include:

- Brain and kidney damage
- Learning disabilities, ADHD and lowering of IQ
- Behavioral problems, which can include later criminal behavior
- Speech and language problems
- Decreased muscle and bone growth
- Hearing problems

The only way to determine if a child has been exposed is to have their blood lead level tested. Proper nutrition can help reduce the absorption of lead during exposure, so be sure your child gets plenty of Iron, Vitamin C and Calcium. Ultimately, the key to preventing children from being poisoned by or exposed to lead is to keep them from coming into contact with it in the first place!

If removal of LBP is necessary, it must be done in a lead-safe manner and a certified lead contractor should be consulted. For more information concerning LBP removal or remediation, go to the Web link for the NC Health Hazards Control Unit at [http://epi.publichealth.nc.gov/lead/lhmp.html](http://epi.publichealth.nc.gov/lead/lhmp.html). Explore their FAQs page at [http://epi.publichealth.nc.gov/lead/pdf/RRPCommonQuestions.pdf](http://epi.publichealth.nc.gov/lead/pdf/RRPCommonQuestions.pdf)

### Getting to know your Environmental Health Specialist...

<table>
<thead>
<tr>
<th>Lisa Morgan</th>
<th>Nancy Leaver</th>
<th>Barry Oldham</th>
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<tbody>
<tr>
<td>Childcare &amp; School Program Specialist</td>
<td>Environmental Health Specialist</td>
<td>Environmental Health Specialist</td>
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<tr>
<td>From Richmond County</td>
<td>From Ohio, in NC for 20+ years</td>
<td>Native of Chatham County</td>
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<tr>
<td>Alumnus of Pembroke State</td>
<td>Alumnus of NC State University</td>
<td>Alumnus of Western Carolina</td>
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<td>Has worked in Chatham County Environmental Health for over 13 years. Her program areas are Childcare &amp; School Sanitation; Food, Lodging &amp; Institutions; and Wells &amp; Water Quality.</td>
<td>Previously worked as a Medical Technologist and in Genetics research</td>
<td>Worked for Jackson County Environmental Health in Onsite Wastewater for 1.5 years</td>
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<td>Promoted to Childcare &amp; School Program Specialist in 2010.</td>
<td>Has worked in Chatham County for over 12 years. Her program areas are Childhood Lead Poisoning Prevention; Child Care &amp; School Sanitation; Public Swimming Pools; and Wells &amp; Water Quality.</td>
<td>Has worked in Chatham County for over 6 years. His program areas are Childcare &amp; School Sanitation; Food, Lodging &amp; Institutions; and Wells &amp; Water Quality.</td>
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<td>What Lisa enjoys most about her job is the field of Environmental Health provides many challenges, so she is never bored!</td>
<td>What Nancy enjoys most about her job is providing education to assist clients in achieving compliance.</td>
<td>What Barry enjoys most about his job is working with the public and enforcing rules.</td>
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<td>Fun Fact: Lisa is a crazy cat lady! She has rescued and adopted hundreds of kitties to loving homes!</td>
<td>Fun Fact: Nancy completed a 5K mud run recently and enjoys taking ballroom dance lessons.</td>
<td>Fun Fact: This time of year, Barry likes to visit Hanging Rock State Park to camp, hike, cook-out, boat, fish and relax. It’s a favorite spot because there’s no cell service!</td>
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