

07-11

## STATEMENT OF POLICY

### Multi-Drug Resistant Organisms

#### Policy

The National Association of County and City Health Officials (NACCHO) urges state and federal partners to provide adequate support, through increased funding and technical assistance, to local health departments to monitor, prevent, and control the spread of multidrug-resistant organisms (MDROs).

Technical support activities include providing training and appropriate guidance materials, enhancing laboratory capacity, improving disease surveillance, and expanding data access among health departments in collaboration with long-term care, acute care, and outpatient facilities.

NACCHO strongly suggests the inclusion of local health department representation to provide input on MDRO policy development through participation in national, state, and local stakeholder meetings and committees that establish, review, and refine national MDRO surveillance, prevention, and containment strategies.

Effectively addressing MDROs also requires consideration of related topics covered in NACCHO's policy statements Antimicrobial Stewardship and Resistance, Healthcare-Associated Infections, and the National Healthcare Safety Network.

#### Justification

MDROs are germs, often bacteria, resistant to one or more antimicrobial drugs. In most instances, MDRO infections have signs and symptoms similar to infections caused by microbes that can be treated with antimicrobial drugs; however, options for treating patients with MDRO infections are often extremely limited. As such, MDROs are associated with increased lengths of hospital stay, costs, and mortality.<sup>1</sup> Monitoring, preventing, and controlling MDROs is a national priority, which requires healthcare facilities as well as federal, state, and local agencies, including health departments, to assume responsibility.

In the past, most MDROs were encountered primarily in healthcare settings, such as acute care hospitals, which typically have dedicated infection prevention staff who can intervene and prevent further spread.<sup>2</sup> MDROs are increasingly occurring in settings that may not have certified infection prevention and control professionals on staff such as long-term care facilities, nursing homes, day care centers, schools, correctional facilities, and recreational facilities. These settings require more support from local health departments when cases arise.<sup>3</sup> As an essential public health service, local health departments investigate and control infectious diseases and other community health hazards.



There are a number of examples of the growing trend of MDROs and associated infections that state and local health departments are facing. Carbapenem-resistant Enterobacteriaceae (CRE) are considered an urgent threat by CDC, as they have become resistant to nearly all available antibiotics.<sup>4</sup> As a result nearly half individuals with bloodstream infections from CRE bacteria die from the infection.<sup>4</sup> Methicillin-resistant *Staphylococcus aureus* (MRSA) has progressed from being an organism primarily associated with infections acquired in healthcare settings to one that regularly infects individuals in the community, causing over 80,000 infections per year.<sup>4,5</sup> Multidrug-resistant (MDR) tuberculosis (TB) makes up 3.7 percent of new TB cases worldwide, and extensively drug-resistant (XDR) TB makes up 9.0 percent of MDR-TB cases.<sup>6</sup> A major outbreak of XDR TB could constitute a substantial drain on public health resources and quickly deplete existing state and local TB budgets, negatively impacting progress toward TB elimination. Antibiotic-resistant *Neisseria gonorrhoeae* is also a growing public health concern, especially since the U.S. gonorrhea control strategy relies on effective antibiotic therapy.<sup>7</sup> Given the ability of *N. gonorrhoeae* to develop antibiotic resistance, it is critical to continuously monitor gonococcal antibiotic resistance and encourage research and development of new treatment regimens for gonorrhea.<sup>8</sup> Vancomycin-resistant enterococci (VRE) have been increasing in prevalence for three decades.<sup>9</sup> Closely related to MDROs is *Clostridium difficile* (*C. diff*), an infection usually associated with antibiotic use which results in similar consequences as MDROs such as increases in length of hospital stay, cost of treatment, and mortality. In 2011, *C. diff* caused nearly half a million infections in the United States. Of these infected patients, 29,000 died within 30 days of diagnosis.<sup>10</sup> In the U.S., local and state health departments bear the brunt of this burden related to investigating outbreaks and devising control measures.<sup>1</sup>

Increased federal funding and technical support will allow state and local health departments to continue and/or increase the following activities:

- Building on existing relationships with schools, correctional facilities, healthcare facilities, and other community partners to provide education and guidance;
- Preventing MDRO transmission in healthcare and community settings;
- Promoting effective treatment, in accordance with national guidelines;
- Coordinating with public health laboratories, including the Antibiotic Resistance Laboratory Network, as appropriate, on laboratory testing to guide containment of these organisms;<sup>11, 12</sup>
- Improving surveillance for MDROs;
- Expanding the capacity for outbreak detection and response;<sup>1, 13</sup>
- Conducting onsite infection control assessments;<sup>11, 12</sup> and
- Improving antimicrobial use by promoting implementation of stewardship practices.

## **References**

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## **Record of Action**

*Proposed by the Infectious Disease Prevention and Control (IDPC) workgroup*

*Approved by the NACCHO Board of Directors*

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