

DEFINITION

- **Diarrhea** is an increase in loose or watery stools (bowel movements). Typically occurring three or more times a day.
- Diarrhea may be mild (passing a few loose or mushy stools) or severe (passing many watery stools).

Diarrhea **SEVERITY** is defined as:

- **No Diarrhea (Scale 0)**
- **Mild (Scale 1-3):** Few loose or mushy BMs; increase of 1-3 stools over normal daily number of stools; mild increase in ostomy output.
- **Moderate (Scale 4-7):** Increase of 4-6 stools daily over normal; moderate increase in ostomy output.
- **Severe (Scale 8-10; or "Worst Possible"):** Increase of 7 or more stools daily over normal; moderate increase in ostomy output; incontinence.

INITIAL ASSESSMENT QUESTIONS

1. **DIARRHEA SEVERITY:** "How bad is the diarrhea?" "How many extra stools have you had in the past 24 hours than normal?"
 - **NO DIARRHEA (SCALE 0)**
 - **MILD (SCALE 1-3):** Few loose or mushy BMs; increase of 1-3 stools over normal daily number of stools; mild increase in ostomy output.
 - **MODERATE (SCALE 4-7):** Increase of 4-6 stools daily over normal; moderate increase in ostomy output.
 - * **SEVERE (SCALE 8-10; OR 'WORST POSSIBLE'):** Increase of 7 or more stools daily over normal; moderate increase in ostomy output; incontinence.
2. **ONSET:** "When did the diarrhea begin?"
3. **BM CONSISTENCY:** "How loose or watery is the diarrhea?"
4. **VOMITING:** "Are you also vomiting?" If so, ask: "How many times in the past 24 hours?"
5. **ABDOMINAL PAIN:** "Are you having any abdominal pain?" If yes: "What does it feel like?" (e.g., crampy, dull, intermittent, constant)
6. **ABDOMINAL PAIN SEVERITY:** If present, ask: "How bad is the pain?" (e.g., Scale 1-10; mild, moderate, or severe)
 - **MILD (1-3):** doesn't interfere with normal activities, abdomen soft and not tender to touch
 - **MODERATE (4-7):** interferes with normal activities or awakens from sleep, tender to touch
 - **SEVERE (8-10):** excruciating pain, doubled over, unable to do any normal activities
7. **ORAL INTAKE:** If vomiting, "Have you been able to drink liquids?" "How much fluids have you had in the past 24 hours?"
8. **HYDRATION:** "Any signs of dehydration?" (e.g., dry mouth [not just dry lips], too weak to stand, dizziness, new weight loss) "When did you last urinate?"
9. **EXPOSURE:** "Have you traveled to a foreign country recently?" "Have you been exposed to anyone with diarrhea?" "Could you have eaten any food that was spoiled?"
10. **ANTIBIOTIC USE:** "Are you taking antibiotics now or have you taken antibiotics in the past 2 months?"
11. **OTHER SYMPTOMS:** "Do you have any other symptoms?" (e.g., fever, blood in stool)
12. **PREGNANCY:** "Is there any chance you are pregnant?" "When was your last menstrual period?"

TRIAGE ASSESSMENT QUESTIONS

Call EMS 911 Now

Shock suspected (e.g., cold/pale/clammy skin, too weak to stand, low BP, rapid pulse)

R/O: shock. FIRST AID: Lie down with the feet elevated.

CA: 40, 22, 1

Difficult to awaken or acting confused (e.g., disoriented, slurred speech)

R/O: shock. FIRST AID: Lie down with the feet elevated.

CA: 40, 22, 1

Sounds like a life-threatening emergency to the triager

CA: 40, 1

See More Appropriate Guideline

Vomiting also present and worse than the diarrhea

Go to Guideline: Vomiting (Adult)

[1] Blood in stool AND [2] without diarrhea

Go to Guideline: Rectal Bleeding (Adult)

Diarrhea in a cancer patient who is currently (or recently) receiving chemotherapy or radiation therapy, or cancer patient who has metastatic or end-stage cancer and is receiving palliative care

Go to Guideline: Cancer - Diarrhea (Adult)

Go to ED Now

[1] SEVERE abdominal pain (e.g., excruciating) AND [2] present > 1 hour

R/O: appendicitis or other acute abdomen

CA: 41, 80, 81, 1

[1] SEVERE abdominal pain AND [2] age > 60

Reason: higher risk of serious cause of abdominal pain, e.g. mesenteric ischemia

CA: 41, 80, 81, 1

[1] Blood in the stool AND [2] moderate or large amount of blood

R/O: severe Shigella, Salmonella, Campylobacter or E. coli O157

CA: 41, 80, 81, 1

Black or tarry bowel movements (Exception: chronic-unchanged black-grey bowel movements AND is taking iron pills or Pepto-Bismol)

R/O: gastritis, peptic ulcer disease

CA: 41, 80, 81, 1

Go to ED Now (or PCP triage)

