

# Disease outbreaks

Oregon state and local health departments investigated 291 acute and communicable disease outbreaks in 2015, up from 256 in 2014 (a 14% increase). Forty-seven percent (138) of these were outbreaks of calicivirus gastroenteritis. Twenty-seven outbreaks were foodborne, 111 were respiratory, three were due to animal contact and one was waterborne. The mode of transmission was undetermined in 54 outbreaks. Sharing of respiratory secretions caused outbreaks of influenza (66) and pertussis (27) and two outbreaks of chickenpox (varicella) can be considered airborne.

Several factors likely led to the unusually high number of influenza-like illness outbreaks in 2015, especially in the long-term care facility (LTCF) setting. The predominant strain of influenza circulating during the 2014–2015 flu season was a drifted variant of influenza A/H3N2. The H3N2 component of the flu vaccine did not match the drifted H3N2 strain that was circulating, which reduced the vaccine's efficacy. In addition, H3N2-predominant seasons historically have been associated with severe illness, particularly among older people. In 2014–2015, 67% of individuals hospitalized with lab-confirmed influenza in the Portland area were  $\geq 65$  years.

Twenty-one (77%) of the pertussis outbreaks in 2015 were reported in school settings. These cases contributed to the high proportion of cases reported among older teenagers.

Foods contaminated with a variety of *Salmonella* made folks ill at a variety of venues. Almost every outbreak reinforces the tried-and-true public health mantras of “wash your hands” and “cover your cough.”

Gastroenteritis is by far the most commonly reported type of outbreak in Oregon, accounting for 172 (59%) of the 291 outbreaks investigated in 2015.

Thanks to rigorous specimen collection by local health investigators, 207 of these outbreaks were confirmed. Fifty-two percent of gastroenteritis outbreaks had disease-causing agents identified, mostly caliciviruses (norovirus and sapovirus). The Oregon State Public Health Laboratory (OSPHL) now routinely tests for sapovirus, astrovirus and rotavirus when stool specimens are norovirus-negative.

## Disease outbreaks, by etiology: Oregon, 2015

