

NEW MEXICO HEALTH ALERT NETWORK (HAN) ALERT Shiga toxin-producing *E. coli* Outbreak Potentially Associated with McDonald's

Providers should consider *E. coli* 0157 in patients with McDonald's consumption and should be aware of appropriate treatment guidelines for patients with Shiga toxin-producing *E. coli* infections.

Background:

The New Mexico Department of Health (NMDOH) is investigating five cases, all Bernalillo County residents, that are part of a national outbreak of *E. coli* 0157:H7: https://www.cdc.gov/ecoli/outbreaks/e-coli-O157.html. There has been one hospitalization in NM associated with this outbreak.

Most ill people in this outbreak report eating the Quarter Pounder hamburger at McDonald's before becoming sick. It is not yet known which specific food ingredient is contaminated.

Shiga toxin-producing *E. coli* (STEC) are diarrhea-causing strains of a group of bacteria called *Escherichia coli*. *E. coli* O157 is the most well-known type of STEC. Symptoms last a few days to a few weeks and include diarrhea (sometimes bloody – either visible or occult), stomach cramps, vomiting, and in about 30% of cases, low-grade fever. Treatment is usually supportive.

Hemolytic Uremic Syndrome (HUS), a potential complication of STEC infection, is a type of thrombotic microangiopathy characterized by anemia, kidney injury, and a low platelet count (thrombocytopenia). HUS, especially in adults, is similar to thrombotic thrombocytopenic purpura (TTP), where blood clots form in small blood vessels throughout the body. TTP can lead to strokes, brain damage, and death.

Recommendations for Clinicians:

Most STEC infection symptoms can be managed with supportive therapies. Patients with profuse diarrhea or vomiting should be rehydrated. Early use of intravenous fluids (within four days of diarrhea onset) may decrease the risk of renal failure. Antimotility agents should NOT be given to patients with STEC infection because these agents may increase the risk of complications, including toxic megacolon and Hemolytic Uremic Syndrome (HUS). Clinicians treating a patient with STEC infection should be aware that administering antimicrobial agents may increase the risk of HUS.

Testing for STEC:

Stool samples should be routinely cultured for E. coli O157 and simultaneously assayed for non-O157 STEC with a test that detects Shiga toxins (or the genes that encode them).

All presumptive E. coli O157 isolates and Shiga toxin-positive specimens should be sent to the New Mexico Scientific Laboratory Division for further characterization. Instructions for specimen submission can be found at https://www.nmhealth.org/about/sld/bib/.

Additional Resources:

Outbreak Summary: https://www.cdc.gov/ecoli/outbreaks/e-coli-O157.html

NMDOH Communicable Disease Manual STEC chapter:

https://www.nmhealth.org/publication/view/general/5063/ About E. coli: https://www.cdc.gov/ecoli/about/index.html

<u>New Mexico Health Alert Network</u>: To register for the NM Health Alert Network, please visit the following site https://nm.readyop.com/fs/4cjZ/10b2</u> Please fill out the registration form completely and click Submit at the bottom of the page, to begin receiving Important health alerts, advisories, and updates.

<u>Please Note</u> that our system also utilizes text messaging to notify members of important health information. Due to FCC Regulation changes that are designed to decrease the amount of unwanted spam text messages sent each year to citizens, please save, this phone number (855) 596-1810 as the "New Mexico Health Alert Network" default phone number for your account used for text messages on the mobile device(s) you register with us.