DEFINITION

- Pain or discomfort located between the bottom of the rib cage and the groin crease.
- The older child complains of a stomachache.
- The younger child should at least point to or hold the abdomen.
- **Triage Tip:** Rule out appendicitis, the most common serious diagnosis that is missed in nurse telephone triage.
- **Excluded Similar Symptoms:**
- Pain from a traumatic abdominal injury. See that guideline.
- Crying is only symptom. Prior to 12 months of age, usually the Crying guidelines should be used.
- Menstrual cramps. See that guideline.
- Vaginal pain or discharge only. See Vaginal Symptoms or Discharge guideline.

PAIN SEVERITY is defined as:

- **MILD:** doesn't interfere with normal activities
- **MODERATE:** interferes with normal activities or awakens from sleep
- **SEVERE:** excruciating pain, unable to do any normal activities, doesn't want to move, incapacitated
- Assessment of Pain Severity: Base it on the child's current behavior. Ask: "How bad is the pain?" and then, "What does the pain keep your child from doing?" Do not ask: "Is the pain Mild, Moderate or Severe?" Reason: Many parents and teens will choose "Severe".

INITIAL ASSESSMENT QUESTIONS

1. LOCATION: "Where does it hurt?" Tell younger children to "Point to where it hurts".
2. ONSET: "When did the pain start?" (Minutes, hours or days ago)
3. PATTERN: "Does the pain come and go, or is it constant?"
   If constant: "Is it getting better, staying the same, or worsening?"
   (NOTE: most serious pain is constant and it progresses)
   If intermittent: "How long does it last?" "Does your child have the pain now?"
   (NOTE: Intermittent means the pain becomes MILD pain or goes away completely between bouts. Children rarely tell us that pain goes away completely, just that it's a lot better.)
4. WALKING or MOVEMENT: "Is your child walking and moving normally?" If not, ask, "What's different?"
   (Triage Tip: children with appendicitis may walk slowly and bent over or holding their abdomen. Jumping or other movements may make the pain worse.)
5. SEVERITY: "How bad is the pain?" "What does it keep your child from doing?"
   - MILD: doesn't interfere with normal activities
   - MODERATE: interferes with normal activities or awakens from sleep
   - SEVERE: excruciating pain, unable to do any normal activities, doesn't want to move, incapacitated
6. CHILD'S APPEARANCE: "How sick is your child acting?" "What are they doing right now?" If asleep, ask: "How were they acting before they went to sleep?"
7. RECURRENT SYMPTOM: "Has your child ever had this type of abdominal pain before?" If so, ask: "When was the last time?" and "What happened that time?"
8. PRIOR DIAGNOSIS: "Have you seen a HCP for these pains?" If so, "What did they think was causing them (their diagnosis)?"

- Author's note: IAQ's are intended for training purposes and not meant to be required on every call.

TRIAGE ASSESSMENT QUESTIONS

Call EMS 911 Now

Shock suspected (very weak, limp, not moving, pale cool skin, etc)

CA: 50, 9

Sounds like a life-threatening emergency to the triager

CA: 50, 9

See More Appropriate Guideline

Age < 3 months

Go to Guideline: Crying - Before 3 Months Old (Pediatric)

Age 3-12 months

Go to Guideline: Crying - 3 Months and Older (Pediatric)

Vomiting and diarrhea present

Go to Guideline: Vomiting With Diarrhea (Pediatric)

Vomiting is the main symptom

Go to Guideline: Vomiting Without Diarrhea (Pediatric)

[1] Diarrhea is the main symptom AND [2] abdominal pain is mild and intermittent

Go to Guideline: Diarrhea (Pediatric)

Constipation is the main symptom or being treated for constipation (Exception: SEVERE pain)

Go to Guideline: Constipation (Pediatric)

[1] Pain with urination also present AND [2] abdominal pain is mild

Go to Guideline: Urination Pain - Female (Pediatric)

[1] Sore throat is main symptom AND [2] abdominal pain is mild

Go to Guideline: Sore Throat (Pediatric) (Reason: Strep pharyngitis can cause up to 10% of acute abdominal pain)

Followed abdominal injury

Go to Guideline: Abdominal Injury (Pediatric)

[1] Has started her periods AND [2] menstrual cramps are present

Go to Guideline: Menstrual Cramps (Pediatric)

[1] Vaginal pain is the main symptom AND [2] after puberty

Go to Guideline: Vaginal Symptoms or Discharge - After Puberty (Pediatric)

[1] Vaginal pain is the main symptom AND [2] before puberty

Go to Guideline: Vaginal Symptoms or Discharge - Before Puberty (Pediatric)

Go to ED Now

Blood in the bowel movements (Exception: Blood on surface of BM with constipation)

R/O: peptic ulcer, intussusception or bacterial diarrhea

CA: 51, 4, 10, 11, 12, 9

[1] Vomiting AND [2] contains blood (Exception: few streaks and only occurs once)

R/O: peptic ulcer, esophagitis

CA: 51, 10, 11, 12, 9

Blood in urine (red, pink or tea-colored)

R/O: renal stone, UTI

CA: 51, 10, 11, 12, 9

Vaginal bleeding (Exception: normal menstrual period)