[1] Drinking very little AND [2] dehydration suspected (e.g., no urine > 12 hours, very dry mouth, very lightheaded)

Reason: may need IV hydration

CA: 42, 80, 1

Patient sounds very sick or weak to the triager

Reason: severe acute illness or serious complication suspected

CA: 42, 80, 1

See HCP within 4 Hours (or PCP triage)

[1] SEVERE diarrhea (e.g., 7 or more times / day more than normal) AND [2] age > 60 years

Reason: higher risk for dehydration

CA: 43, 20, 89, 1

[1] Constant abdominal pain AND [2] present > 2 hours

R/O: diverticulitis, appendicitis or other acute abdomen

CA: 43, 89, 1

[1] Fever > 103 F (39.4 C) AND [2] not able to get the fever down using Fever Care Advice

CA: 43, 20, 72, 73, 89, 1

See PCP within 24 Hours

[1] SEVERE diarrhea (e.g., 7 or more times / day more than normal) AND [2] present > 24 hours (1 day)

Reason: higher risk of dehydration

CA: 44, 26, 27, 24, 25, 2, 5, 7, 17, 1

[1] MODERATE diarrhea (e.g., 4-6 times / day more than normal) AND [2] present > 48 hours (2 days)

Reason: higher risk of dehydration

CA: 44, 3, 4, 24, 25, 2, 5, 7, 17, 1

[1] MODERATE diarrhea (e.g., 4-6 times / day more than normal) AND [2] age > 70 years

Reason: higher risk of dehydration and morbidity

CA: 44, 26, 27, 7, 17, 1

Fever > 101 F (38.3 C)

R/O: bacterial diarrhea

CA: 44, 16, 20, 72, 73, 17, 1

Fever present > 3 days (72 hours)

R/O: bacterial diarrhea

CA: 44, 16, 20, 72, 73, 17, 1

Abdominal pain (Exception: Pain clears with each passage of diarrhea stool)

R/O: bacterial diarrhea

CA: 44, 20, 89, 1

[1] Blood in the stool AND [2] small amount of blood

(Exception: only on toilet paper. Reason: diarrhea can cause rectal irritation with blood on wiping)

R/O: bacterial diarrhea

CA: 44, 20, 89, 1

[1] Mucus or pus in stool AND [2] present > 2 days AND [3] diarrhea is more than mild

R/O: *bacterial diarrhea*

CA: 44, 16, 17, 1

[1] Recent antibiotic therapy (i.e., within last 2 months) AND [2] diarrhea present > 3 days since antibiotic was stopped

R/O: *C. difficile diarrhea*

CA: 44, 15, 3, 4, 17, 1

[1] Recent hospitalization AND [2] diarrhea present > 3 days

R/O: *C. difficile diarrhea*

CA: 44, 30, 3, 4, 17, 1

Weak immune system (e.g., HIV positive, cancer chemo, splenectomy, organ transplant, chronic steroids)

Reason: *broader range of causes*

CA: 44, 3, 4, 10, 17, 1

Tube feedings (e.g., nasogastric, g-tube, j-tube)

R/O: *osmotic diarrhea*

CA: 44, 23, 87, 89, 1

Call PCP within 24 Hours

Travel to a foreign country in past month

Reason: *antibiotic therapy may be indicated for the treatment of Traveler's Diarrhea*

CA: 50, 11, 12, 3, 4, 2, 5, 24, 25, 17, 1

See PCP within 3 Days

[1] MILD diarrhea (e.g., 1-3 or more stools than normal in past 24 hours) without known cause AND [2] present > 7 days

R/O: *bacterial cause or Giardia*

CA: 45, 3, 4, 7, 17, 1

See PCP within 2 Weeks

Diarrhea is a chronic symptom (recurrent or ongoing AND present > 4 weeks)

CA: 46, 3, 4, 7, 18, 8, 1

Home Care

SEVERE diarrhea (e.g., 7 or more times / day more than normal)

Reason: *new or transient diarrhea without significant risk factors; may respond to homecare measures*

CA: 48, 9, 26, 27, 24, 25, 2, 5, 7, 6, 8, 1

MILD-MODERATE diarrhea (e.g., 1-6 times / day more than normal)

Reason: *new or transient diarrhea without significant risk factors; may respond to homecare measures. R/O: viral gastroenteritis*

