

# Comprehensive Antibigram Toolkit: Phase 1

## Antibiogram Factsheet

### What is an antibiogram?

Antibiograms aggregate information about susceptibility patterns of organisms to commonly prescribed antibiotics. Antibiograms display the organisms present in clinical specimens sent by the prescribing clinician (physician, nurse practitioner, or physician assistant) for laboratory testing as well as the susceptibility of each organism to an array of antibiotics. Antibiograms are routinely prepared by hospital laboratories, over a period of months or years, but antibiograms are not routine in the nursing home setting.

### How will antibiograms be created?

The data for the nursing home antibiogram will be generated by the nursing home's contracted clinical laboratory, using the results from residents' cultures collected at the nursing home over the past 12–24 months. The antibiogram will be formatted as a table that is easy for prescribing clinicians to read and use when making decisions about prescribing antibiotics for residents.

### Why are antibiograms important?

Antibiotics are among the most commonly prescribed pharmaceuticals in long-term care settings, yet research indicates that a high proportion of antibiotic prescriptions are inappropriate. The adverse consequences of inappropriate prescribing practices are serious and have become a major public health concern. Using an antibiogram to guide empiric antibiotic selection can help to improve the likelihood that the antibiotic will be effective even before the bacteria have been identified by the laboratory.

### What is the potential impact of using antibiograms?

Research has shown that the use of antibiograms can result in reduced reliance on broad-spectrum antibiotics as initial therapy and can result in fewer clinical failures of antibiotics that are first prescribed.