R/O: ectopic pregnancy, spontaneous abortion

CA: 51, 10, 11, 9

Poisoning suspected (with a plant, medicine, or chemical)

CA: 51, 4, 10, 11, 13, 9

Go to ED/UCC Now (or PCP triage)

Appendicitis suspected (e.g., constant pain > 2 hours, RLQ location, walks bent over holding abdomen, jumping makes pain worse, etc)

CA: 52, 4, 10, 11, 9

Intussusception suspected (brief attacks of severe abdominal pain/crying suddenly switching to 2-10 minute periods of quiet) (age usually < 3 years)

CA: 52, 4, 10, 11, 9

Diabetes suspected by triager (e.g., excessive drinking, frequent urination, weight loss)

CA: 52, 9

Pregnant or pregnancy suspected (e.g. missed last period)

R/O: spontaneous abortion or ectopic pregnancy

CA: 52, 10, 11, 9

[1] SEVERE pain (incapacitating) AND [2] present > 1 hour

R/O: serious cause

CA: 52, 4, 10, 11, 9

[1] Lying down and unable to walk AND [2] persists > 1 hour

R/O: appendicitis or other acute abdomen

CA: 52, 4, 10, 11, 9

[1] Walks bent over holding the abdomen AND [2] persists > 1 hour

R/O: appendicitis or other acute abdomen

CA: 52, 4, 10, 11, 9

[1] Abdomen very swollen AND [2] SEVERE or MODERATE pain

R/O: GI obstruction

CA: 52, 4, 10, 11, 9

[1] Vomiting AND [2] contains bile (green color)

R/O: intestinal obstruction

CA: 52, 10, 11, 9

[1] Fever AND [2] > 105 F (40.6 C) NOW or RECURRENT by any route OR axillary > 104 F (40 C)

R/O: serious bacterial infection

CA: 52, 20, 10, 9

[1] Fever AND [2] weak immune system (sickle cell disease, HIV, chemotherapy, organ transplant, adrenal insufficiency, chronic oral steroids, etc)

R/O: serious bacterial infection. Note: if available, refer to established specialist.

CA: 52, 9

High-risk child (e.g., diabetes, sickle cell disease, hernia, recent abdominal surgery)

CA: 52, 9

Child sounds very sick or weak to the triager

Reason: severe acute illness or serious complication suspected

CA: 52, 4, 10, 11, 9

See HCP (or PCP Triage) Within 4 Hours

[1] Pain low on the right side AND [2] persists > 2 hours

R/O: appendicitis, ovarian torsion

CA: 53, 4, 10, 11, 9

[1] Caller presses on abdomen AND [2] tenderness only present low on right side AND [3] persists > 2 hours

R/O: appendicitis, ovarian torsion

CA: 53, 4, 10, 11, 9

[1] Recent injury to the abdomen AND [2] within last 3 days

R/O: ruptured spleen or traumatic pancreatitis

CA: 53, 4, 10, 11, 9

[1] MODERATE pain (interferes with activities) AND [2] constant > 4 hours

R/O: appendicitis, PID, other acute abdomen

CA: 53, 4, 10, 11, 9

Dehydration suspected (no urine > 12 hours PLUS dark urine, very dry mouth, no tears, tired appearing, etc.) (Exception: only decreased urine. Consider fluid challenge and call back).

CA: 53, 3, 14, 9

Urgent Home Treatment with Follow-Up Call

[1] SEVERE abdominal pain AND [2] present < 1 hour AND [3] no other serious symptoms

CA: 70, 23, 2, 4, 11, 5, 14, 9

Call PCP Now

[1] Recent visit for abdominal pain within last 48 hours AND [2] symptoms worse OR not improving

R?O: new diagnosis or complication

CA: 59, 14, 9

See PCP Within 24 Hours

Fever is also present

R/O: UTI, Strep pharyngitis

CA: 54, 29, 16, 2, 4, 30, 9

Urinary tract infection (UTI) suspected

CA: 54, 16, 2, 4, 30, 9

Strep throat suspected (sore throat with mild abdominal pain)

CA: 54, 31, 16, 2, 4, 30, 9

Call PCP Within 24 Hours

[1] Pain and nausea AND [2] started with new prescription medicine (such as Zithromax)

Reason: probable gastric irritation

CA: 60, 42, 43, 44, 9

See PCP Within 3 Days

[1] MODERATE pain (interferes with activities) AND [2] comes and goes (cramps) AND [3] present > 24 hours
(Exception: pain with Vomiting, Diarrhea or Constipation-see that Guideline)

CA: 55, 15, 16, 4, 6, 41, 9

[1] MILD pain (doesn't interfere with activities) AND [2] present > 48 hours

CA: 55, 24, 25, 6, 26, 7, 21, 9

See PCP Within 2 Weeks

Abdominal pains are a chronic problem (recurrent or ongoing AND present > 4 weeks)

R/O: stress-related, school avoidance

CA: 56, 2, 3, 35, 17, 18, 19, 8, 9

Home Care

[1] Stress-related stomach aches diagnosed in the past AND [2] current abdominal pain is similar

CA: 58, 32, 2, 3, 6, 35, 33, 18, 34, 9

[1] MODERATE abdominal pain (interferes with activities) AND [2] constant AND [3] present < 4 hours