CA: 48, 9, 3, 4, 24, 25, 2, 5, 7, 6, 8, 1

[1] MILD diarrhea AND [2] taking antibiotics

CARE ADVICE (CA) -

1. **Care Advice** given per Diarrhea (Adult) guideline.
2. **Diarrhea Medicine** - Bismuth Subsalicylate (e.g., Kaopectate, Pepto-Bismol):
 - This medicine can help reduce diarrhea, vomiting, and abdominal cramping. It is available over-the-counter (OTC) in a drug store.
 - *Adult dosage:* Take two tablets or two tablespoons by mouth every hour (if diarrhea continues) to a maximum of 8 doses in a 24 hour period.
 - Do not use for more than 2 days.
3. **Fluid Therapy during Mild-Moderate Diarrhea:**
 - Drink more fluids, at least 8-10 cups daily. One cup equals 8 oz (240 ml).
 - **Water:** For mild to moderate diarrhea, water is often the best liquid to drink. You should also eat some salty foods (e.g., potato chips, pretzels, saltine crackers). This is important to make sure you are getting enough salt, sugars, and fluids to meet your body's needs.
 - **Sports drinks:** You can also drink a sports drinks (e.g., Gatorade, Powerade) to help treat and prevent dehydration. For it to work best, mix it half and half with water.
 - Avoid caffeinated beverages (Reason: caffeine is mildly dehydrating).
 - Avoid alcohol beverages (beer, wine, hard liquor).
4. **Food and Nutrition during Mild-Moderate Diarrhea**
 - Maintaining some food intake during episodes of diarrhea is important.
 - Begin with boiled starches / cereals (e.g., potatoes, rice, noodles, wheat, oats) with a small amount of salt to taste.
 - Other foods that are OK include: bananas, yogurt, crackers, soup.
 - As the diarrhea starts to get better, you can slowly return to a normal diet.
5. **Caution** - Bismuth Subsalicylate (e.g., Kaopectate, Pepto-Bismol):
 - May cause a temporary darkening of stool and tongue.
 - Do not use if allergic to aspirin.
 - Do not use in pregnancy.
 - *Read and follow the package instructions carefully.*
6. **Expected Course:** Viral diarrhea lasts 4-7 days. Always worse on days 1 and 2.
7. **Contagiousness:**
 - Be certain to wash your hands after using the restroom.
 - If your work is cooking, handling, serving or preparing food, then you should not work until the diarrhea has completely stopped.
8. **Call Back If:**
 - Signs of dehydration occur (e.g., no urine over 12 hours, very dry mouth, lightheaded, etc.)
 - Diarrhea lasts over 7 days
 - You become worse.

9. **Reassurance and Education:**
 - Sometimes the cause is an infection caused by a virus ('stomach flu) or a bacteria. Diarrhea is one of the body's way of getting rid of germs.
 - Certain foods (e.g., dairy products, supplements like Ensure) can also trigger diarrhea.
 - In some patients, the exact cause is never found.
 - Staying well-hydrated is the key for adults with diarrhea. From what you have told me, it sounds like you are not severely dehydrated at this point.
 - *Here is some general care advice that should help.*
10. **Do Not Use - Bismuth Subsalicylate (e.g., Kaopectate, Pepto-Bismol):**
 - Do not take Kaopectate or Pepto-Bismol for the diarrhea.
 - Reason: Diarrhea in immunocompromised patients is often chronic and there could be side effects from taking it chronically.
11. **Traveler's Diarrhea:**
 - Traveler's diarrhea typically begins within two weeks of traveling to a foreign country. There are bacteria in the water and food that your body is not used to and a diarrheal infection is the result. Traveler's Diarrhea is also called "Mummy Tummy," "Montezuma's revenge," and Turista.
 - Symptoms: Passage of at least three loose stools a day; accompanying symptoms may include nausea, vomiting, abdominal cramping, fecal urgency, and fever.
 - Treatment: Antibiotic therapy is sometimes recommended to treat this type of diarrhea.
12. **Region and Risk:**
 - High-risk: travel to Latin America, Africa, Southern Asia - diarrhea occurs in 40% of travelers
 - Intermediate-risk: travel to Northern Mediterranean countries, middle east, China, and Russia - diarrhea occurs in 10-15% of travelers
 - Low-risk: travel to United States, Western Europe, Canada, Japan - diarrhea occurs in 2-4% of travelers.
13. **Prevention During Travel to High Risk Regions:**
 - Eat cooked foods (steaming hot) or dry foods (bread).
 - Eat fruit that can be peeled (apples, bananas, oranges).
 - Drink steaming hot beverages (coffee, tea) or carbonated drinks (bottled soft drinks, beer).
 - Avoid uncooked foods (salad).
 - Avoid ice cubes and tap water.
15. **Education:**
 - Most diarrhea that occurs while taking antibiotics will resolve on its own.
 - However, sometimes a patient can develop a type of bacterial diarrhea after taking antibiotics.
 - You may need to provide a stool culture. Bring a sample of the diarrhea (e.g., in a container with a lid).
16. **Stool Sample:** It could be bacterial diarrhea. You may need to provide a stool culture.

