

DPHHS HAN ADVISORY

DATE: February 18, 2011



DPHHS Subject Matter Resource:

For more information regarding this HAN, contact:

Communicable Disease
Epidemiology
406-444-0273

SUBJECT: Increase in gastroenteritis in northern Montana caused by *Shigella* bacteria (shigellosis)

DPHHS Health Alert Hotline:
1-800-701-5769

DPHHS HAN Website:
www.han.mt.gov

INSTRUCTIONS:

FORWARD to local HAN contacts

INFORMATION / RECOMMENDATIONS:

The Montana Department of Public Health and Human Services (DPHHS) has recently received several reports of diarrheal illness caused by the bacterium *Shigella*. As of February 18, 2011, eight confirmed cases of shigellosis were reported with the majority (5 of 8) occurring during the last three weeks. All cases reported residing in northwestern and north central Montana. At least one patient was hospitalized. During 2008–2010 an average of 9 cases were reported annually in Montana.

Shigella bacteria cause an infectious disease called shigellosis. Most people who become ill with shigellosis experience mild or severe diarrhea, often with fever, and traces of blood or mucous in the stool. Some infected people do not develop symptoms. The symptoms may appear 1–7 days after exposure but usually within 2–3 days. Most people pass *Shigella* in their feces (stool) for one to two weeks, and up to four weeks in some cases. Certain antibiotics may shorten the carrier phase.

What can be done to prevent the spread of shigellosis?

Shigella bacteria are passed in feces. The single most important prevention activity is thorough hand washing after using the toilet. Additional control measures include:

- wash hands with soap carefully and frequently, especially after going to the bathroom, after changing diapers, and before preparing foods or beverages
- dispose of soiled diapers properly
- disinfect diaper changing areas after using them
- keep children with diarrhea out of child care settings
- supervise hand washing of toddlers and small children after they use the toilet
- persons with diarrheal illness should not prepare food for others
- food handlers should be excluded from work until 2 negative stool samples are obtained 24 hours apart

Categories of Health Alert Messages:

Health Alert: conveys the highest level of importance; warrants immediate action or attention.

Health Advisory: provides important information for a specific incident or situation; may not require immediate action.

Health Update: provides updated information regarding an incident or situation; unlikely to require immediate action.

DPHHS Recommendations for local health jurisdictions:

If you suspect a case of shigellosis:

- Interview case using the attached diarrheal illness exposure questionnaire. If case is confirmed, use the attached *Shigella* exposure questionnaire.
- Questionnaires can also be downloaded from:
http://dphhs.mt.gov/PHSD/epidemiology/documents/EntericIllnessComplaintForm_MT_final.pdf or
[http://www.dphhs.mt.gov/PHSD/epidemiology/documents/shigella MT 12 23 10.pdf](http://www.dphhs.mt.gov/PHSD/epidemiology/documents/shigella_MT_12_23_10.pdf)
- Report suspected and confirmed cases to the Montana Communicable Disease Epidemiology Program: 406-444-0273

DPHHS Recommendations for local health jurisdictions:

- Report suspected and confirmed cases to your local health jurisdiction immediately upon notification.
- Send a stool sample in appropriate transport media to the Montana Public Health Laboratory for laboratory testing. For questions about laboratory transport or testing, please call the laboratory at 800-821-7284.

More information about shigellosis is attached to here and is also available on the web at:<http://www.cdc.gov/nczved/divisions/dfbmd/diseases/shigellosis/>

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Please send contact information updates to hhshan@mt.gov

Enteric Illness Complaint Form Complainant ID #:

Date Received: _____ **Receiving Agency:** _____ **Call Received By:** _____

Complainant Information

Name: _____ **DOB:** _____ **Gender:** M F **"Race:** W B H A Other: _____

Phone: (Work) _____ (Home) _____ (Cell) _____ (Email) _____

Occupation(s): _____ **Previous or Chronic Illness:** Y N **Existing Medications:** Y N

Comments: _____

Illness Information

Illness Onset: Date: _____ Time: _____ AM PM **Illness Stopped:** Date: _____ Time: _____ AM PM

Illness Ongoing:

Signs and Symptoms:

Diarrhea Watery Bloody
Vomiting
Nausea
Abdominal Pain
Fever _____ °F
Chills

Headache
Myalgia (muscle ache)
Dizziness
Double Vision
Jaundice
Weakness

Itching (location)
Numbness (location)
Tingling (location)
Edema (location)
Rash
Other:

Diarrhea Onset: Date: _____ Time: _____ AM PM **Diarrhea Stopped:** Date: _____ Time: _____ AM PM

Clinical Information

Was a doctor or other healthcare provider visited? Y N

Date Visited: _____ **Time:** _____ AM PM **Admitted:** Y N **Length of Stay:** _____ (hrs)

