Recently, the CDC has confirmed a total of 159 measles cases in 10 states so far in 2019. The total this year has surpassed total annual cases for both 2016 and 2017. In 2018, there were a total of 372 cases. The states that have reported cases of measles to the CDC are California, Colorado, Connecticut, Georgia, Illinois, Kentucky, New York, Oregon, Texas, and Washington. The current outbreak is connected to travelers who have introduced measles into the United States after travel to places where measles outbreaks are occurring.

Measles is a viral infection of the respiratory system and is very contagious. Measles spreads through contact with infected mucus and saliva, and an infected person can release the infection into the air when they cough or sneeze. Drinking from an infected person’s glass or sharing eating utensils with an infected person increases the risk of infection. Symptoms of measles appear within 14 days of exposure. It is characterized by a prodrome of fever (as high as 105°F) and malaise, cough, coryza, and conjunctivitis - the three “C”s - , a pathognomonic enanthema (Koplik spots) followed by a maculopapular rash.

Healthcare providers should consider measles in patients presenting with febrile rash illness and clinically compatible measles symptoms, especially if the person recently traveled internationally or was exposed to an individual with measles. Patients are considered contagious from 4 days before to 4 days after the rash appears.

Suspected measles cases are to be reported to the Delaware General Health District immediately. Although anyone can get measles, certain groups of people are at higher risk of complications, such as infants and children less than five years and adults older than 20 years of age. About 1 in 4 will be hospitalized, 1 out of every 1,000 will develop brain swelling, and 1-2 out of every 1,000 will die. The easiest way for measles to spread is when it reaches a community where groups of people are unvaccinated.

Currently, most confirmed cases are unvaccinated; an unvaccinated individual has a 90% chance of contracting measles if exposed. The best protection against measles is the measles-mumps-rubella (MMR) vaccine.

Children should receive their first dose at 12-15 months of age. The second dose should be received at 4-6 years of age, or at least 28 days after the first dose. The measles two-dose vaccine is 97 percent effective against the virus, according to the CDC.

**What Can Clinicians Do?**

- Discuss the importance of MMR vaccine with parents. Listen and respond to parents’ questions. When parents have questions, it does not necessarily mean they won’t accept vaccines. Sometimes, they simply want your answers to their questions.

- Ensure all patients are up to date on measles, mumps, rubella (MMR) vaccine.

- Children need 2 doses of MMR: one dose at 12-15 months and another dose at 4-6 years.

- Before any international travel, infants 6-11 months need 1 dose of MMR vaccine, children 12 months and older need 2 doses separated by at least 28 days, and teenagers and adults who do not have evidence of immunity against measles need 2 doses separated by at least 28 days.

- Consider measles in patients presenting with febrile rash illness and clinically compatible measles symptoms (cough, coryza, and conjunctivitis), and ask patients about recent travel internationally or to domestic venues frequented by international travelers, as well as a history of measles exposures in their communities.

- Promptly isolate patients with suspected measles to avoid disease transmission and immediately report the suspect measles case to the health department.

- Obtain specimens for testing from patients with suspected measles, including viral specimens for genotyping, which can help determine the source of the virus. Contact the local health department with questions about submitting specimens for testing.

For more information, including guidelines for patient evaluation, diagnosis and management, visit: [https://www.cdc.gov/measles/hcp/index.html](https://www.cdc.gov/measles/hcp/index.html)
Juul: The Modern Cigarette

Youth and teens today are a generation of smartphone and social media users. A quick search of the hashtag #Juul on Instagram or Twitter highlights the prevalence of the new public health threat regarding tobacco use, Juul.

“Juuling” is the new verb created to describe the use of the e-cigarette device. Juul has become the most popular choice of tobacco product among adolescents and teens. Some estimates point to Juul owning 60% of the electronic cigarette market. Of a local, even more significant concern, 20% of youth in Delaware County have reported using e-cigarettes.

While we know that any use of a tobacco product is unsafe for youth, the Juul is especially dangerous, as it is designed to provide a very quick and powerful burst of nicotine. This makes the product more addictive to youth. Juul products contain high levels of nicotine, the Juul-Pod, the piece that contains the nicotine liquid, contains as much nicotine as a pack of regular cigarettes.

Not only is the high nicotine content troubling, the Juul-Pods come in flavors that are attractive to youth, such as cucumber, mango, and crème. The device is also designed to mimic the look and shape of a USB flash drive. This makes the product more difficult to identify, and use can go unnoticed in schools and at home. Despite the Juul company persisting the product’s only intended purpose is to become a better alternative to cigarettes to existing adult smokers, the fact remains that the sleek design, flavors, and marketing has appealed heavily to teens.

