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 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?

2015 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 2015, respiratory outbreaks accounted for 64% of the total outbreaks reported in our Region.

- In 2015/16, 23 respiratory and 13 gastrointestinal illness (GI) outbreaks were reported in the Region (*Figure 1*) compared to 12 respiratory and 21 GI outbreaks the previous year (not shown).
- February and March were particularly hard hit with respiratory outbreaks; this corresponded with the late onset of the influenza season in this year.
- The top three organisms circulating in long term care homes (LTC) in 2015/16 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 2015/16, eight influenza outbreaks were reported in LTC compared to 15 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 2015, 27 confirmed outbreaks were reported, and an additional 16 suspect outbreaks did not advance to confirmed status.
- In 2015, the average duration of respiratory outbreaks was 15 days, and for GI outbreaks 17 days. The average attack rate (percentage of residents ill) was 16.9% for GI outbreaks, and 14.4% for respiratory outbreaks.

Figure 1: Outbreaks by Type, Saskatoon Health Region, 2015/16

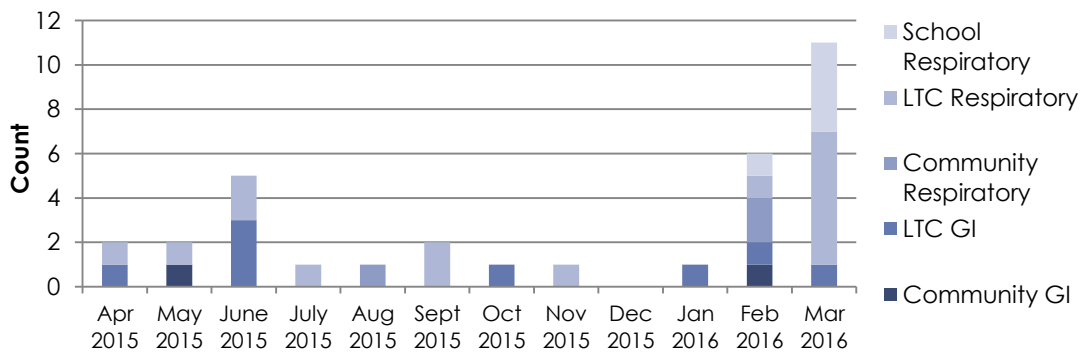
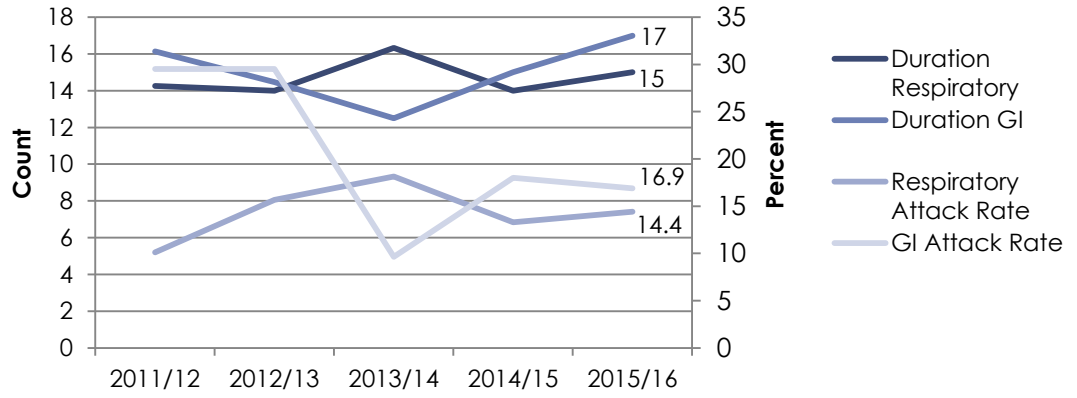


Figure 2: Duration and Attack Rates of Long Term Care Outbreaks, Saskatoon Health Region, 2011/12 to 2015/16



Source: Population and Public Health