17. **Call Back If:**
 - Signs of dehydration occur (e.g., no urine over 12 hours, very dry mouth, lightheaded, etc.)
 - Bloody stools
 - Constant or severe abdominal pain
 - You become worse.
18. **Diarrhea Diary:**
 - Please keep a diary of the diarrhea each day.
 - This can help make the correct diagnosis.
20. **Clear Fluids:**
 - Drink more fluids.
 - Sip water or a half-strength sports drink (Gatorade or Powerade; mix half and half with water)
 - Other options: oral rehydration solution (Pedialyte or Rehydralyte) .
21. **Clear Fluids:**
 - Sip water or a sports - rehydration drink (Gatorade or Powerade)
 - Other options: oral rehydration solution (Pedialyte or Rehydralyte).
22. **First Aid:** Lie down with the feet elevated (Reason: counteract shock)
23. **Option - Contact Home Health Nurse:**
 - If patient is being followed by a home health nurse, a home visit may be an option instead of an office visit.
 - The home health nurse can assess the patient, check tube placement, and provide education.
24. **Diarrhea Medicine - Loperamide (Imodium AD):**
 - This medicine helps decrease diarrhea. It is available over-the-counter (OTC) in a drug store.
 - *Adult dosage:* 4 mg (2 capsules) is the recommended first dose. You may take an additional 2 mg (1 capsule) after each loose BM.
 - *Maximum dosage:* 16 mg per day (8 capsules).
 - Do not use for more than 2 days.
25. **Caution - Loperamide (Imodium AD):**
 - **Do Not** use if there is a fever over 100.5 F (38.1 C) or if there is blood or mucus in the stools.
 - *Read and follow the package instructions carefully.*
26. **Fluid Therapy during Severe Diarrhea:**
 - Drink more fluids, at least 8-10 cups daily. One cup equals 8 oz (240 ml).
 - **Water:** Even for severe diarrhea, water is often the best liquid to drink. You should also eat some salty foods (e.g., potato chips, pretzels, saltine crackers). This is important to make sure you are getting enough salt, sugars, and fluids to meet your body's needs.
 - **Sports drinks:** You can also drink a sports drink (e.g., Gatorade, Powerade) to help treat and prevent dehydration. For it to work best, mix it half and half with water.
 - Avoid caffeinated beverages (Reason: caffeine is mildly dehydrating).
 - Avoid alcohol beverages (beer, wine, hard liquor).

27. **Food and Nutrition during Severe Diarrhea:**
- Drinking enough liquids is more important than eating when one has severe diarrhea.
 - As the diarrhea starts to get better, you can slowly return to a normal diet.
 - Begin with boiled starches / cereals (e.g., potatoes, rice, noodles, wheat, oats) with a small amount of salt to taste.
 - Other foods that are OK include: bananas, yogurt, crackers, soup.
28. **Probiotic Supplements:**
- Probiotic supplements contain healthy bacteria (such as Lactobacillus). They help replace the good bacteria in the gut.
 - Probiotic supplements are available in pharmacies and health food stores.
 - They come in tablets, capsules, and granules. You can mix the granules with food or drinks.
 - *Follow the package directions.*
29. **Yogurt and Kefir:**
- Consider eating yogurt twice a day. Yogurt contains probiotics (good bacteria for the gut). You need to choose a brand that has "active cultures."
 - Another option is Kefir. Kefir is a fermented beverage that tastes much like a yogurt drink. It contains a higher amount of probiotic cultures than yogurt.
30. **Education:**
- If you have been in the hospital recently, your diarrhea might be caused by a certain type of bacteria called C. Diff.
 - Your doctor may want to test your stool to check for this bacteria.
 - Bring a sample of the diarrhea (e.g., in a container with a lid) with you to your appointment.
31. **Reassurance and Education:**
- It is common to have mild diarrhea when taking an antibiotic.
 - Diarrhea is not an allergic reaction to the antibiotic.
 - Antibiotics can irritate the gut. They can also upset the natural balance of bacteria (normal flora) in the gut.
 - *Here is some care advice that should help.*
32. **Call Back If:**
- Signs of dehydration occur (e.g., no urine over 12 hours, very dry mouth, lightheaded, etc.)
 - Diarrhea lasts more than 3 days after finishing antibiotic
 - Diarrhea becomes severe
 - You become worse.
40. **Call EMS 911 Now:**
- Immediate medical attention is needed. You need to hang up and call 911 (or an ambulance).
 - *Triager Discretion:* I'll call you back in a few minutes to be sure you were able to reach them.
41. **Go to ED Now:**
- You need to be seen in the Emergency Department.
 - Go to the ED at _____ Hospital.
 - Leave now. Drive carefully.

