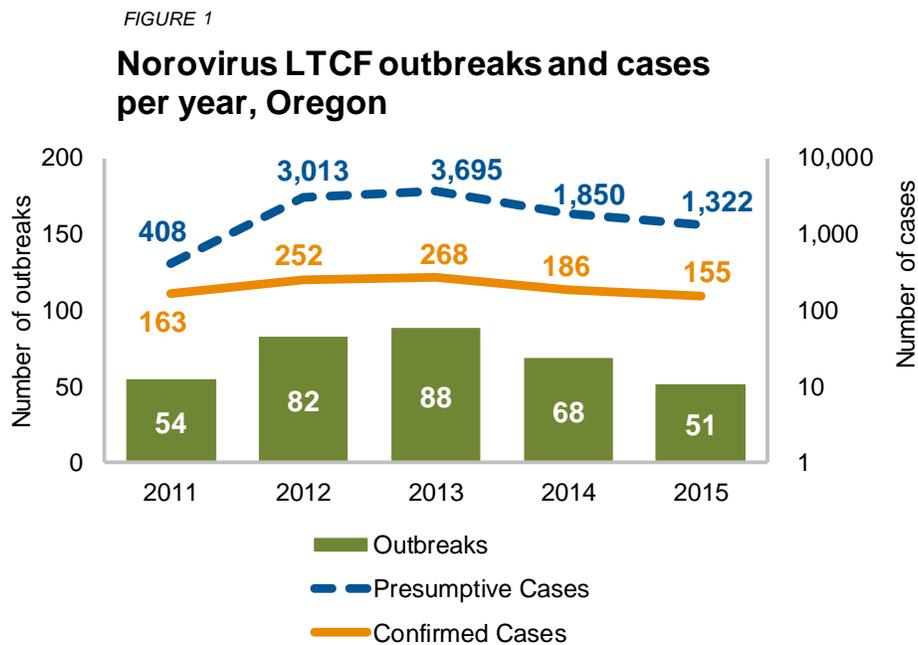


## Illness & Injury

# Norovirus outbreaks in long-term care facilities

Norovirus infection causes nausea, vomiting, diarrhea, muscle aches, fever and abdominal cramps, which can result in dehydration. Symptoms typically resolve within a day but can remain for up to three days. Norovirus is highly transmissible and persons typically get norovirus by eating contaminated food containing infected stool or vomit particles. Norovirus is the leading cause of foodborne outbreaks in the United States and is often found in semi-permanent settings such as Long-Term Care Facilities (LTCFs) and cruise ships.

In late 2011, the Oregon Public Health Division began to track suspect norovirus outbreaks. From 2011 to 2015, 343 norovirus or norovirus-like outbreaks were reported in Oregon LTCFs. They comprised 59% of all norovirus outbreaks and affected 11,655 staff and residents of LTCFs (Figure 1).