The Delaware General Health District and the Tobacco Free Delaware County Coalition have recognized the inherent dangers of the Juul device. We have created an informational fact sheet discussing the device and have distributed it to the local schools intending to alert and educate parents that this new device exists and is not safer than traditional cigarettes.

As a physician, the Tobacco Free Delaware County Coalition is asking you to discuss the risks of the Juul device, as well as other tobacco products, with your youth and teenage patients as well as your adult patients who are parents. The informational fact sheet can be obtained by contacting Abbey Trimble, Community Health Specialist Supervisor at atrimble@delawarehealth.org or by calling 740-203-2037.

USB Flash Drive or E-Cigarette?
Can you spot the difference?

A new e-cigarette called JUUL, (pronounced ‘jewel’), shaped like a flash drive, is on the rise among youth in schools.

Learn more about this new trend in vaping by visiting:
https://delawarehealth.org/tobacco-free-delaware-county
SBIRT Training for Providers Held in Delaware

Providers and administrators were trained in the Screening, Brief Intervention, and Referral to Treatment (SBIRT) model on February 25th and 26th in Delaware County with 22 of the 26 attendees receiving extended training so that they can train others. The free training was provided through funding from the Ohio Department of Health and coordinated by staff from the Delaware Morrow Mental Health and Recovery Services Board and the Delaware General Health District. National Trainer Laura Leone from the National Council for Behavioral Health covered all aspects including SBIRT in the context of health, the full model, and SBIRT implementation.

According to the trainer, SBIRT is a paradigm shift, where the following holds true for implementation:

• Not looking for addiction,
• Looking for unhealthy substance use patterns,
• Looking for opportunities for intervention, and
• Meeting people where they are

The training was the kick off of a new program that will assist providers by supplying materials and tools to allow them to use a standard screening process and to become integrated into a standardized referral process. The referral process will close the loop for providers so that they know that their patients and clients who are at moderate or high risk for a substance use disorder have been connected to a professional or received help.

The low cost of SBIRT, minimal potential for harm, and emerging study results together support the tremendous potential for a population-level benefit from even small reductions in substance use and provide sufficient basis for the incorporation of SBIRT practices into the medical care standards for adolescents. – American Academy of Pediatrics Policy Statement, 2016

Five sites will pilot the SBIRT model in April 2019. Those sites include the Mount Carmel Lewis Center Emergency Room, Mount Carmel Powell Physicians Group, Mount Carmel Lewis Center Physicians Group, the Health District’s Pre-natal and Newborn Home Visiting Program, and SourcePoint’s In-Home Care program. For information on the Delaware County SBIRT program, contact Lori Kannally at lkannally@delawarehealth.org or 740-203-2029.

Children with Medical Handicaps Program (Formally BCMH)

The Children with Medical Handicaps Program is a state program in Ohio that assists children with special healthcare needs from the ages of 0-21 years of age. The program assists families financially with their medical diagnosis and with access to care. There are two main components of the CMH program. The diagnostic portion covers medical testing for certain medical conditions such as labs, x-rays, autism evaluations, genetic testing, etc. The treatment portion of the program covers treatments related to specific health conditions such as medications, therapy, surgeries, etc. Public Health nurses are available to perform a home visit with the families to provide assistance with the application and program as it can be difficult to navigate. Nurses also provide families with support, area resources and connect families with eligible physicians participating in the program. To make a referral, please call 740-203-2040 and ask to speak with a (B)CMH nurse.
It is known that a person’s job can affect both their physical and psychological wellbeing. It is also known that the opioid epidemic has negatively affected workers, workplaces and employers. Is there a pattern?

Researchers from the Center for Disease Control and Prevention used mortality data from the National Occupational Mortality Surveillance system to examine unintentional or undetermined drug overdose mortality within 26 occupational groups.

Looking at data from 2007-2012, proportional mortality ratios (PMR) for the occupational groups were calculated. PMRs for heroin-related overdose deaths and methadone-related overdose deaths were found to be highest for the construction occupation group.

When looking at natural and semisynthetic opioids, researchers found PMRs were highest for extraction (e.g., mining, oil and gas extraction) and health care practitioner occupation groups.

Identifying these occupational groups further characterizes the opioid epidemic. Workplace research and targeted interventions for these groups may benefit the response to the opioid epidemic.

Citation:
The chart below shows the number of disease reports classified as confirmed or probable from January through March 2019 compared to their historical average.

