Influenza

In April of 2009, CDC reported the first cases of infection with a novel strain of influenza A (H1N1) virus in the United States and by June 2009 the World Health Organization declared the first influenza pandemic of the 21st century. The pandemic strain of influenza A (H1N1) caused morbidity and mortality around the world, and had a substantial impact on the public’s health in Oregon. Influenza, a respiratory illness caused by the influenza virus, is characterized by fever, cough, sore throat, headache, coryza, muscle aches, headache, and fatigue. Influenza seasons are unpredictable, and can be severe. Pandemics can cause greater than expected mortality, or in the case of the 2009–2010 pandemic, greater mortality among younger persons. Nearly 90% of pandemic deaths in the U.S. during 2009–2010 occurred among persons younger than 65.

The Oregon Public Health Division conducted enhanced surveillance for pandemic H1N1 illnesses in collaboration with local partners. Surveillance activities included outpatient influenza-like illness (ILI) surveillance, statewide hospitalization surveillance among adult and pediatric cases, and statewide mortality surveillance. Laboratory testing and surveillance through the Oregon State Public Health Laboratory supported ILI, hospitalization and morality surveillance.

Influenza-like illness

The peak of ILI activity occurred between October 11–24, 2009. During the week ending October 17, 2009, 10.9% of outpatient visits reported by sentinel providers were associated with ILI. During the week that ended October 24, 2009, 22.3% of outpatient visits reported by Oregon Community Health Information Network providers (OCHIN representing 103 clinics throughout Oregon) were associated with ILI.

Hospitalizations and deaths

Influenza-associated hospitalizations and deaths were reportable conditions in Oregon from September 1, 2009, to August 31, 2010. Between April 2009 and May 2010, surveillance identified 1,315 influenza hospitalizations and 67 deaths. The rate of hospitalization was highest among persons 0–4 years of age and 50–64 years of age. Fifty-four percent of hospitalized cases were female. Eight percent of hospitalized cases died. Four influenza deaths occurred among children 0–17 years of age.

Deaths

The reporting requirements changed after August 2010. Currently, only pediatric influenza deaths and ICU hospitalizations (including six weeks post-partum) among pregnant women are reportable in Oregon.
Oregon outpatient influenza-like illness (ILI) surveillance: ILINet and OCHIN, 2009–10

Influenza hospitalizations among Oregon residents: 9/1/2009–5/1/2010
Influenza deaths among Oregon residents: 9/1/2009–5/1/2010