Dear Parent/Guardian:

The Mid-Michigan District Health Department (MMDHD) is seeing an increase in the number of cases of viral illnesses, particularly gastroenteritis and influenza-like illness throughout the district. Your assistance is requested in helping to stop the spread of viral illness.

**Norovirus**

Though several viruses can cause gastroenteritis, norovirus is the most common. All are easily transmitted through food, by person-to-person contact, or through contaminated surfaces. Therefore, take caution if one of your family members is affected because the virus spreads easily in the home as well. Norovirus is sometimes called the “stomach flu”, but is not related to influenza (the flu), which is a respiratory viral illness that causes fever, cough, chills, headache, muscle aches, runny nose, and sore throat.

Norovirus often causes nausea, vomiting, diarrhea, and stomach cramping. Symptoms may also include low-grade fever, headache, weakness, and muscle aches. Symptoms can begin as early as 12 hours after exposure to the virus or as late as 48 hours. The symptoms of norovirus usually last between 1 to 2 days. In most cases, ill persons fully recover without medical attention. However, norovirus infection can result in hospitalization due mainly to dehydration, especially in the very young and elderly. Those with severe diarrhea should drink lots of liquids. Symptoms that are not seen with norovirus infection are bloody diarrhea or high fever. If these symptoms develop, we advise contacting your medical provider.

Children and staff exhibiting symptoms of viral gastroenteritis should be excluded from school or other group activities until 48 hours after their symptoms have stopped.

People who have been sick with norovirus-like symptoms should not prepare or serve food to others for at least 3 days after their symptoms are gone. It’s important to know that most household cleaners are ineffective against norovirus and bleach is the only reliable means of disinfection. Please refer to the Norovirus Cleaning and Disinfection Guidelines attached.

Further information about norovirus and how to limit its spread can be found at [https://www.cdc.gov/norovirus/index.html](https://www.cdc.gov/norovirus/index.html)

**Influenza-Like Illness**

Influenza, also called “the flu”, is a respiratory viral illness that can cause fever, cough, chills, headache, muscle aches, runny nose and sore throat. With true influenza, a fever is almost always present and the cough is often severe. Influenza symptoms usually last between 2 to 7 days. Influenza is not the same as the “stomach flu,” which is a gastrointestinal illness causing severe nausea, vomiting, and diarrhea that usually lasts 1 to 2 days.

The influenza virus spreads when an infected person coughs or sneezes, causing droplets containing the virus to spread in the air. Uninfected people can become infected by being in close contact with these droplets (within 6 feet) and breathing them in or by touching surfaces the droplets fell onto.

There are many things that can be done to keep our schools, homes, and communities “flu-free” and protect ourselves and our loved ones:
1. It’s not too late to get vaccinated. Influenza vaccine is widely available at MMDHD, through area physicians and pharmacies.

2. As a general rule, even outside of influenza, children and adults should stay home when ill. We recommend that people sick with any influenza-like illness remain at home until they have been fever-free for at least 24 hours without the use of fever-reducing medicines.

3. Teach your family how to lower their risk of getting and spreading the influenza virus by:
   - Washing their hands often with soap and running warm water for at least 20 seconds. That is as long as it takes to sing “Happy Birthday” twice. Make sure to clean under the fingernails also.
   - If a hand washing station is not available, use hand sanitizer properly. Gels, rubs, and hand wipes work well against influenza if they contain at least 60% alcohol. Throw wipes in the trash after use.
   - Coughing or sneezing into their upper shirt sleeve or elbow—not onto their hands!
   - Avoid touching eyes, nose or mouth. That’s how germs enter the body.

4. Seek medical care immediately if your child experiences any of the following symptoms:
   - Illness lasting longer than a week
   - Fast breathing or trouble breathing
   - Bluish skin color
   - Not drinking enough fluids or not urinating
   - Not waking up or not interacting with others as they normally do
   - Being so irritable that the child does not want to be held
   - Flu-like symptoms that improve but then return with fever and worse coughing
   - Fever with a rash

The best way to limit the spread of these viruses is frequent hand washing for at least 20 seconds using soap and warm running water, being sure to completely clean all areas of hands and under fingernails. Preventing contamination of food, drinks, water, and ice is also very important.

Further information about influenza-like illness and how to limit its spread can be found at https://www.cdc.gov/flu/.

Please be sure to specify the nature of the illnesses you are reporting. Differentiate between influenza-like illness (fever, chills, cough, sore throat, runny or stuffy nose, body aches, headaches, and/or fatigue) and gastro-intestinal illness (“stomach flu”). If you have any questions, please feel free to contact one of our Communicable Disease Nurses:

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<tr>
<th>Clinton County</th>
<th>Gratiot County</th>
<th>Montcalm County</th>
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<tbody>
<tr>
<td>Becky Stoddard, RN</td>
<td>Lisa Mikesell, RN</td>
<td>Laura Grosskopf, RN</td>
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<tr>
<td>Public Health Nurse III</td>
<td>Public Health Nurse II</td>
<td>Public Health Nurse II</td>
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<tr>
<td>(989) 227-3111</td>
<td>(989) 875-1019</td>
<td>(989) 831-3615</td>
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</tbody>
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Sincerely,

Jennifer E. Morse, MD
Medical Director

Attachment – Norovirus Cleaning and Disinfection Guidelines
Norovirus Cleaning and Disinfection Guidelines

**General Warning:** Chlorine bleach is corrosive and irritating to mucosal tissue, skin, eyes and respiratory tract. Please read the label and follow all manufacturer’s recommendations and warnings. Avoid spray bottle application and use only in a well-ventilated area. Chlorine bleach may damage fabrics and other surfaces. Please spot test an area before applying to a surface.

**Examples of items to disinfect:**
Doorknobs, faucets, sinks, toilets, commodes, bath rails, phones, counters, chairs (including backs), tables, hand rails, light switches, keyboards, etc. within a 25-foot radius of a vomiting incident. Steam clean carpets/upholstery and launder any clothes/linens contaminated with vomit or feces.

**What works best:** Chlorine bleach (regular, not splashless type). A new bottle of bleach should be used, if possible, as bleach may lose its effectiveness after being open for more than 30 days.

**Chlorine bleach concentrations and mixing instructions:**

- **For stainless steel, food/mouth contact items, toys**
  - 1 Tablespoon of bleach in 1-gallon water

- **For non-porous surfaces, tile floors, countertops, sinks, toilets**
  - 1/3-cup bleach in 1-gallon water

**Specific Clean-up Procedures**
1. Pre-clean any visible vomit or feces with disposable paper towel or other absorbent material and place in trash.
2. Disinfect area and objects surrounding where the vomiting or diarrhea occurred with the appropriate bleach dilution.
3. Seal and discard trash immediately

**Hard surfaces**
- Disinfect with appropriate bleach solution, rinse with water if food preparation area. A bucket of bleach solution and rag are suggested. Clean the least contaminated areas first, leaving the most contaminated areas for last.

**Carpet / Upholstered Furniture**
- Visible vomit or feces should be cleaned with disposable paper towel or other absorbent material and placed in the trash. Disinfecting with bleach may discolor carpet or upholstery – steam cleaning should be used.

**Linens / clothing / textiles**
- Visible vomit or feces should be carefully removed with disposable paper towel or other absorbent material and placed in the trash. Keep contaminated clothes/linens separated from uncontaminated laundry. Minimize the handling of soiled items and wash immediately. Wash items in a pre-wash cycle first, and then use a regular wash cycle and detergent at the hottest setting safe for the fabrics. Dry separately from uncontaminated clothing at the highest temperature safe for the fabric.