Communicable diseases are those which can be easily transmitted from one person to another. Prevention and control of communicable disease is a necessary and critical aspect of assuring community health and is a duty of the local health department. The communicable disease section of the Allegan County Health Department is responsible for the keeping track of the over 80 reportable communicable diseases.

The list of reportable diseases, along with details on how to report to the local health department, can be found in the Health Care Professionals Guide to Disease Reporting in Michigan. [Link](http://www.michigan.gov/documents/mdch/Reportable_Diseases_by_Condition_478488_7.pdf)

The Michigan Disease Surveillance System (MDSS) is a web-based communicable disease reporting system that facilitates coordination among local, state and federal public health agencies during follow-up investigations of communicable disease events. Data presented in the 2018 Communicable Disease Report were obtained from MDSS.

The Communicable Disease Report is a listing of new cases of reportable communicable diseases that have been reported to the Allegan County Health Department during the previous month. Cumulative case totals to-date is included as well as previous years of data for comparison. These statistics are updated monthly. Communicable disease reporting is an ongoing process and case information changes, often day to day or week to week. Case totals are subject to change as additional information and test results become available. Also included is a five-year report, comparing reported and probable cases.

**Foodborne Illness/Gastrointestinal Illness**- Most foodborne illnesses peak in the summer and decrease during the winter. The high incidence of foodborne illness during summer can be attributed to warmer weather and poor food handling during outdoor activities. Allegan County saw increases in the number of cases of Campylobacter, Cryptosporidiosis, Shiga toxin E. coli, (STEC) and Salmonella, when compared to the 5-year average in Allegan County. Allegan County saw a higher rate of Campylobacter, STEC, Salmonella, and Cryptosporidiosis than the state average (cases per 100,000).

**Influenza**- Data from the Michigan Syndromic Surveillance System (MSSS) is useful in providing an indication of local influenza-like illness (ILI) activity. The percentage of people visiting local emergency departments each week for ILI are compared to data from the previous four seasons to indicate how the current flu season’s activity compares too what is “expected” each week. Data from the Centers for Disease Control and Prevention (CDC) indicate that flu activity most often peaked in February, followed by December, March, and January. In 2018 there was an increase in individual cases of influenza as well as influenza-like illness. In 2018, 3,745 cases were reported, compared to 3,179 in 2017, 2,602 in 2016, 2,447 in 2015, and 2,161 in 2014. (Remember to get your flu shot every year!)
Meningitis- Meningitis is an inflammation (swelling) of the protective membranes covering the brain and spinal cord. A bacterial or viral infection of the fluid surrounding the brain and spinal cord usually causes the swelling. However, injuries, cancer, certain drugs, and other types of infections also can cause meningitis. Bacterial meningitis is very serious and can be deadly. Death can occur in as little as a few hours. Most people recover from meningitis. However, permanent disabilities (such as brain damage, hearing loss, and learning disabilities) can result from the infection. Viral meningitis is the most common type of meningitis, an inflammation of the tissue that covers the brain and spinal cord. It is often less severe than bacterial meningitis, and most people get better on their own (without treatment). *Streptococcus pneumoniae* (*S. pneumoniae*) are lancet-shaped, gram-positive, facultative anaerobic bacteria with over 90 known serotypes. Most *S. pneumoniae* serotypes can cause disease, but only a minority of serotypes produce the majority of pneumococcal infections.

Other- Histoplasmosis is an infection caused by a fungus called *Histoplasma*. The fungus lives in the environment, particularly in soil that contains large amounts of bird or bat droppings. People can get histoplasmosis after breathing in the microscopic fungal spores from the air. Although most people who breathe in the spores don’t get sick, those who do may have a fever, cough, and fatigue. Many people who get histoplasmosis will get better on their own without medication, but in some people, such as those who have weakened immune systems, the infection can become severe. There were 6 cases in Allegan County, an increase compared to the five-year average. Michigan’s 137 cases was lower than the statewide five-year average.