CA: 58, 24, 2, 3, 4, 5, 6, 7, 22, 9

[1] MODERATE abdominal pain (interferes with activities) AND [2] comes and goes (cramps) AND [3] present < 24 hours

CA: 58, 24, 15, 3, 4, 5, 6, 26, 7, 22, 9

[1] MILD abdominal pain AND [2] present < 48 hours

CA: 58, 1, 2, 3, 4, 5, 6, 26, 7, 8, 9

Transient abdominal pain

CA: 58, 27, 28, 9

CARE ADVICE (CA) -

1. **Reassurance and Education:**
   • It doesn't sound like a serious stomachache.
   • A mild stomachache can be from indigestion, gas pains, or overeating.
   • Sometimes a stomachache signals the onset of a vomiting or diarrhea illness from a virus.
   • Watching your child for several hours at home will usually tell you the cause.

2. **Lie Down:**
   • Encourage your child to lie down and rest until feeling better.

3. **Clear Fluids**:
   • Offer clear fluids only (e.g., water, flat soft drinks or half-strength Gatorade) until the pain is resolved for 2 hours.
   • Then return to a regular diet.

4. **Prepare for Vomiting:**
   • Keep a vomiting pan handy.
   • Younger children often refer to nausea as a "stomachache."

5. **Pass a Stool:**
   • Encourage sitting on the toilet and trying to pass a stool.
   • This may relieve pain if it is due to constipation or impending diarrhea.
   • Note: For constipation, sitting in warm water may relax the anus and release a stool.

6. **Avoid Pain Medicines:**
   • Any drug could irritate the stomach lining and make the pain worse (especially NSAIDs).
   • Do not give any pain medicines or laxatives for stomach cramps.
   • For fever above 102 F (39 C), acetaminophen can be given.

7. **Expected Course:**
   • With harmless causes, the pain is usually better or resolved within a few hours.
   • With gastroenteritis ("stomach flu"), belly cramps may precede each bout of vomiting or diarrhea and last several days.
   • With serious causes (such as appendicitis), the pain becomes constant and severe.

8. **Call Back If**:
   • Pain becomes **severe**
   • Pain becomes constant
   • **Mild** pain lasts over 48 hours
   • Your child becomes worse

9. **Care Advice** given per Abdominal Pain - Female Pediatric guideline.

10. **Lie Down:**
    • Encourage lying down and rest until seen.

11. **Don't Give Anything By Mouth:**
    • Do not allow any eating or drinking.
    • Also, avoid pain medicines.
    • Reason: Just in case condition needs surgery and general anesthesia.

12. **Bring in a Sample:**
    • Bring in a sample of anything that looks like blood (Reason: for testing).

13. **Bring in a Sample:**
    • For possible poisoning, bring in any pills or take a photo of what you think your child ingested.

14. **Call Back If**:
    • Your child becomes worse

15. **Stomach Cramps - Treatment:**
    • Stomach cramps that come and go are common.
    • Indigestion (eating an unusual food) can cause cramps for up to 8 hours.
    • Most that last longer are caused by a stomach virus. This type usually turns into diarrhea or vomiting.
    • During stomach cramps, have your child lie down and try to find a comfortable position.
    • A warm cloth on the belly or massage may help.

16. **Give Fluids and Offer Bland Diet:**
    • Drink adequate fluids.
    • Offer foods that are easy to digest. Examples are crackers and cereals.

17. **Reassurance and Education:**
    • It doesn't sound like a serious stomach ache.
    • Most recurrent abdominal pains are caused by stress.
    • However, your child should have a complete medical checkup before you conclude that they are due to worrying too much or stress.

18. **Don't Miss School:**
    • Make sure that your child doesn't miss any school because of stomach aches. Stressed children have a tendency to want to stay home when the going gets rough.
    • The more they stay home, the harder it is to treat their pains.
    • If your child has to miss school, your child needs to be examined that day.

19. **Keep a Pain Diary**:
    • Keep a pain diary.
    • Include the date, time, place, what child was doing at the time, severity, duration, what helps, etc.
    • Reason: Try to find some of the triggers.

20. **Fever Medicine**:
    • To bring down fever, give acetaminophen every 4 hours **Or** ibuprofen every 6 hours as needed (See Dosage Table).

21. **Call Back If**:
    • Pain becomes **severe**
    • Pain becomes **moderate** (interferes with activities)
    • Your child becomes worse

22. **Call Back If**:
    • Pain becomes **severe**
    • Constant **moderate** pain lasts over 4 hours
    • Intermittent **moderate** pain lasts over 24 hours
    • Abdominal pain moves to right lower abdomen
    • Your child becomes worse

23. **Reassurance and Education**:
    • A severe stomachache is not always serious.
    • Often severe pain changes to mild pain in less than 1 hour.
    • A stomachache can be from indigestion or gas pains.
    • Sometimes a stomachache signals the onset of a vomiting or diarrhea illness from a virus.

24. **Reassurance and Education**:
• It doesn't sound like a serious stomachache.
• A stomachache can be from indigestion, gas pains, or overeating.
• Sometimes a stomachache signals the onset of a vomiting or diarrhea illness from a virus.