42. **Go To ED Now (or PCP triage):**
- **If No PCP (Primary Care Provider) Second-Level Triage:** You need to be seen within the next hour. Go to the ED/UCC at _____ Hospital. Leave as soon as you can.
 - **If PCP Second-Level Triage Required:** You may need to be seen. Your doctor (or NP/PA) will want to talk with you to decide what's best. I'll page the provider on-call now. If you haven't heard from the provider (or me) within 30 minutes, go directly to the ED/UCC at _____ Hospital.
43. **See HCP Within 4 Hours (or PCP triage):**
- **If Office Will Be Open:** You need to be seen within the next 3 or 4 hours. Call your doctor (or NP/PA) now or as soon as the office opens.
 - **If Office Will Be Closed and No PCP (Primary Care Provider) Second-Level Triage:** You need to be seen within the next 3 or 4 hours. A nearby Urgent Care Center (UCC) is often a good source of care. Another choice is to go to the ED. Go sooner if you become worse.
 - **If Office Will Be Closed and PCP Second-Level Triage Required:** You may need to be seen. Your doctor (or NP/PA) will want to talk with you to decide what's best. I'll page the on-call provider now. If you haven't heard from the provider (or me) within 30 minutes, call again. **NOTE:** If on-call provider can't be reached, send to UCC or ED.
44. **See PCP Within 24 Hours:**
- **If Office Will Be Open:** You need to be seen within the next 24 hours. Call your doctor (or NP/PA) when the office opens and make an appointment.
 - **If Office Will Be Closed and No PCP (Primary Care Provider) Second-Level Triage:** You need to be seen within the next 24 hours. A clinic or an urgent care center is often a good source of care if your doctor's office is closed or you can't get an appointment.
 - **If Office Will Be Closed and PCP Second-Level Triage Required:** You may need to be seen within the next 24 hours. Your doctor (or NP/PA) will want to talk with you to decide what's best. I'll page the on-call provider now. **NOTE:** Since this isn't serious, hold the page between 10 pm and 7 am. Page the on-call provider in the morning.
 - **If Patient Has No PCP:** Refer patient to a clinic or urgent care center. Also try to help caller find a PCP for future care.
45. **See PCP Within 3 Days:**
- You need to be seen within 2 or 3 days. Call your doctor (or NP/PA) during regular office hours and make an appointment. A clinic or urgent care center are good places to go for care if your doctor's office is closed or you can't get an appointment. **NOTE:** If office will be open tomorrow, tell caller to call then, not in 3 days.
 - **If Patient Has No PCP (Primary Care Provider):** A clinic or urgent care center are good places to go for care if you do not have a primary care provider. **NOTE:** Try to help caller find a PCP for future care (e.g., use a physician referral line). Having a PCP or "medical home" means better long-term care.
46. **See PCP Within 2 Weeks:**
- You need to be seen for this ongoing problem within the next 2 weeks. Call your doctor (or NP/PA) during regular office hours and make an appointment.
 - **If Patient Has No PCP (Primary Care Provider):** A primary care clinic or an urgent care center are good places to go for care if you do not have a primary care provider. **NOTE:** Try to help caller find a PCP (e.g., use a physician referral line). Having a PCP or "medical home" means better long-term care.

47. **Home Care - Information or Advice Only Call.**
48. **Home Care:**
 - You should be able to treat this at home.
49. **Call PCP Now:**
 - You need to discuss this with your doctor (or NP/PA).
 - I'll page the on-call provider now. If you haven't heard from the provider (or me) within 30 minutes, call again.
50. **Call PCP Within 24 Hours:**
 - You need to discuss this with your doctor (or NP/PA) within the next 24 hours.
 - **If Office Will Be Open:** Call the office when it opens tomorrow morning.
 - **If Office Will Be Closed:** I'll page the on-call provider now. **Exception:** from 9 pm to 9 am. Since this isn't urgent, we'll hold the page until morning.
51. **Call PCP When Office Is Open:**
 - You need to discuss this with your doctor (or NP/PA) within the next few days.
 - Call the office when it is open.
52. **Go To L&D Now:**
 - You need to be seen.
 - Go to the Labor and Delivery Unit or the Emergency Department at _____ Hospital.
 - Leave now. Drive carefully.

72. **Fever Medicines:**

- For fever relief, take acetaminophen or ibuprofen.
- Treat fevers above 101° F (38.3° C).
- The goal of fever therapy is to bring the fever down to a comfortable level. Remember that fever medicine usually lowers fever 2-3° F (1-1.5° C).

Acetaminophen (e.g., Tylenol):

- Take 650 mg (*two 325 mg pills*) by mouth every 4-6 hours as needed. Each Regular Strength Tylenol pill has 325 mg of acetaminophen. The most you should take each day is 3,250 mg (10 Regular Strength pills a day).
- Another choice is to take 1,000 mg (*two 500 mg pills*) every 8 hours as needed. Each Extra Strength Tylenol pill has 500 mg of acetaminophen. The most you should take each day is 3,000 mg (6 Extra Strength pills a day).

Ibuprofen (e.g., Motrin, Advil):

- Take 400 mg (*two 200 mg pills*) by mouth every 6 hours as needed.
- Another choice is to take 600 mg (*three 200 mg pills*) by mouth every 8 hours as needed.
- The most you should take each day is 1,200 mg (six 200 mg pills a day), unless your doctor has told you to take more.

Extra Notes:

- Acetaminophen is thought to be safer than ibuprofen or naproxen for people over 65 years old. Acetaminophen is in many OTC and prescription medicines. It might be in more than one medicine that you are taking. You need to be careful and not take an overdose. An acetaminophen overdose can hurt the liver.
- McNeil, the company that makes Tylenol, has different dosage instructions for Tylenol in Canada and the United States. In Canada, the maximum recommended dose per day is 4,000 mg or twelve (12) Regular-Strength (325 mg) pills. In the United States, McNeil recommends a maximum dose of ten (10) Regular-Strength (325 mg) pills.
- Before taking any medicine, read all the instructions on the package.