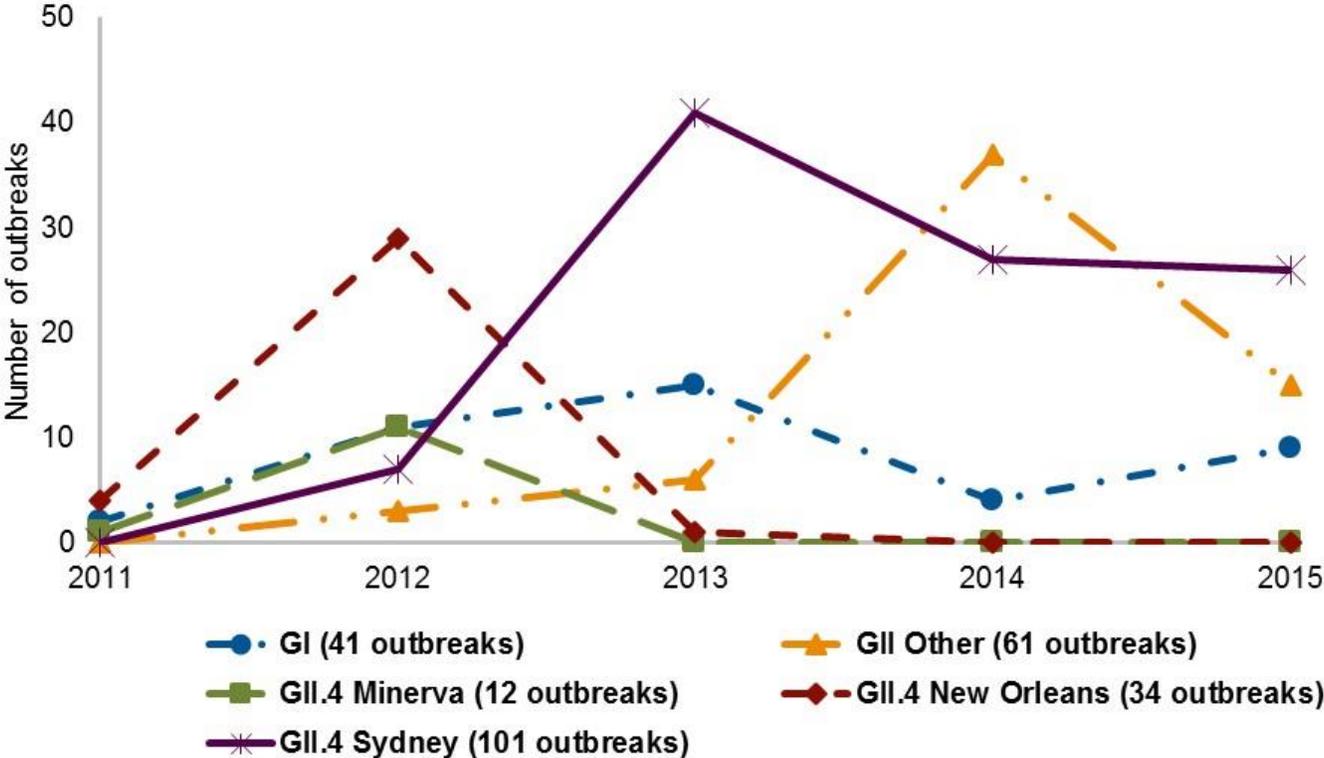


Source: Oregon outbreak investigation database

The Oregon State Public Health Laboratory (OSPHL) began identifying genotypes associated with gastrointestinal outbreaks in late 2012. As shown in Figure 2, norovirus genogroup GII genotype 4 New Orleans was predominant in 2011 and 2012 accounted for 33 (24%) of 136 total confirmed norovirus outbreaks among Oregon LTCFs. Also in late 2012, a new norovirus strain of genogroup II, genotype 4 originating in Sydney, Australia (GII.4 Sydney 2012), became the predominant norovirus strain and caused a severe norovirus season globally. In 2013, GII.4 Sydney was responsible for 41 (45%) of 91 confirmed norovirus outbreaks among Oregon LTCF's. In 2014 and 2015, the number confirmed norovirus outbreaks caused by GII.4 Sydney decreased. In 2015 we saw an increase of genogroup I norovirus strains, though GII.4 Sydney strains still accounted for the most number of outbreaks in 2015.

FIGURE 2

**Confirmed norovirus genotypes in LTCF outbreaks by year, Oregon**



Source: Oregon outbreak investigation database

In 2014-2015, presumed norovirus infections among staff and residents in Oregon LTCFs afflicted more females (61%) than males (39%). Of those presumed LTCF norovirus cases, 33% were in staff and 67% were in residents.

**Additional Resources:** [Long-Term Care Facility Outbreak Data](#)

**About the Data:** Case data used in this analysis come from Oregon’s outbreak investigation database, “Outbreaks.” Demographic data comes from the Case Log database listing the age, sex, symptom profile and facility role of those presumed to be sick during an outbreak.

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[Oregon State Health Profile](#)

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