25. **Give Fluids and Offer Regular Diet:**
• Allow a regular diet.
• Drink adequate fluids.

26. **Reassurance for Blood Streaks that Occur Once**:
• Specific advice to offer if blood limited to few streaks on surface of stool or in vomit **and** occur only once.
• Give reassurance and tell to call back if recurs.

27. **Reassurance and Education:**
• Brief stomach pains can occur in anyone.
• They may be due to something your child ate or gas.

28. **Call Back If:**
• **Severe** pain occurs
• Pain returns and persists
• Your child becomes worse

29. **Fever Medicine and Treatment:**
• For fever above 102 F (39 C), you may use acetaminophen. (See Dosage table).
• Avoid ibuprofen (Reason: can irritate the stomach lining and make the pain worse).
• For fevers 100-102 F (37.8 to 39 C), fever medicines are not needed. Reason: Fever turns on your body's immune system. Fever helps fight the infection.
• Exception: If your child also has definite pain, treat it.
• **Fluids.** Encourage cool fluids in unlimited amounts. Reason: prevent dehydration.
• **Clothing.** For all children, dress in 1 layer of clothing, unless shivering. For shivering, use a blanket until it stops.

30. **Call Back If:**
• **Severe** pain occurs
• Abdominal pain moves to right lower abdomen
• Your child becomes worse

31. **Sore Throat Pain Relief:**
• Children over 1 year old can sip warm chicken broth or apple juice. Some children prefer cold foods such as popsicles or ice cream.
• Children over 6 years old can also suck on hard candy or lollipops.
• Children over 8 years old can also gargle warm water with a little table salt or liquid antacid added.
• Waste of money: medicated throat sprays or lozenges.

32. **Stress-Related Stomach Aches - Reassurance and Education:**
• The most common cause of recurrent stomach aches is stress (commonly called the "worried stomach").
• Over 10% of children have them.
• The pain occurs in the pit of the stomach or near the belly button. The pain is mild to moderate. The pain is real, but harmless.
• It usually lasts several hours each time.
• Such children tend to be sensitive, serious, even model children.
• Their personality makes them more vulnerable than the average child to the normal stresses of life, such as changing schools, teasing or family disagreements.

33. **Worried Stomach - Prevention:**
• Help your child talk about events that trigger the abdominal pain and how to cope with these triggers next time.
• Help your child worry less about things he or she can't control.
• Teach your child to use relaxation exercises (relaxing every muscle in the body) to treat the pain. Lie down in a quiet place; take deep-slow breaths; and think about something pleasant. Listening to podcasts or apps that teach relaxation might help.
• Teach your child the importance of getting adequate sleep.

34. **Call Back If:**
• Stomach ache becomes worse than usual
• Stomach ache lasts longer than usual

35. **Liquid Antacid for Upper Abdominal Pain:**
• Upper abdominal pain is sometimes caused by indigestion.
• It may be improved with a liquid antacid.
• Examples are Mylanta or the store brand antacid.
• Give 1 Tablespoon (15 ml) as needed (no more than 4 times per day).
• Age: For children 5 years and older.

36. N/A

37. N/A

38. N/A

39. N/A

40. N/A

41. **Call Back If:**
• Severe pain occurs
• Pain becomes constant
• Abdominal pain moves to right lower abdomen
• Your child becomes worse

42. **Reassurance and Education:**
• Some medicines irritate the lining of the stomach, especially if given on an empty stomach.
• Here are some tips that should help the pain get better.
• If the problem continues, your doctor will decide if you need to change medicines.

43. **Give Med After Snack:**
• Give all future dosages after a snack (e.g., some soda crackers) or meal.
• Reason: medicines given on an empty stomach are more likely to cause nausea or pain.
• Other option: give half the dose now and the other half 60 minutes later.

44. **Call Back If:**
• Abdominal pain becomes constant or worse
• Vomiting occurs
• Your child becomes worse

50. **Call EMS 911 Now**:
• Your child needs immediate medical attention. 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.

51. **Go To ED Now**:
• Your child needs to be seen in the Emergency Department immediately.
• Go to the ED at ___________ Hospital.
• Leave now. Drive carefully.

52. **Go To ED/UCC Now (or PCP Triage):**
• **If No PCP (Primary Care Provider) Second-Level Triage**: Your child needs to be seen within the next hour. Go to the ED/UCC at _____________ Hospital. Leave as soon as you can. **Caution**: See Sources of Care below when considering where to send the patient.
• **If PCP Second-Level Triage Required**: Your child 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, go directly to the ED/UCC at _____________ Hospital.
Note to Triager:
• Use nurse judgment to select the most appropriate source of care.
• Consider both the urgency of the patient's symptoms AND what resources may be needed to evaluate and manage the patient.
• Do not send these patients to Retail Clinics. Retail Clinics have limited services and are not able to manage these patients.
Sources of Care:
• **ED:** Patients who may need surgery, need hospitalization, sound seriously ill or may be unstable need to be sent to an ED. Likewise, so do most patients with complex medical problems and serious symptoms.
• **UCC is Open:** Some Urgent Care Centers (UCCs) can manage patients who are stable and have less serious symptoms (e.g., minor illnesses and injuries). The triager must know the UCC capabilities before sending a patient there. If unsure, call ahead.
• **Office is Open**: If patient sounds stable and not seriously ill, consult PCP (or follow your office policy) to see if patient can be seen NOW in office.

