



The Extensively Drug-Resistant Organism (XDRO) Registry

The Illinois Department of Public Health (IDPH) and Chicago CDC Prevention Epicenter developed an infection control tool called the XDRO registry to improve:

1. **Inter-facility communication:** The registry provides efficient information exchange across the spectrum of healthcare about patients who have tested positive for carbapenem-resistant Enterobacteriales (CRE) and other emerging pathogens of concern (e.g., *Candida auris*).
2. **XDRO surveillance:** The registry stores XDRO surveillance data that can be used to measure XDRO burden and to detect clusters.

Reporting Requirements

- The Control of Communicable Diseases Code (77 Ill. Adm. Code 690) requires hospitals, laboratories, and long-term care facilities to report CRE that meet surveillance criteria.
- As of November 2013, the **first CRE-positive culture per patient stay** must be reported to the XDRO registry **within 7 calendar days** after the test result is finalized.

CRE surveillance criteria

Enterobacteriales (e.g., *E. coli*, *Klebsiella* spp, *Enterobacter* spp, *Proteus* spp, *Citrobacter* spp, *Serratia* spp, *Morganella* spp, or *Providentia* spp) with one of the following laboratory test results:

1. Molecular test (e.g., polymerase chain reaction [PCR]) specific for carbapenemase;
2. Phenotypic test (e.g., modified Carbapenem Inactivation Method [mCIM]) specific for carbapenemase production; or
3. Susceptibility test (**for *E. coli* and *Klebsiella* spp only, excluding *K. aerogenes***): non-susceptible (intermediate or resistant) to ONE of the following carbapenems (doripenem, meropenem, or imipenem) AND resistant to ALL of the following third generation cephalosporins tested (ceftriaxone, cefotaxime, and ceftazidime). *Note: ignore ertapenem for this definition.*

Highlighted Feature – Automated Alerts

- The registry has a system, called auto alerts, for rapid notification of XDRO carriage at the time of patient admission to support appropriate infection control action.
- A hospital sends its inpatient admission feeds to automatically search the registry for XDRO-positive patients. If a match is found, an alert is sent to the hospital's infection preventionist (IP), who can then review patient-specific information in the registry.



XDRO registry website: www.xdro.org • **Contact:** DPH.XDROregistry@illinois.gov

Report Carbapenem-Resistant Enterobacterales (CRE) isolates to the XDRO registry

