

Communicable Disease – Outbreaks

Why Is This Important?

A disease outbreak is the occurrence of cases of disease in excess of what is expected in a defined community, geographical area or season. In Saskatoon Health Region, long term care (LTC) homes report outbreaks to Population and Public Health (PPH) and work with PPH Disease Control Department and Infection Control to limit the impact of outbreaks. Schools report illness absenteeism in excess of 10%. Community outbreak investigations are conducted when illness exceeds what is normally expected. The goal of outbreak investigation and management is to identify the source of infection and ensure interventions are put in place to prevent ongoing transmission of illness.

Two indicators of outbreak control are duration of the outbreak and attack rate. Lengthy outbreaks are costly, both to LTC residents in terms of restricted activities, and financially to the LTC home. The goal is to keep the attack rate and length of the outbreak to a minimum.

What Is Being Done?

[2016 Disease Control Activities](#)

[Outbreak Management in Long Term Care](#)

[Hand Hygiene Campaign](#)

To Learn More:

Chief Medical Health Officer's [Call to Action](#)

Highlights

In 2016/17 an increased number of outbreaks were reported.

- In 2016/17, 43 respiratory and 24 gastrointestinal illness (GI) outbreaks were reported in the Region (Figure 1) compared to 23 respiratory and 10 GI outbreaks reported the previous year (not shown). One Zika infection (other) and one antibiotic resistant organism outbreak (ARO) were reported in 2016/17. And additional eleven hospital outbreaks were reported (not shown).
- December and January were particularly hard hit with respiratory outbreaks; this corresponded with the onset of the influenza season (not shown).
- The top three organisms circulating in long term care homes (LTC) were norovirus, influenza, and respiratory syncytial virus (RSV). For trends in outbreak organisms in LTC see [Additional Data](#).
- Influenza control is important in LTC. In 2016/17, 20 confirmed influenza outbreaks were reported in LTC compared to 8 influenza outbreaks reported the previous year (not shown). Immunization of staff and residents are important preventive measures against influenza outbreaks. See [Influenza](#) and [Influenza Immunization](#).
- LTC homes are encouraged to report "suspect" outbreaks, and to begin interventions to prevent transmission before illness escalates to a confirmed outbreak. In 2016, 7 suspect outbreaks did not advance to confirmed status.
- In 2016/17, the average duration of respiratory outbreaks was 14 days, and for GI outbreaks 15 days. The average attack rate (percentage of residents ill) was 25.7% for GI outbreaks, and 13.1% for respiratory outbreaks (Figure 2).

Figure 1: Outbreaks by Type, Saskatoon Health Region, 2016/17

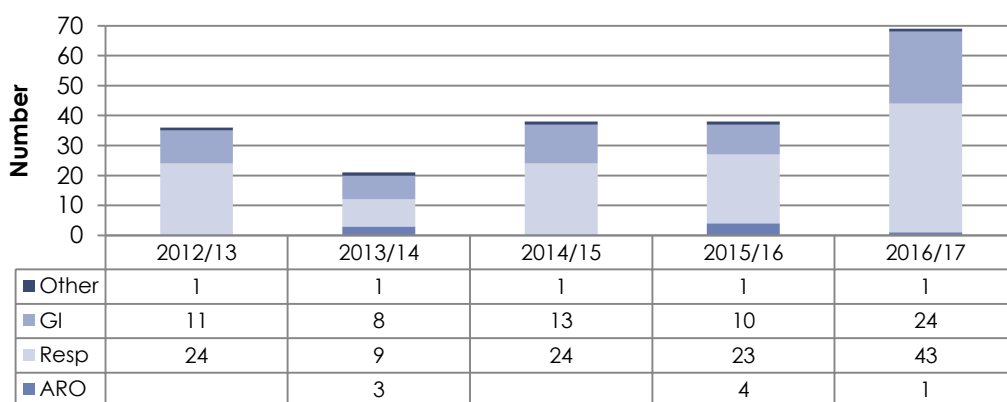
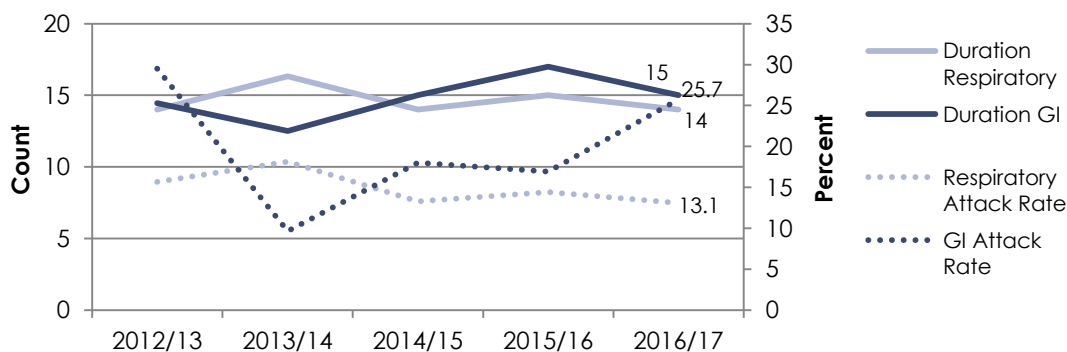


Figure 2: Duration and Attack Rates of Long Term Care Outbreaks, Saskatoon Health Region, 2012/13 to 2016/17



Outbreak season is from April 1 to March 31st

Source: Population and Public Health