53. **See HCP (or PCP Triage) Within 4 Hours**:

• If Office Will Be Open: Your child needs to be seen within the next 3 or 4 hours. Call your doctor's (or NP/PA) office as soon as it opens.

• If Office Will Be Closed and No PCP (Primary Care Provider) Second-Level Triage: Your child needs 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 your child becomes worse.

• If Office Will Be Closed and PCP Second-Level Triage Required: Your child 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.

Note to Triager:

• Use nurse judgment to select the most appropriate source of care.

• Consider both the urgency of the patient's symptoms AND what resources may be needed to evaluate and manage the patient.

Sources of Care:

• **ED:** Patients who may need surgery or hospital admission need to be sent to an ED. So do most patients with serious symptoms or complex medical problems.

• **UCC:** Some UCCs can manage patients who are stable and have less serious symptoms (e.g., minor illnesses and injuries). The triager must know the UCC capabilities before sending a patient there. If unsure, call ahead.

• **OFFICE:** If patient sounds stable and not seriously ill, consult PCP (or follow your office policy) to see if patient can be seen NOW in office.

54. **See PCP Within 24 Hours:**

• If Office Will Be Open: Your child needs to be examined within the next 24 hours. Call your child's doctor (or NP/PA) when the office opens and make an appointment.

• If Office Will Be Closed: Your child needs to be examined 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 Patient Has No PCP: Refer patient to a clinic or urgent care center. Also try to help caller find a PCP (medical home) for future care.

Note to Triager:

• Use nurse judgment to select the most appropriate source of care.

• Consider both the urgency of the patient's symptoms AND what resources may be needed to evaluate and manage the patient.

55. **See PCP Within 3 Days**:

• Your child needs to be examined within 2 or 3 days.

• PCP Visit: 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): 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.

56. **See PCP Within 2 Weeks**:
 • Your child needs an evaluation for this ongoing problem within the next 2 weeks.
 • **PCP Visit:** Call your child's doctor (or NP/PA) during regular office hours and make an appointment.
 • **If Patient Has No PCP (Primary Care Provider):** A primary care clinic is where you need to be seen for chronic health problems. **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.

58. **Home Care**:
 • You should be able to treat this at home.

59. **Call PCP Now**:
 • You need to discuss this with your child's 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.

60. **Call PCP Within 24 Hours:**
 • You need to discuss this with your child's 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.

61. **Call PCP When Office Is Open**:
 • You need to discuss this with your child's doctor (or NP/PA) within the next few days.
 • Call the office when it is open.

70. **Urgent Home Treatment With Follow-Up Call:**
 • Call-back instructions.
 Call Center Provides RN Call-Backs:
 • Your child will usually improve with the home treatment advice I give you.
 • I'll call you back in 30-60 minutes to see how your child is doing.
 • *Call me back immediately if:* Your child becomes worse before my follow-up call.
 Call Center Does Not Provide RN Call-Backs:
 • I'll explain how to treat your child's symptom.
 • After finishing the home treatment, call me back (in 30-60 minutes) and tell me how your child is doing.
 • *Go to the ED immediately without calling back if:* Your child **becomes worse or doesn't improve** with treatment.
 RN Response to Follow-Up Call:
 • Evaluate child's response to home treatment.
 • If unchanged or worse, refer to ED Now.
 • If improved or resolved, review remaining triage questions and give care advice.

FIRST AID

First Aid Advice for Shock: Lie down with the feet elevated.

BACKGROUND INFORMATION

Matching Pediatric Handouts for Callers

Printed home care advice instructions for patients have been written for this guideline. If your software contains them, they can be sent to the caller at the end of your call. Here are the names of the pediatric handouts that relate to this topic:

- Abdominal Pain - Symptom
- Abdominal Pain - Stress Related
- School Avoidance

Severity of Abdominal Pain: Other Clues

- **Mild:** Currently up and active, not crying (or transient crying), playing
- **Moderate:** Crying, prefers lying down but can walk, walks slowly, can't sleep normally
- **Severe:** Doesn't want to move because movement makes pain worse, won't walk or walks bent over, won't jump
- For constant pain, record severity level of pain NOW (unless sleeping)
- For intermittent, record level of pain for last bout of pain.

Assessing Pain Severity in Nonverbal Children: Crying and Other Clues

- Always consider pain as a possible cause of fussiness or crying.
- **Mild:** Up and active, not crying at time of call (or transient brief periods of crying), easy to console, will play, drinking fluids, doesn't awaken from sleep
- **Moderate:** Intermittent crying for longer times, takes longer to console, doesn't want to play, prefers to be held constantly, irritable or more fussy overall, fluid intake may be less than normal, awakening from sleep frequently, difficult to put back to sleep. In addition to crying, may have 'moaning or whimpering' due to pain.
- **Severe:** Unable to do normal activities, unable to sleep or will only fall asleep briefly, may have poor fluid intake or refuse fluids, miserable, incapacitated, excessive or constant crying, difficult or impossible to console. NOTE: Instead of excessive or constant crying, may also be 'groaning, grunting, moaning or whimpering' due to severe pain.