Rabies- Rabies is a deadly zoonotic illness caused by a virus that is transmitted to humans through the saliva of an infected animal, usually during a bite. Early symptoms of rabies infection include fever, headache, and weakness, but these may lead to anxiety, confusion, tingling sensation at the site of the bite, excitation, hallucinations, agitation, salivating more than usual, difficulty swallowing, and fear of water. Death usually occurs within days of the onset of symptoms. The primary goal of ACHD is to prevent human exposure to rabies through education and awareness; however, if exposure (or potential exposure) occurs, the main goal is to prevent the infectious disease through post-exposure treatment. It is extremely important that all individuals seek medical care as soon as possible after the suspected exposure.

Sexually Transmitted Infections – Chlamydia is the most common sexually-transmitted infection in Allegan County, Michigan, and the United States. Cases of chlamydia were down in Allegan County in 2018 compared to 2017, and cases of gonorrhea increased in 2018. The increase in both of the infections occurred statewide. Individuals who have unprotected sex, multiple sex partners, and sexual intercourse with an infected person are at high-risk for infection. Avoiding high-risk behavior and practicing protected sex with the use of condoms can prevent infection.

Tuberculosis- Tuberculosis (TB) is a serious bacterial dis-ease caused by *Mycobacterium tuberculosis*, which usually infects the lungs, but can also infect the kidneys, the spine, and the brain. TB is spread through the air when an infected individual coughs, sneezes, speaks, or sings, sending out droplets of infectious bacteria. An uninfected person may breathe in these bacteria and become infected. Not everyone who is infected with TB presents symptoms or becomes sick. In fact, most people who are infected with TB have strong enough immune systems that
protect them from illness. This type of TB is called **Latent TB Infection (LTBI)**. There were no cases of TB in Allegan County in 2018, and 11 cases of LTBI. 2018 was really the first year that ACHD kept track of LTBI cases in MDSS, thus no cases showing up in the previous years.

**Vaccine-Preventable Diseases** – Surveillance of vaccine-preventable diseases not only informs the effectiveness of immunization programs and vaccines, but also allows monitoring progress towards preventable disease elimination. Allegan County has not had a case of mumps since a probable mumps case in 2014, and has no measles cases. Statewide, there were 42 cases of mumps, and 19 cases of measles in 2018. Pertussis is a very contagious disease, spread from person to person, usually by coughing or sneezing. Allegan County had 12 pertussis cases in 2018, with seven of these linked to a school-wide outbreak in December. Michigan had 646 pertussis cases. There were 6 cases of chickenpox in 2018, an increase compared to the 5-year average. Michigan had 434 cases, a decrease in the five-year statewide average. **The best way to prevent these diseases is to get vaccinated.**

**Vectorborne** – For the first time in many years, an Allegan County resident was diagnosed with Eastern Equine Encephalitis (EEE). Additionally, this was the only EEE in the entire state in 2018. Three cases of West Nile Virus were reported in 2018, as well. Allegan County is just one of many counties with a known risk for Lyme disease (at least two confirmed local exposures, and/or ticks or animals with lyme bacteria). Mosquito and tick-borne disease prevention largely depends on individual protection. Taking precautions to prevent mosquito and tick bites when engaging in outdoor activities can reduce the likelihood of getting vector borne infections.

**Viral Hepatitis**- Hepatitis means inflammation of the liver. The liver is a vital organ that processes nutrients, filters the blood, and fights infections. When the liver is inflamed or damaged, its function can be affected. Heavy alcohol use, toxins, some medications, and certain medical conditions can cause hepatitis. However, hepatitis is often caused by a virus. In the United States, the most common types of viral hepatitis are hepatitis A, hepatitis B, and hepatitis C. Since the summer of 2016, Michigan has been experiencing a large Hepatitis A outbreak (699 cases in 2017). Allegan County had one case of Hepatitis A reported in 2017 and one additional case in 2018. Hepatitis A can be prevented by proper hand washing and vaccination.