Health Advisory: Multidrug Resistant *Salmonella* Newport among Travelers to and from Mexico

**Key Messages**

- The Centers for Disease Control and Prevention (CDC) has observed an increase in *Salmonella* infections among travelers to and from Mexico.
- Multidrug-resistant *Salmonella* serotype Newport (MDR *Salmonella* Newport) has been identified as the etiologic agent.
- Consider MDR *Salmonella* Newport in the differential diagnosis of patients with symptoms compatible with salmonellosis who traveled to and from Mexico in the 7 days before onset of symptoms.
- If treatment is indicated, obtain appropriate cultures (for example, stool, urine, and/or blood).
- Ceftriaxone or an alternative agent should be considered for empiric treatment when indicated until antibiotic sensitivity results are available.

**Situation**

The Centers for Disease Control and Prevention (CDC) has observed a new and recent increase in certain *Salmonella* infections among travelers to and from Mexico. These infections are due to a strain of multidrug-resistant *Salmonella* serotype Newport (MDR *Salmonella* Newport). MDR infections can be harder to treat, and patients may be at increased risk for developing serious complications.

**Background**

**MDR Salmonella Newport**

During 2015 to 2019, *Salmonella* Newport was the second most common *Salmonella* serotype identified among San Diego County (SDC) residents representing 11% of all serotypes. Since 2018, there have been two multistate clusters of MDR *Salmonella* Newport involving SDC residents: One in 2018-2019, with 31 cases among SDC residents and the other in late 2021, with 14 cases from SDC. Exposures reported in these clusters included consumption of beef, including jerky, from the U.S. or Mexico, consumption of Mexican-style cheese brought into the U.S. from Mexico, and travel to Mexico.

Because of this new cluster of cases in 2022, CDC posted a travel notification on September 8, 2022 and a Clinician Outreach Communication on October 20, 2022.

**Diagnosis and Treatment**

Most people with *Salmonella* diarrheal illness require only supportive care, which includes fluid replacement. CDC guidance for MDR *Salmonella Newport* notes that antibiotics for otherwise healthy people do not shorten the duration of diarrhea or fever, may lead to prolonged asymptomatic *Salmonella* carriage, and contribute to the development of antibiotic resistance. When treatment is indicated, antibiotic sensitivity testing should be utilized.
because most MDR *Salmonella* Newport isolates from this 2022 travel-associated strain are **not susceptible** to antibiotics typically recommended for *Salmonella* treatment.

Healthcare providers should consider MDR *Salmonella* Newport in the differential diagnosis of patients with symptoms compatible with salmonellosis (e.g., diarrhea, fever, and abdominal cramps) who traveled to and from Mexico in the 7 days before onset of symptoms. The [CDC guidance for MDR *Salmonella Newport*](http://www.cdc.gov) includes information on diagnosis, treatment, patient education, and additional resources. Some key points are:

- **Obtain** appropriate cultures (for example, stool, urine and/or blood) when evaluating ill travelers.
- **Order** antimicrobial susceptibility testing to guide the choice of antibiotic if indicated when *Salmonella* is identified.
- **Request** a follow-up (reflex) culture to obtain an isolate for antimicrobial susceptibility testing if *Salmonella* is identified by a culture-independent diagnostic test (CIDT).
- **Consider** ceftriaxone or an alternative agent for empiric treatment, when indicated. Note that most isolates are resistant to ampicillin, ciprofloxacin, and trimethoprim-sulfamethoxazole. Use azithromycin with caution because most isolates carry a macrolide resistance gene and show an elevated minimum inhibitory concentration (>32 µg/ml) on laboratory testing.
- **Consider** consulting an infectious disease specialist for management of patients with MDR or complicated *Salmonella*.

**Actions Requested**

1. **Advise** patients planning travel to and from Mexico to view CDC’s travel health notice to learn about this strain, some of the foods associated with it, steps they can take to prevent a *Salmonella* infection, and [ways to prevent further transmission](http://www.cdc.gov) if they develop diarrhea, regardless of the cause.
2. **Consider** ceftriaxone or an alternative agent when empiric treatment is indicated.
3. **Tailor** antibiotic treatment to the results of antimicrobial susceptibility testing when possible.
4. **Consider** consulting an infectious disease specialist for management of patients with MDR or complicated *Salmonella*.
5. **Call** the Epidemiology Program at 619-692-8499 (Mon-Fri 8 AM to 5 PM), for questions about MDR *Salmonella* Newport.

**Resources**

- [Travel-related Infectious Diseases: Salmonella](http://www.cdc.gov) | CDC
- [Preparing International Travelers: Food & Water Precautions](http://www.cdc.gov) | CDC
- [Travelers’ Health: Clinician Information Center](http://www.cdc.gov) | CDC
- [Foodborne Illness and Culture-Independent Diagnostic Tests](http://www.cdc.gov) | CDC
- [Information for Travelers to Mexico](http://www.cdc.gov) | CDC
- [Clinical Practice Guidelines for the Diagnosis and Management of Infectious Diarrhea](http://www.idsociety.org) | IDSA
- [Red Book: Salmonella](http://www.idsociety.org) | AAP
- [Monthly Communicable Disease Report: Salmonella](http://www.cdc.gov) | CoSD

Thank you for your participation.

**CAHAN San Diego**

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Secure Website: [https://member.everbridge.net](https://member.everbridge.net)

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