Causes of Acute Abdominal Pain

- **Overeating.** Eating too much can cause an upset stomach and mild stomach pain.
- **Hunger Pains.** Younger children may complain of stomach pain when they are hungry.
- **GI Virus (such as Rotavirus).** A GI virus can cause stomach cramps as well as vomiting and/or diarrhea. This is the most common cause in children who also act sick.
- **Food Poisoning.** This causes sudden vomiting and/or diarrhea within hours after eating the bad food. It is caused by toxins from germs growing in foods left out too long. Most often, symptoms go away in less than 24 hours. It often can be treated at home without the need for medical care.
- **Constipation.** The need to pass a stool may cause cramps in the lower abdomen. Caution: any abdominal pain from constipation is intermittent cramping. Constant abdominal pain needs to be triaged using the abdominal pain guideline.
- **Strep Throat.** A strep throat infection causes 10% of new onset stomach pain with fever.
- **Bladder Infection.** Bladder infections usually present with painful urination, urgency and bad smelling urine. Sometimes the only symptom is pain in the lower abdomen.
- **New Medication.** Drugs (such as Tamiflu, Doxycycline, Zithromax) can cause nausea and stomach pain. The clue to this diagnosis is that the symptom begins soon after starting the medicine.
- **Appendicitis (Serious).** Suspect appendicitis if pain is low on the right side and walks bent over. Other signs are the child won't hop and wants to lie still.
- **Intussusception (Serious).** Sudden attacks of severe pain that switch back and forth with periods of

calm. Caused by one segment of bowel telescoping into a lower piece of bowel. Usually occurs in children from age 6 months to 2 years.

Female Specific Causes of Abdominal Pain

The female and male causes of most abdominal pain are the same. The exceptions are the female causes of lower abdominal and pelvic pain. The female reproductive organs (ovaries, uterus and vagina) can cause acute and chronic pain at this site. Examples are:

- Ovarian torsion (serious cause)
- Pelvic inflammatory disease (PID)
- Endometriosis
- Ectopic pregnancy (serious cause). Symptoms begin 2 to 12 weeks after a missed period.
- Spontaneous abortion
- Menstrual cramps
- Mittelschmertz

Causes of Recurrent Abdominal Pains

- **Stress or Worries.** The most common cause of frequent stomach pains is stress. Over 10% of children have a "worried stomach". These children tend to be sensitive and too serious. They often are model children. This can make them more at risk to the normal stresses of life. Examples of these events are changing schools, moving or family fights. The pain is in the pit of the stomach or near the belly button. The pain is real.
- **Abdominal Migraine.** Attacks of stomach pain and vomiting with sudden onset and offset. Often occur in children who later develop migraine headaches. Strongly genetic.
- **Functional Abdominal Pains.** Functional means the stomach pains are due to a sensitive GI tract. The GI tract is free of any disease.
- **School Avoidance.** Stomach pains that mainly occur in the morning on school days. They keep the child from going to school.

Distinguishing Appendicitis From Gastroenteritis

- Gastroenteritis (GE) is the most common cause of acute onset abdominal PAIN
- Appendicitis accounts for 1% or 2%
- GE: Intermittent mild PAIN
- Appendicitis: Constant PAIN
- GE: PAIN doesn't interfere with activities
- Appendicitis: PAIN interferes with activities
- GE: Often starts with VOMITING
- Appendicitis: VOMITING (present 60%) is usually delayed, starting 12-24 hours after pain. (Exception: Vomiting can be the first symptom in young children).
- GE: Progresses to associated DIARRHEA
- Appendicitis: DIARRHEA is usually absent (Exception: from pelvic appendix)
- FEVER: not helpful for distinguishing appendicitis from gastroenteritis

Appendicitis: How to Recognize

- Symptoms: periumbilical pain for 4-12 hours
- Then constant localized RLQ pain
- Movement: increases pain (prefers to lie still)
- Position: lies on side, hips flexed, curled up

• Walking: Refuses or walks bent over and holding lower abdomen. Walking in a guarded way is also suggestive of appendicitis. A 2018 review of 12 patients with appendicitis referred in by triage nurses at CHCO found that not being able to walk upright was the most common symptom. (Reviewer: Julie Klingel, RN)
• Jumping or hopping: refuses or pain increases
• For any of the above (such as doesn't want to move, doesn't want to walk or pain in RLQ), refer in now even if vomiting is the main symptom
• If caller brings up "appendicitis", the patient has suspected appendicitis and needs to seen, unless the triager proves the patient has none of the above symptoms.
• Associated fever 50% and vomiting 60%
• Complications: perforation and peritonitis over 48 hours from onset (perforation occurs 20-70%)
• Death from shock less than 1%
• Incidence: 7% of people. Peak age: 10 - 20 years old.