73. **Caution - NSAIDs (e.g., ibuprofen, naproxen):**

- Do not take nonsteroidal anti-inflammatory drugs (NSAIDs) if you have stomach problems, kidney disease, heart failure, or other contraindications to using this type of medicine.
- Do not take NSAID medicines for over 7 days without consulting your PCP.
- Do not take NSAID medicines if you are pregnant.
- Do not take NSAID medicines if you are also taking blood thinners.
- You may take this medicine with or without food. Taking it with food or milk may lessen the chance the drug will upset your stomach.
- **Gastrointestinal Risk:** There is an increased risk of stomach ulcers, GI bleeding, perforation.
- **Cardiovascular Risk:** There may be an increased risk of heart attack and stroke.

80. **Driving:** Another adult should drive.

81. **Bring Medicines:**

- Please bring a list of your current medicines when you go to the Emergency Department (ER).
- It is also a good idea to bring the pill bottles too. This will help the doctor to make certain you are taking the right medicines and the right dose.

87. **Bring Medicines:**

- Please bring a list of your current medicines when you go to see the doctor.
- It is also a good idea to bring the pill bottles too. This will help the doctor to make certain you are taking the right medicines and the right dose.

89. **Call Back If:**

- You become worse.

FIRST AID



FIRST AID Advice for Shock: Lie down with the feet elevated.

BACKGROUND INFORMATION

Key Points

- The majority of adults with acute diarrhea (less than 14 days duration) have an infectious etiology for their diarrhea, and in most cases the infection is a virus. Other common causes of acute diarrhea are food poisoning and medications.
- Maintaining hydration is the cornerstone of treatment for adults with acute diarrhea.
- In general, an adult who is alert, feels well, and who is not thirsty or dizzy: is NOT dehydrated. A couple loose or runny stools do not cause dehydration. Frequent, watery stools can cause dehydration.
- Antibiotic therapy is only rarely required in the treatment of acute diarrhea. Two types of acute diarrhea that require antibiotic therapy are *C. difficile* diarrhea and (sometimes) Traveler's Diarrhea.

Causes

- *Antibiotic side effect* (e.g., temporary diarrhea from Augmentin / amoxicillin clavulanic acid)
- *Bacterial gastroenteritis* (i.e., *Campylobacter*, *Salmonella*, *Shigella*)
- *Cathartics, excessive use of* (e.g., magnesium citrate, milk of magnesia)
- *Food poisoning*
- *Giardiasis*
- *Inflammatory bowel disease*
- *Irritable bowel syndrome*
- *Traveler's Diarrhea*
- *Pseudomembranous colitis*. Pseudomembranous colitis is an inflammation in the colon that occurs in some people from taking antibiotics. It is usually caused by an over-growth of a specific type bacteria called *Clostridium difficile* (*C. difficile*). Other names that are used to describe this illness include antibiotic-associated diarrhea and *C. difficile* colitis.
- *Viral gastroenteritis*

Traveler's Diarrhea

- **Definition:** Traveler's diarrhea typically begins within two weeks of traveling to a foreign country. There are bacteria in the water and food that the body is not used to and a diarrheal infection is the result. Traveler's diarrhea is also called "mummy tummy," "Montezuma's revenge," and "turista".
- **Symptoms:** Passage of at least three loose stools a day; accompanying symptoms may include nausea, vomiting, abdominal cramping, fecal urgency, and fever.
- **Region and Risk:** Travelers to the following developing areas have a **high-risk** (40%) of getting traveler's diarrhea: Latin America, Africa, Southern Asia. There is an **intermediate-risk** (15%) with

travel to Northern Mediterranean countries, the Middle East, China, and Russia. Travelers to the United States, Western Europe, Canada, and Japan have a **low risk** (2-4%) of getting traveler's Diarrhea.

- **Prevention: Diet:** Avoid uncooked foods (salad). Cooked foods (served steaming hot) are usually safe as are dry foods (e.g., bread). Avoid ice cubes and tap water. Drink steaming beverages (e.g., coffee, tea) or carbonated drinks (e.g., bottled soft drinks, beer). Fruits that can be peeled are usually safe (e.g., oranges, bananas, apples).
- **Prevention: Bismuth Subsalicylate:** Bismuth (PeptoBismol 8 tablets daily PO) is approximately 65% effective at preventing Traveler's Diarrhea.
- **Prevention: Antibiotics:** Antibiotic chemoprophylaxis (prevention) during travel may be indicated in certain circumstances. Rifaximin (200 mg PO BID with meals) is approximately 70-80% effective at preventing traveler's diarrhea.
- **Treatment - Anti-Diarrheal Agents:** Bismuth subsalicylate (PeptoBismol) and loperamide (Imodium AD) are both effective at reducing the diarrhea symptoms.
- **Treatment - Antibiotics:** Antibiotic therapy is sometimes recommended to treat this type of diarrhea, especially if the symptoms are more than mild. There are a number of antibiotics that are effective including ciprofloxacin (Cipro), azithromycin (Zithromax), and rifaximin (Xifaxan 200 mg PO TID for 3 days).