Healthcare Facility: _____ **Physician Name:** _____ **Phone:** _____

Were clinical specimens taken? Y N Blood Stool **Diagnosis:** _____

Would you be willing to provide a stool sample? Y N Samples no longer available

Suspect Meal Information

Suspect Meal:

Date: _____ **Time:** _____ AM PM

Number of people in party: _____ **Number of people ill:** _____ **Group contact:** _____ **Phone:** _____

Enteric Illness Complaint Form__ Complainant ID #:

72 hour exposure history

Day of onset date: _____

Breakfast: _____ Location: _____ Time: _____ AM PM

Contacts: _____

Lunch: _____ Location: _____ Time: _____ AM PM

Contacts: _____

Dinner: _____ Location: _____ Time: _____ AM PM

Contacts: _____

Other Foods/Water: _____ Location: _____ Time: _____ AM PM

One day before onset date: _____

Breakfast: _____ Location: _____ Time: _____ AM PM

Contacts: _____

Lunch: _____ Location: _____ Time: _____ AM PM

Contacts: _____

Dinner: _____ Location: _____ Time: _____ AM PM

Contacts: _____

Other Foods/Water: _____ Location: _____ Time: _____ AM PM

Enteric Illness Complaint Form___ Complainant ID #:

Two days before onset date: _____

Breakfast: _____ **Location:** _____ **Time:** _____ AM PM

Contacts: _____

Lunch: _____ **Location:** _____ **Time:** _____ AM PM

Contacts: _____

Dinner: _____ **Location:** _____ **Time:** _____ AM PM

Contacts: _____

Other Foods/Water: _____ **Location:** _____ **Time:** _____ AM PM

Three days before onset date: _____

Breakfast: _____ **Location:** _____ **Time:** _____ AM PM

Contacts: _____

Lunch: _____ **Location:** _____ **Time:** _____ AM PM

Contacts: _____

Dinner: _____ **Location:** _____ **Time:** _____ AM PM

Contacts: _____

Other Foods/Water: _____ **Location:** _____ **Time:** _____ AM PM

Fact Sheet

SHIGELLOSIS (*Shigella* species): What You Need To Know

What is shigellosis?

Shigellosis is a bacterial infection affecting the intestinal tract. Most cases are seen in the summer and early fall and occur as single cases or outbreaks, but cases and outbreaks can occur year-round. Children, especially toddlers aged 2 to 4, are the most likely to get shigellosis.

How do people catch *Shigella*?

Shigella germs are found in the intestinal tract of infected people who in turn may contaminate food or water. The *Shigella* germ is spread by eating or drinking contaminated food or water or by direct contact with an infected person.

What are the symptoms?

People infected with the *Shigella* germ may experience mild or severe diarrhea, often with fever and traces of blood or mucous in the stool. Some infected people may not show any symptoms.

How soon do symptoms appear?

The symptoms may appear one to seven days after exposure but usually within two to three days.

When and for how long is a person able to spread shigellosis?

Most infected people pass *Shigella* in their feces (stool) for one to two weeks, but sometimes up to four weeks after symptoms are gone. Certain antibiotics may shorten the carrier phase.

Should infected people be isolated or excluded from school or work?

Since the germ is passed in the feces of an infected person, people with active diarrhea or those who are unable to control their bowel habits should be isolated. Most infected people may return to work or school when their diarrhea ceases, provided that they carefully wash their hands after toilet visits. **Food service, health care and day care workers and children in day care must obtain the approval of the local or state health department before returning to work or day care.**

How is shigellosis treated?

Most people with shigellosis will recover on their own. Some may require fluids to prevent dehydration. Antibiotics are occasionally used to treat severe cases or to shorten the carrier phase which may be important for food handlers, children in day care or institutionalized individuals.

What can be done to prevent the spread of shigellosis?

Since germs are passed in feces, the single most important prevention activity is careful hand washing after using the toilet. Some tips:

- wash hands and under fingernails with soap carefully and frequently, especially after going to the bathroom, after changing diapers, and before preparing foods or beverages
- dispose of soiled diapers properly
- disinfect diaper changing areas after using them
- keep children with diarrhea out of child care settings
- supervise handwashing of toddlers and small children after they use the toilet
- **persons with diarrheal illness should not prepare food for others**
- if you are traveling to the developing world, "boil it, cook it, peel it, or forget it"



Send completed forms
DPHHS CDEpi
Program
Fax: 800-616-7460

Case ID _____

Reported to DPHHS: Date ___/___/___

Classification: Confirmed Probable

Method: Lab Clinical

Epi Link: _____

Outbreak-related

LHJ Cluster# _____

DOH Outbreak # _____

Shigellosis

County _____

REPORT SOURCE

Initial report date ___/___/___

Reporter (check all that apply)