<table>
<thead>
<tr>
<th>Infectious Disease</th>
<th>Jan - Mar 2019</th>
<th>5-yr Avg Jan - Mar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Campylobacteriosis</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Chlamydia infection</td>
<td>99</td>
<td>85</td>
</tr>
<tr>
<td>CP-CRE</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Cryptosporidiosis</td>
<td>1</td>
<td>2.2</td>
</tr>
<tr>
<td>E. coli -(shiga toxin producing)</td>
<td>3</td>
<td>1.6</td>
</tr>
<tr>
<td>Giardiasis</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Gonoccal Infection</td>
<td>24</td>
<td>15.6</td>
</tr>
<tr>
<td>Hepatitis A</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>Hepatitis B</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>Hepatitis C</td>
<td>20</td>
<td>24.2</td>
</tr>
<tr>
<td>Influenza-Associated Hospitalizations</td>
<td>64</td>
<td>41.8</td>
</tr>
<tr>
<td>Legionnaire's Disease</td>
<td>0</td>
<td>0.4</td>
</tr>
<tr>
<td>Lyme Disease</td>
<td>0</td>
<td>0.4</td>
</tr>
<tr>
<td>Meningitis - (viral)</td>
<td>0</td>
<td>0.6</td>
</tr>
<tr>
<td>Pertussis</td>
<td>4</td>
<td>5.4</td>
</tr>
<tr>
<td>Salmonella</td>
<td>4</td>
<td>2.4</td>
</tr>
<tr>
<td>Shigella</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>Streptococcal - Group A - invasive</td>
<td>0</td>
<td>2.0</td>
</tr>
<tr>
<td>Streptococcus pneumoniae</td>
<td>2</td>
<td>2.8</td>
</tr>
<tr>
<td>Syphilis</td>
<td>3</td>
<td>1.4</td>
</tr>
<tr>
<td>Tuberculosis</td>
<td>0</td>
<td>0.2</td>
</tr>
<tr>
<td>Varicella (Chickenpox)</td>
<td>0</td>
<td>6.4</td>
</tr>
<tr>
<td>Yersiniosis</td>
<td>1</td>
<td>0.2</td>
</tr>
</tbody>
</table>
Hepatitis A Statewide Community Outbreak

Outbreaks of Hepatitis A are occurring in several states across the U.S. The Ohio Department of Health declared a statewide community outbreak of hepatitis A after observing an increase in cases since the beginning of 2018. As of April 2019, Delaware County has eight confirmed cases of hepatitis A linked to this outbreak.

Ohio Hepatitis A Outbreak Summary (as of April 1, 2019):

- **Number of cases**: 2044
- **Illness onset range**: 01/05/2018 – 03/26/2019
- **Age range**: 1-84 years
- **Gender**: 60% male
- **Number of hospitalizations**: 1259 (62%)
- **Number of deaths**: 7
- **Number of counties with cases**: 72 (82%)

Hepatitis A is a serious, highly contagious liver disease caused by the hepatitis A virus (HAV). HAV is found in the feces of people with hepatitis A. You can get hepatitis A by ingesting fecal matter—even in microscopic amounts, during sex, or just by living with an infected person. Illness can appear 15-50 days after exposure and you can be sick for several weeks. Although not all people infected with hepatitis A experience illness, symptoms can include: fever, fatigue, loss of appetite, nausea, vomiting, abdominal pain, dark urine, clay-colored stools, joint pain, and jaundice.

Although anyone can get hepatitis A, in the United States, certain groups of people are at higher risk, such as:

- **People with direct contact with someone who has Hepatitis A**
- **Travelers to countries where hepatitis A is common**
- **Men who have sexual contact with men**
- **People who use street drugs, both injection and non-injection**
- **Household members or caregivers of a recent adoptee from countries where hepatitis A is common**
- **People with clotting factor disorders, such as hemophilia**

*People working with nonhuman primates*

*People experiencing homelessness or who are incarcerated*

If you evaluate a case of Hepatitis A, let the patient know that the health department will be reaching out to them for a follow-up.

The Health District is now offering a Hepatitis A vaccine clinic every Friday from 1pm - 4pm, no appointment needed.

For more information on the outbreak in Ohio visit: [https://odh.ohio.gov/wps/portal/gov/odh/know-our-programs/Hepatitis-Prevention/Hepatitis-A-Statewide-Community-Outbreak](https://odh.ohio.gov/wps/portal/gov/odh/know-our-programs/Hepatitis-Prevention/Hepatitis-A-Statewide-Community-Outbreak)
HEPATITIS A VACCINATION CLINIC

EVERY FRIDAY 1-4PM

HOW IS IT SPREAD?

- Not washing hands
- Sex with infected partners
- Eating/Drinking foods contaminated by Hep A
- Illegal drug use

PROTECT YOURSELF

- Wash hands often with soap and water
- Get vaccinated

Delaware General Health District
Dedicated to Your Health

1 W. Winter St. Delaware, OH 740-203-2040
DelawareHealth.org