Gastrointestinal (GI) illnesses are infections of the intestines that often result in diarrhea, vomiting, stomach cramps, fatigue and/or fever. Usually, microorganisms such as bacteria, viruses, or parasites are the cause of these illnesses. People can get exposed by eating, drinking, or ingesting these microorganisms. GI illnesses are often transmitted when people have contact with animals or their surroundings, the feces (poop) or vomit of an infected person, or a contaminated surface. Because GI illnesses can be very contagious, the Ottawa County Department of Public Health (OCDPH) maintains a surveillance system to quickly identify outbreaks, notify the public when there is more illness than usual, and help healthcare providers know when to expect more patients with GI illness.

Data in this report include community notifications of suspected foodborne illnesses, GI illnesses from schools, childcare and healthcare offices, chief complaints of GI illness from emergency departments (ED), and GI illness outbreaks reported to the OCDPH. To view laboratory-confirmed cases of some GI illness by pathogen, see the Ottawa County Annual Summary of Reportable Diseases 2018.

**Foodborne Illness Surveillance**

*Figure 1. Community Reports of Suspected GI Illness to OCDPH by Month, 2018 (N=67)*

This chart illustrates community notifications of suspected foodborne illness to OCDPH by month. The number of reports increased sharply in April compared to other months. The reason for this increase is unknown but may be associated with a broader community-wide increase in GI illness. An April increase in GI illness was also noted in healthcare offices (Figure 3), hospital emergency departments (Figure 4), and outbreaks in long-term care facilities (LTCFs) (Figure 5).
Gastrointestinal Illness (GI) Surveillance from Reporting Schools, Childcare and Healthcare Settings

Figure 2. School and Childcare GI Illness by Week, Ottawa County, 2018

These charts represent weekly reports of GI illness to OCDPH. Overall, school and childcare GI illnesses followed a seasonal pattern similar to norovirus-like illnesses with an increase in winter and waning in the spring, summer and fall. Reported GI illnesses in healthcare offices briefly increased during and shortly after holidays.
Gastrointestinal Illness Syndromic Surveillance

Figure 4. Percentage of ED Visits in Ottawa County with GI Illness Syndrome

The figure above illustrates the proportion of patients seen in Ottawa County hospital EDs with a GI illness symptom (nausea, vomiting and/or diarrhea). In 2018, the highest proportion of ED visits with GI symptoms, 16.8%, occurred in December. This period also corresponds to an increase in the proportion of GI illness reports from healthcare offices (Figure 3). When comparing years, there was no significant difference in the weekly average proportion of visits to EDs for GI symptoms between 2017 (10.4%) and 2018 (10.9%; \(p=0.09\)).

Gastrointestinal Illness Outbreaks

Figure 5. Reported GI Illness Outbreaks by Month, Ottawa County, 2018

- Community
- Long-term care facilities
- Schools/childcare
In 2018, the majority (60%, n=6) of GI illness outbreaks reported to OCDPH were in LTCFs, 30% (n=3) in school/childcare settings and 10% (n=1) in a local food establishment. Thirty percent (n=3) of the reported outbreaks were associated with norovirus, and the remainder (n=7) were of undetermined causes. Among the outbreaks associated with norovirus, 67% (n=2) were in LTCFs and 33% (n=1) was in a local food establishment.

OCDPH actively works to prevent GI illness in the food service industry by providing:

- Food safety services and inspections throughout the county
- Education and training on food handling and sanitation, and
- GI illness surveillance and outbreak investigations

To report a suspected foodborne illness or submit a question to OCDPH, click here.

Visit us at https://www.miottawa.org/Health/OCHD/

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