Lab Hospital HCP

Public health agency Other

OK to talk to case? Yes No Don't know

Investigation
start date:
___/___/___

Reporter name _____

Reporter phone _____

Primary HCP name _____

Primary HCP phone _____

PATIENT INFORMATION

Name (last, first) _____

Address _____ Homeless

City/State/Zip _____

Phone(s)/Email _____

Alt. contact Parent/guardian Spouse Other Name: _____

Zip code (school or occupation): _____ Phone: _____

Occupation/grade _____

Employer/worksite _____ School/child care name _____

Birth date ___/___/___ Age _____

Gender F M Other Unk

Ethnicity Hispanic or Latino
 Not Hispanic or Latino

Race (check all that apply)

Amer Ind/AK Native Asian
 Native HI/other PI Black/Afr Amer
 White Other

CLINICAL INFORMATION

Onset date: ___/___/___ Derived Diagnosis date: ___/___/___ Illness duration: _____ days

Signs and Symptoms

Y N DK NA

Diarrhea Maximum # of stools in 24 hours: _____

Bloody diarrhea

Abdominal cramps or pain

Nausea

Vomiting

Fever Highest measured temp (°F): _____

Oral Rectal Other: _____ Unk

Hospitalization

Y N DK NA

Hospitalized for this illness

Hospital name _____

Admit date ___/___/___ Discharge date ___/___/___

Y N DK NA

Died from illness Death date ___/___/___

Autopsy Place of death _____

Predisposing Conditions

Y N DK NA

Immunosuppressive therapy or disease

Laboratory

Collection date ___/___/___

Source _____

P = Positive O = Other
N = Negative NT = Not Tested
I = Indeterminate

P N I O NT

Shigella culture (clinical specimen)

Shigella species: _____

PFGE pattern: _____

Clinical Findings

Y N DK NA

Hemolytic uremic syndrome (HUS)

Kidney dialysis as result of illness

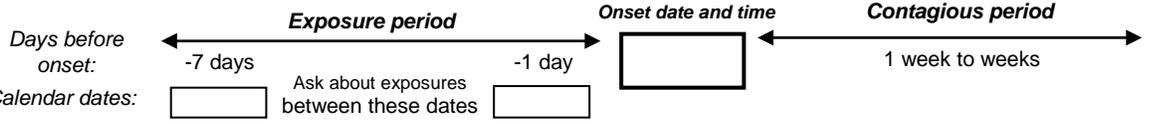
NOTES

INFECTION TIMELINE

Case defining variables are in **bold**. Answers are: Yes, No, Unknown to case, Not asked /Not answered

DPHHS CD021 (Rev. 12/10)

Enter onset date and time (first sx) in heavy box. Count forward and backward to figure probable exposure and contagious periods



EXPOSURE (Refer to dates above)

- Y N DK NA**
- Travel out of the state, out of the country, or outside of usual routine
Out of: County State Country
Destinations/Dates: _____
 - Does case know anyone with similar symptoms or illness?
 - Contact with lab confirmed case
 Casual Household Sexual
 Needle use Other: _____
 - Epidemiologic link to a confirmed human case**
 - Contact with diapered or incontinent child or adult
 - Congregate living Type:
 Barracks Corrections Long term care
 Dormitory Boarding school Camp
 Shelter Other: _____
 - Refrigerated, prepared food (e.g. dips, salsas, salads, sandwiches)
 - Group meal (e.g. potluck, reception)
 - Food from restaurants
Restaurant name/Location: _____

- Y N DK NA**
- Source of drinking water known
 Individual well Shared well
 Public water system Bottled water
 Other: _____
 - Drank untreated/unchlorinated water (e.g. surface, well)
 - Recreational water exposure (e.g. lakes, rivers, pools, wading pools, fountains)
 - Sewage or human excreta
 - Any type of sexual contact with others during exposure period
female sexual partners: _____
male sexual partners: _____

NOTES

- Patient could not be interviewed
- No risk factors or exposures could be identified

Most likely exposure/site: _____ Site name/address: _____

Where did exposure probably occur? In MT (County: _____) US but not MT Not in US Unk

PATIENT PROPHYLAXIS/TREATMENT

PUBLIC HEALTH ISSUES

- Y N DK NA**
- Employed as food worker
 - Non-occupational food handling (e.g. potlucks, receptions) during contagious period
 - Employed as health care worker
 - Employed in child care or preschool
 - Attends child care or preschool
 - Household member or close contact in sensitive occupation or setting (HCW, child care, food)

PUBLIC HEALTH ACTIONS

- Exclude individuals in sensitive occupations (HCW, food, child care) or situation until 2 negative stools
- Consider excluding symptomatic contacts in sensitive occupations (HCW, food, child care) or situations (child care) until 2 negative stools
- Initiate trace-back investigation
- Child care inspection
- Hygiene education provided
- Restaurant inspection
- Follow-up of household members
- Work or child care restriction for household member
- Testing of home/other water supply
- Other, specify: _____

Investigator _____ Phone/email: _____ Investigation complete date ____ / ____ / ____

Local health jurisdiction _____ Record complete date ____ / ____ / ____