Norwalk Virus

- **Definition:** The Norwalk virus is one of a number of viruses that cause stomach flu (viral gastroenteritis). It is usually acquired through contaminated food or water. In 2002 and 2003 this received significant media attention when several cruise ships had outbreaks in which hundreds of passengers were affected.
- **Symptoms:** acute onset of diarrhea, vomiting, abdominal cramps. In adults there is usually more diarrhea than vomiting. The symptoms typically last 1 to 2 days.
- **Epidemiology:** The Norwalk virus is the number one cause of epidemic gastroenteritis. Outbreaks have been reported in restaurants, nursing homes, hospitals, and vacation settings like cruise ships.
- **Incubation period:** 1-3 days
- **Prevention:** How can one avoid exposure while on a vacation? Avoid uncooked food. Drink bottled water (avoid ice cubes). Wash your hands frequently. Do not share glassware or eating utensils.
- **Treatment:** Antibiotics are not helpful since this is a viral infection. Maintaining adequate hydration through intake of oral liquids is the most important thing. PeptoBismol can be used.

Dehydration - Estimation By Telephone...

Mild Dehydration

1. Urine Production: slightly decreased
2. Urine Color: yellow
3. Mucous Membranes: normal
4. Heart rate < 100 beats / minute
5. Slightly thirsty.
6. Capillary Refill: < 2 sec
7. Treatment: can usually treat at home

Moderate Dehydration

1. Urine Production: minimal or absent, last urinated over 12 hours
2. Urine Color: dark yellow
3. Mucous Membranes: dry inside of mouth
4. Heart rate 100-130 beats / minute
5. Thirsty, lightheaded when standing
6. Capillary Refill: > 2 sec
7. Treatment: must be seen; Go to ED NOW (or PCP Triage)

Severe Dehydration

1. Urine Production: minimal or absent, last urinated over 12 hours
2. Urine Color: dark yellow-brown
3. Mucous Membranes: very dry inside of mouth
4. Heart rate > 130 beats / minute
5. Very thirsty, very weak and lightheaded; fainting may occur
6. Capillary Refill: > 2-4 sec
7. Treatment: must be seen immediately; Go to ED NOW or CALL EMS 911 NOW

Signs of Shock

1. Confused, difficult to awaken, or unresponsive
2. Heart rate (pulse) is rapid and weak
3. Extremities (especially hands and feet) are bluish or gray, and cold
4. Too weak to stand or very dizzy when tries to stand
5. Capillary Refill: > 4 seconds
6. Treatment: Lie down with the feet elevated; CALL EMS 911 NOW

REFERENCES

1. Acheson DW, Fiore AE. Preventing foodborne disease--what clinicians can do. *N Engl J Med.* 2004 Jan 29;350(5):437-40.
2. Allen SJ, Martinez EG, Gregorio GV, Dans LF. Probiotics for treating acute infectious diarrhoea. *Cochrane Database Syst Rev.* 2010 Nov 10;(11):CD003048.
3. Barr W, Smith A. Acute diarrhea. *Am Fam Physician.* 2014 Feb 1;89(3):180-9.
4. Black RA, Hill DA. Over-the-counter medications in pregnancy. *Am Fam Physician.* 2003;67(12):2517-24.
5. Centers for Disease Control and Prevention (CDC). Diagnosis and management of foodborne illnesses: a primer for physicians. *MMWR Recomm Rep.* 2004;53(RR-4):133.
6. Cohen SH, Gerding DN, Johnson S, et.al. Society for Healthcare Epidemiology of America; Infectious Diseases Society of America. Clinical practice guidelines for *Clostridium difficile* infection in adults: 2010 update by the society for healthcare epidemiology of America (SHEA) and the ISDA. *Infect Control Hosp Epidemiol.* 2010 May;31(5):431-55.
7. Conway S, Hart A, Clark A, Harvey I. Does eating yogurt prevent antibiotic-associated diarrhoea? A placebo-controlled randomised controlled trial in general practice. *Br J Gen Pract.* 2007 Dec;57(545):953-9.
8. DuPont HL. New insights and directions in travelers' diarrhea. *Gastroenterol Clin North Am.* 2006; 35(2): 337-53, viii-ix.
9. DuPont HL. Guidelines on acute infectious diarrhea in adults. The Practice Parameters Committee of the American College of Gastroenterology. *Am J Gastroenterol.* 1997;92(11):1962-75.
10. Evans DP. Non-pharmacotherapeutic interventions in travellers diarrhoea (TD). *J Travel Med.* 2018 May 1;25(suppl_1):S38-S45
11. Fekety R. Guidelines for the diagnosis and management of *Clostridium difficile*-associated diarrhea and colitis. American College of Gastroenterology. *Am J Gastroenterol.* 1997;92(5):739-50.
12. Fisman D. Seasonality of viral infections: mechanisms and unknowns. *Clin Microbiol Infect.* 2012 Oct;18(10):946-54.

