

CP-CRE Cases in Clark County

General CP-CRE Information

Background

CP-CRE is Carbapenemase-Producing Carbapenem-Resistant Enterobacterales, which are CRE capable of breaking down carbapenems. CRE is a family of bacteria that is difficult to treat because of the high levels of resistance to antibiotics. Common Enterobacterales include *Klebsiella* species and *Escherichia coli* (*E. coli*), which are normally found in the human intestines. Sometimes these bacteria spread outside the gut and cause serious infections. Carbapenems are antibiotics that are typically reserved for the treatment of serious infections, especially when the infection is caused by a germ highly resistant to antibiotics. Resistance makes the antibiotics ineffective in killing the resistant germ.

Transmission & Risk

CP-CRE is usually spread from person-to-person through contact with infected or colonized people, particularly contact with wounds or stool. A colonized individual is someone who has the bacteria in or on their body without it producing an infection.

Healthy people don't usually get CP-CRE infections. CP-CRE primarily affects patients in acute and long-term healthcare settings who are being treated for another condition. Patients who are immunocompromised or have invasive devices going into their body are more likely to be affected.

Symptoms & Complications

The symptoms and complications from CRE will vary based on the type of bacteria involved and the part of the body infected. For example, pain with urination from a urinary tract infection or shortness of breath from pneumonia. A serious complication from CRE is sepsis.

Testing, Diagnosis, Treatment

If CP-CRE is causing an infection, there are some antibiotics that will work against it; however, the options are limited. There are some strains that have been resistant to all antibiotics, but these are very rare. Some infections may be treated by draining the infection.

There are some tests that may be ordered to determine if a patient has CRE, these include: complete blood count, chest x-ray, urine tests, additional imaging tests, blood cultures, urine cultures, sputum cultures, antibiotic sensitivity tests.

Treatment depends on symptoms, age, and general health. It can include: IV fluids, nutritional support, fever-reducing medicines, careful monitoring of vital signs, and more.

More information can be found here: <https://odh.ohio.gov/know-our-programs/infectious-disease-control-manual/section3/section-3-cp-cre>

Clark County Related Discussion

The highest report cases in Clark County was in 2021 (18 cases) and the lowest reported was in 2017 (0 cases). There is an overall increase in cases between 2017 and 2021. To prevent the spread of CP-CRE, healthcare personnel and facilities should be following infection control precautions provided by the CDC. For patients that have CP-CRE, take antibiotics exactly as prescribed and finish the full course. Following proper hygienic routines helps decrease the spread as well.

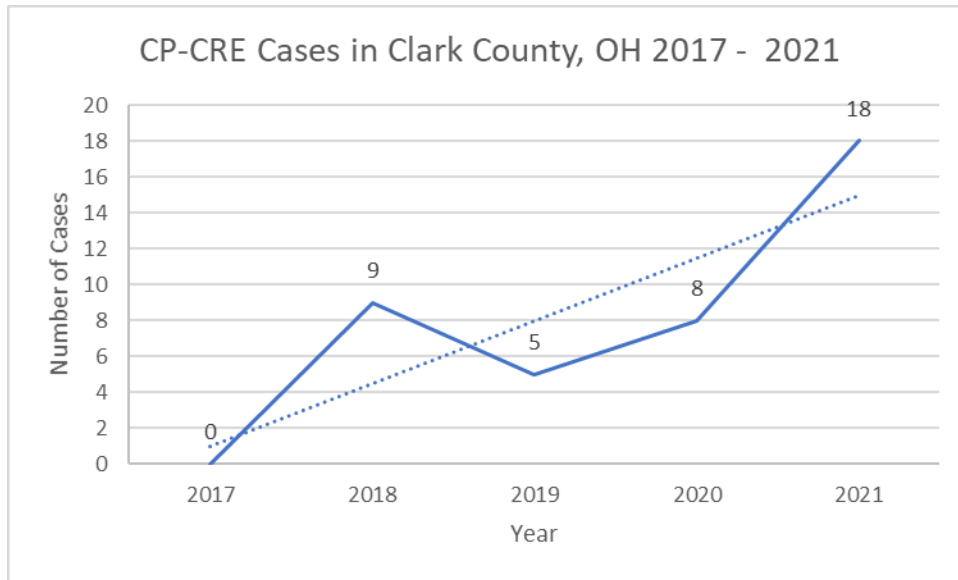


Figure 1 CP-CRE Cases 2017-2021

*Includes Suspected, Probable and Confirmed Cases.