Ruptured (Perforated) Appendicitis

• Delayed diagnosis of appendicitis is the 2nd most common cause of pediatric malpractice lawsuits (McAbee, 2009).
• Yet, ruptured appendix at the time of surgery is common: 90% in 0-2 year olds, 70% in 2-5 y o, 30% for 6-12 y o and 10% in teens.
• The perforation rate is inversely related to the age of the patient.
• Even an examination may not detect appendicitis. Some children are seen twice before the correct diagnosis is made.
• Atypical symptoms can contribute to a delayed diagnosis: diarrhea (from pelvic appendix touching sigmoid colon), vomiting onset before pain (age 2 to 5), and minimal migration of pain to RLQ.
• In younger children, remember that crying can be from pain.
• Suspect appendicitis in children who have constant abdominal pain for more than 2 hours; even if they lack any of the classic symptoms. Constant means that while the pain may lessen; the child is never pain-free.
• Symptoms may change after perforation: The RLQ pain can become more generalized and the pain severity can temporarily diminish. However, the pain persists (it doesn't go away), the abdomen becomes rigid, fever begins or rises, and the child becomes less willing to move about.

Intussusception: **Serious Cause**

• Definition: telescoping bowel
• Symptoms: brief attacks of severe abdominal pain, suddenly switching to calm (quiet periods last 2-10 minutes)
• Repeated vomiting (90%)
• Currant jelly stool (10%)
• Silent form: lethargy and pallor (10-20%)
• Age usually younger than 3 years; peak age 6 to 9 months
• Complication: necrotic bowel
• Incidence: 6 per 10,000 children

Bowel Obstruction: **Serious Cause**

• Symptoms: constant abdominal pain
• Persistent vomiting (99%), usually bile-stained
• Distended abdomen
• No stools
• Causes: volvulus, intussusception, etc

• Complications: necrotic bowel shock

Ovarian Torsion in Pediatric Patients: Serious Cause

• Definition: An ovary twists on its pedicle causing obstruction of venous drainage
• Common symptoms: lower abdominal or pelvic pain (82%), vomiting (77%), fever (18%), difficulty walking (10%)
• The abdominal pain is usually RLQ or LLQ, intermittent (crampy), and of variable severity.
• Complication: Over several days, the arterial blood supply to the ovary becomes compromised, causing infarction and loss of the ovary.
• Diagnostic confirmation: By pelvic ultrasound
• Treatment: Surgical intervention. Detorsion can sometimes salvage the ovary.
• While early diagnosis is the goal, the duration of pain prior to surgery was 77 hours for salvaged ovaries and 97 hours for non-salvaged ovaries (not a significant difference).
• Age: most ovarian torsion occurs in child-bearing age; less than 20% occurs in prepubertal girls.
• Incidence: 5 per 100,000 in children and teens
• Source: Anders J. Arch Pediatr Adolesc Med 2005;159:532-535.

Location of Pain and Possible Etiologies

• RUQ: liver and gall bladder
• Epigastric: stomach, duodenum, esophagus, pancreas
• LUQ: spleen, stomach
• Periumbilical: benign causes, early appendicitis
• RLQ: ileum, appendix, ovary
• Suprapubic: bladder, rectum, uterus
• LLQ: sigmoid colon, ovary

Expert Reviewers

• George Sam Wang MD, Associate Professor of Pediatrics, Sections of Emergency Medicine and Medical Toxicology, Children's Hospital Colorado. Also, Associate Medical Editor of STCC pediatric clinical content.
• Joseph A Grubenhoff MD, Pediatric Emergency Medicine, Medical Director, Diagnostic Safety Program, Children's Hospital Colorado, Aurora, Colorado.
• The author is extremely grateful for these critical reviews.

REFERENCES

1. Acer-Demir T, Güney LH, Fakioğlu E, et al. Comparison of Clinical Features of Intussusception in Terms of Age and Duration of Symptoms. Pediatr Emerg Care. 2023 Nov 1;39(11):841-847.
2. Anders J, Powell E. Urgency of evaluation and outcome of acute ovarian torsion in pediatric patients. Arch Pediatr Adolesc Med. 2005;159(6):532-535.
3. Ashcraft KW. Acute abdominal pain. Pediatr Rev. 2000;21:363-367.
4. Baber KF, Anderson J, Puzanovava M, et al. Rome II versus Rome III classification of functional gastrointestinal disorders in pediatric chronic abdominal pain. J Pediatr Gastroenterol Nutr. 2008 Sep;47(3):299-302.
5. Baker RD. Acute abdominal pain. Pediatr Rev 2018; 39(3):130-138.

6. Becker T, Kharbanda A, Bachur R. Atypical clinical features of pediatric appendicitis. Acad Emerg Med. 2007;14:124.

7. Bundy DG, Byerley JS, Liles EA, et al. Does this child have appendicitis? JAMA. 2007;298(4):438-451.

8. Caperell K, Pitetti R, Cross KP. Race and acute abdominal pain in a pediatric emergency department. Pediatrics. 2013 Jun;131(6):1098-1106.

9. Colvin JM, Bachur R, Kharbanda A: The presentation of appendicitis in preadolescent children. Pediatr Emerg Care 2007;23:849-855.

10. Cunningham NR, Moorman E, Brown CM, et al. Integrating psychological screening into medical care for youth with abdominal pain. Pediatrics. 2018 Aug;142(2). pii: e20172876.

