The Oregon Emerging Infections Program (EIP) conducts population-based surveillance for *Clostridiodes difficile* infections (CDI) among residents in Klamath County, with Deschutes County participating in 2012—2013. Oregon is one of ten EIP sites participating in this surveillance project.

Project objectives are:

- Determine the population-based incidence of community– and healthcare–associated CDI among EIP sites
- Characterize *C. difficile* strains responsible for CDI with a focus on strains from community–associated cases
- Describe the epidemiology of community– and healthcare–associated CDI

### About *C. difficile*:

*Clostridiodes difficile* is a toxin-producing bacterium that causes diarrhea and more serious intestinal conditions like colitis (bowel inflammation) and bowel perforation.

*C. difficile* caused almost half a million infections and was associated with approximately 29,000 deaths in the U.S. in 2011. *C. difficile* infections are often linked to medical care; people who take antibiotics and receive medical care are most at risk.

Spread of *C. difficile* infection is preventable by hand washing and appropriate antibiotics use.

### Public health importance:

*C. difficile* infections are a leading cause of patient harm in the U.S. medical system. Data from this project will help inform future policy and prevention strategies.
Surveillance began in Klamath County in January 2010, with Deschutes County participating in 2012-2013. As of December 2018, one thousand two hundred and ten incident cases have been identified and medical records reviewed. Of these cases:

- 76% received systemic antibiotics in the 12 weeks before their *C. difficile* infection
- 52% are community associated, which means they did not have a recent admission to a hospital or long-term care facility
- 25% of community associated cases, however, had recent healthcare exposure in an emergency room
- 23% of infections occurred in a hospital or long-term care facility
- 17% experienced a recurrent *C. difficile* infection
- 3% died while hospitalized or within 30 days of *C. difficile* infection if residing in a long-term care facility

Underlying medical conditions include diabetes (23%), chronic pulmonary disease (21%), and chronic kidney disease (13%). Twenty seven percent of cases have no underlying conditions.