13. Goldenberg JZ, Yap C, Lytvyn L, Lo CK, Beardsley J, Mertz D, Johnston BC. Probiotics for the prevention of *Clostridium difficile*-associated diarrhea in adults and children. *Cochrane Database Syst Rev*. 2017 Dec 19;12:CD006095
14. Goldsmid JM, Leggat PA. The returned traveller with diarrhoea. *Aust Fam Physician*. 2007 May;36(5):322-7.
15. Goodgame R. A Bayesian approach to acute infectious diarrhea in adults. *Gastroenterol Clin North Am*. 2006; 35(2): 249-73.
16. Gore JI, Surawicz C. Severe acute diarrhea. *Gastroenterol Clin North Am*. 2003;32(4):1249-67.
17. Guerrant RL, Van Gilder TV, Steiner TS, et.al. Practice guidelines for the management of infectious diarrhea. *Clin Infect Dis*. 2001;32(3);331.
18. Hahn S, Kim Y, Garner P. Reduced osmolarity oral rehydration solution for treating dehydration due to diarrhoea in children: systematic review. *BMJ*. 2001 Jul 14;323(7304):81-5.
19. Kamat D, Mathur A. Prevention and Management of Travelers' Diarrhea. *Dis Mon*. 2006;52(7):289-302.
20. Kelly CP, LaMont JT. *Clostridium difficile*--more difficult than ever. *N Engl J Med*. 2008 Oct 30;359(18):1932-40.
21. Khanna S, Pardi DS. *Clostridium difficile* infection: new insights into management. *Mayo Clin Proc*. 2012 Nov;87(11):1106-17.
22. Lal A, Hales S, French N, Baker MG. Seasonality in human zoonotic enteric diseases: a systematic review. *PLoS One*. 2012;7(4):e31883.
23. McGee S, Abernethy WB 3rd, Simel DL. The rational clinical examination. Is this patient hypovolemic? *JAMA*. 1999 Mar 17;281(11):1022-9.
24. Ryan ET, Wilson ME, Kain KC. Illness after international travel. *N Eng J Med*. 2002;347:505-516.
25. Schiller LR. Diarrhea. *Med Clin North Am*. 2000;84(5);1259-1274.
26. Sinert R, Spektor M. Evidence-based emergency medicine/rational clinical examination abstract. Clinical assessment of hypovolemia. *Ann Emerg Med*. 2005 Mar;45(3):327-9.
27. Thielman NM, Guerrant R. Acute infectious diarrhea. *N Eng J Med*. 2004;350:38-47.
28. Thwaites GE, Day NPJ. Approach to Fever in the Returning Traveler. *N Engl J Med*. 2017 May 4;376(18):1798.
29. Trinh C, Prabhakar K. Diarrheal diseases in the elderly. *Clin Geriatr Med*. 2007 Nov;23(4):833-56, vii.
30. Van Niel CW, Feudtner C, Garrison MM, Christakis DA. *Lactobacillus* therapy for acute infectious diarrhea in children: a meta-analysis. *Pediatrics*. 2002 Apr;109(4):678-84.

SEARCH WORDS

ABDOMINAL CRAMP
 ABDOMINAL CRAMPING
 ABDOMINAL CRAMPS

ACUTE GASTROENTERITIS
BACTERIAL DIARRHEA
BMS
BOWEL CONTROL
BOWEL MOTION
BOWEL MOTIONS
BOWEL MOVEMENT
BOWEL MOVEMENTS
COLITIS
CRAMP
CRAMPS
CRUISE SHIP
DEHYDRATED
DEHYDRATION
DIARRHEA
DYSENTERY
EXPLOSIVE STOOL
EXPLOSIVE STOOLS
FLATULENCE
FOOD POISONING
FOREIGN TRAVEL
FREQUENT STOOL
FREQUENT STOOLS
GASTROENTERITIS
LOOSE STOOL
LOOSE STOOLS
MUCUS IN STOOL
MUCUS IN STOOLS
NORWALK
NORWALK VIRUS
PERSISTENT DIARRHEA
PUS IN STOOL
PUS IN STOOLS
RECENT TRAVEL
RECTUM
SEVERE DIARRHEA
STOOL
STOOLS
TRAVEL
TRAVELERS DIARRHEA
TRAVELER'S DIARRHEA
VIRAL DIARRHEA

WATERY STOOL
WATERY STOOLS

AUTHOR AND COPYRIGHT

Author: David A. Thompson, MD, FACEP
Copyright: 2000-2019, LaGrange Medical Software, Inc.. All rights reserved.
Company: Schmitt-Thompson Clinical Content
Content Set: After Hours Telephone Triage Protocols - Standard | Adult
Version Year: 2019
Last Revised: 4/11/2019
Last Reviewed: 4/11/2019