11. Goldman DA. Gallbladder, gallstones, and diseases of the gallbladder in children. Pediatr Rev. 2020 Dec;41(12):623-629.

12. Goldman RD, Carter S, Stephens D, et al. Prospective validation of the pediatric appendicitis score. J Pediatr. 2008;153:278.

13. Gremse DA and Sacks AI. Evaluation of dyspepsia. Pediatr Ann. 1997;26:251-259.

14. Hansen LW, Dolgin SE. Trends in the diagnosis and management of pediatric appendicitis. Pediatr Rev. 2016 Feb;37(2):52-57.

15. Kharbanda AB, Stevenson MD, Macias CG, et al. Interrater reliability of clinical findings in children with possible appendicitis. Pediatrics. 2012;129:695-700.

16. Kharbanda AB, Vazquez-Benitez G, Ballard DW, et al. Development and validation of a novel pediatric appendicitis risk calculator (pARC). Pediatrics. 2018 Apr;141(4). pii: e20172699.

17. Klein EJ, Paris CA. Appendicitis. In: Moyer V, Davis RL, Elliott E, et al, eds. Evidence Based Pediatrics and Child Health. London, England: BMJ Publishing Group; 2000. p.287-297.

18. Kuppermann N, O'Dea T, Pinckney L, Hoecker C. Predictors of intussusception in young children. Arch Pediatr Adolesc Med. 2000;154:250-255.

19. Mason JD. The evaluation of acute abdominal pain in children. Emerg Med Clin North Am. 1996;14:629-643.

20. McCollough M, Sharieff G. Abdominal pain in children. Pediatr Clin North Am. 2006;53(1):107-120.

21. North F, Odunukan O, Varkey P. The value of telephone triage for patients with appendicitis. J Telemed Telecare. 2011;17(8):417-420.

22. Oltmann SC, Fischer A, et al. Cannot exclude torsion - A 15 year review. J Pediatr Surg 2009; 44:1212-1217.

23. Pade KH, Waterhouse MR. Index of suspicion: ovarian torsion. Pediatr Rev. 2020 Jul;41(7):369-372.

24. Pena BM, Taylor GA, Lund DP. Appendicitis revisited: New insights into an age-old problem. Contemp Pediatr. 1999;16(9):122-131.

25. Pollack E. Pediatric abdominal surgical emergencies. Pediatr Ann. 1996;25:448-457.

26. Ross A, LeLeiko NS. Acute abdominal pain. Pediatr Rev 2010;31:135-143.

27. Scholer SJ, et al. Clinical outcome of children with acute abdominal pain. Pediatrics. 1996;98:680-685.

28. Shelby GD, Shirkey KC, Sherman AL, et al. Functional abdominal pain in childhood and long-term vulnerability to anxiety disorders. Pediatrics. 2013 Sep;132(3):475-482.

29. Sierra D, Wood M, Kolli S, Felipez LM. Pediatric gastritis, gastropathy, and peptic ulcer disease. Pediatr Rev. 2018 Nov;39(11):542-549.

30. Trent M. Pelvic inflammatory disease. Pediatr Rev. 2013 Apr;34(4):163-172.

31. Weihmiller SN, Monuteaux MC, Bachur RG. Ability of pediatric physicians to judge the likelihood of intussusception. Pediatr Emerg Care. 2012;28(2):136-140.

32. Zuar LR, Thompson LA. What Parents Should Know About Constipation in Children. JAMA Pediatr. 2023;177(2):216.

SEARCH WORDS

ABDOMEN
ABDOMEN PAIN
ABDOMEN PAINS
ABDOMINAL CRAMPS
ABDOMINAL PAIN
ABDOMINAL PAINS
ABDOMINAL SWELLING OR MASS
ABDOMINAL WALL PAIN
APPENDICITIS
BELLY PAIN
BELLY PAINS
BLADDER PAIN
COLON PAIN
CONSTANT PAIN
CRAMPING
CRAMPS
DEEP BREATHING
DIABETES
DYSMENORRHEA
FLANK PAIN
GALL BLADDER PAIN
GAS
GASTRITIS
GI CLINIC
GI PAIN
HARD ABDOMEN
HARD BELLY
HEAVY BREATHING
HEPATITIS

HOLDING ABDOMEN
INDIGESTION
INTERMITTENT PAIN
INTUSSUSCEPTION
LIVER PAIN
MENSTRUAL CRAMPS
OVARY PAIN
PAIN
PID
RIGHT SIDE PAIN
SEVERE PAIN
SPLEEN PAIN
STOMACH
STOMACH ACHE
STOMACH ACHES
STOMACH CRAMPS
STOMACH PAIN
STOMACH PAINS
STOMACHACHE
SWOLLEN ABDOMEN
SWOLLEN BELLY
UTERUS PAIN
VIRAL GASTRITIS

AUTHOR AND COPYRIGHT

Author: Barton D. Schmitt, MD, FAAP

Copyright: 1994-2025, Schmitt Pediatric Guidelines LLC All rights reserved.

Company: Schmitt-Thompson Clinical Content

Content Set: After Hours Telehealth Triage Guidelines | Pediatric

Version Year: 2025

Last Revised: 3/26/2025

Last Reviewed: 3/26/2025