Diabetes - High Blood Sugar

Adult After-Hours Version

- DEFINITION -

* Patient with known diabetes mellitus
* Has a high blood sugar (hyperglycemia), defined as a blood glucose > 200 mg/dl (11 mmol/l)
* Has symptoms of high blood sugar
* Has questions regarding high blood sugar

SYMPTOMS of High Blood Sugar (Hyperglycemia) include:
* Mild hyperglycemia: polyuria, polydipsia, fatigue, blurred vision.
* Severe hyperglycemia: confusion and coma.
* Diabetic ketoacidosis (DKA): fruity odor on breath, vomiting, rapid breathing, weakness, confusion and coma.

- INITIAL ASSESSMENT QUESTIONS -

1. BLOOD GLUCOSE: "What is your blood glucose level?"
2. ONSET: "When did you check the blood glucose?"
3. USUAL RANGE: "What is your glucose level usually?" (e.g., usual fasting morning value, usual evening value)
4. URINE KETONES: "Do you check your urine for ketones?" If yes, ask: "What does the test show now?"
5. TYPE 1 or 2: "Do you know what type of diabetes you have?" (e.g., Type 1, Type 2, doesn't know)
6. INSULIN: "Do you take insulin?" If yes, ask: "Have you missed any shots recently?"
7. DIABETES PILLS: "Do you take any pills for your diabetes?" If yes, ask: "Have you missed taking any pills recently?"
8. OTHER SYMPTOMS: "Do you have any symptoms?" (e.g., fever, frequent urination, difficulty breathing, dizziness, weakness, vomiting)
9. PREGNANCY: "Is there any chance you are pregnant?" "When was your last menstrual period?"

- BACKGROUND INFORMATION -

DIABETES MELLITUS
* Diabetes mellitus is an endocrine condition in which patients have elevated blood glucose levels (hyperglycemia). The classic symptoms of untreated or under-treated diabetes are: frequent urination (polyuria), polydipsia (excessive thirst), and involuntary weight loss.
* Insulin is a hormone produced by the pancreas to help process food. Eating food makes the blood glucose rise and insulin makes the blood glucose fall.
* There are two forms of diabetes: Type 1 and Type 2.

TYPE 1 DIABETES
* Other names: Insulin Dependent Diabetes Mellitus (IDDM), Juvenile Onset Diabetes.
* Physiology: There is no production of insulin by the body.
* Ketosis-prone: Patients with this type of diabetes are ketosis-prone, which means that if they do not receive daily insulin shots their bodies break down fats and produce ketones. The ketones spill into the urine and can be measured. Patients with Type I diabetes are susceptible to developing Diabetic Keto-Acidosis (DKA), a life-threatening condition.
* Treatment: Insulin therapy is always required. Insulin is given subcutaneously at least once daily. Patients striving for tight control of their blood glucose will take insulin more often than once a day or may instead utilize an insulin pump.
**TYPE 2 DIABETES**
* Other names: Non-Insulin Dependent Diabetes Mellitus (NIDDM), Adult-Onset Diabetes
* Physiology: In Type 2 diabetes, there is decreased insulin production and decreased sensitivity to insulin.
* Not ketosis-prone: These patients are not prone to ketosis. DKA rarely occurs.
* Treatment: The initial and most important treatments are exercise and weight loss. When these measures fail, there are pills that can be prescribed to help the body make more insulin or use the insulin more effectively. Occasionally patients require insulin therapy.
* Onset: It more commonly develops in elderly and overweight adults.

**DIABETIC KETOACIDOSIS (DKA)**
* Definition: Blood glucose > 250 mg/dl (12 mmole/L) with acidosis and ketosis (urine ketones moderate to large)
* Symptoms of DKA: In addition to symptoms of hyperglycemia, fruity odor on breath, vomiting, rapid/deep breathing, confusion and coma.
* Causes: Non-compliance with using insulin in type 1 diabetes, infection.

**FIVE GENERAL TYPES OF INSULIN**
* Rapid-acting (Humalog/lispro, Novolog/aspart): peaks 30-90 minutes
* Short acting (Regular, Humulin R, Novolin R): peaks 50-120 minutes
* Intermediate acting (NPH, Lente, Humulin N, Humulin L, Novolin N, Novolin L) - peaks 6-15 hours
* Long acting (Glargine, Determir, Levemir): peaks 8-12 hours
* Pre-mixed (70/30, 50/50): peaks 2-12 hours, depends on mixture

**EXUBERA - INHALED FORM OF INSULIN - NO LONGER AVAILABLE**
* Exubera is the first-ever inhaled insulin. It comes in a dry powder inhaler.
* It was approved by the FDA in January 2006 for the treatment of type 1 and type 2 diabetes mellitus.
* On October 18th 2007, Pfizer announced that they would no longer be making Exubera. More information is available on their website: http://www.exubera.com.

**CONVERTING GLUCOSE LEVELS: MG/DL AND MMOL/L**
* In the United State glucose is typically measured using the units MG/DL. Nearly every country in the world (including Canada) measures glucose levels using the units MMOL/L.
* To convert mmol/l of glucose to mg/dl, multiply by 18.
* To convert mg/dl of glucose to mmol/l, divide by 18 or multiply by 0.055.

**FIRST AID**

**FIRST AID ADVICE FOR HYPOGLYCEMIA -- GLUCOSE**

... IF BLOOD GLUCOSE < 70 mg/dl (3.9 mmol/l) or UNKNOWN (pending EMS arrival):
* Give glucose by mouth IF able to swallow.
* Sources: juice (1 cup; 240 ml), honey (3 tsps; 15 ml), table sugar (3 tsps; 15 ml), glucose paste (25-50 gms)

**FIRST AID ADVICE FOR HYPOGLYCEMIA -- GLUCAGON**

... IF BLOOD GLUCOSE < 70 mg/dl (3.9 mmol/l) or UNKNOWN (pending EMS arrival):
* If family has glucagon for hypoglycemic emergencies AND the caller knows how to use it, encourage the caller to give the glucagon now.
* Inject it IM into the upper outer thigh.
* Adult dosage is 1 mg

REFERENCES

SEARCH WORDS
BLOOD GLUCOSE
BLOOD SUGAR
COMA
DIABETES
DIABETES MELLITUS
DIABETIC
DIZZINESS
DKA
DM
EXUBERA
GLUCOSE
HIGH BLOOD SUGAR
HYPERGLYCEMIA
IDDM
- TRIAGE -

**Call EMS 911 Now**

Unconscious or difficult to awaken

- *R/O: diabetic ketoacidosis (DKA), severe hyperglycemia, profound hypoglycemia*
  - *CA: 40, 14, 16, 1*

Acting confused (e.g., disoriented, slurred speech)

- *R/O: DKA, severe hyperglycemia, hypoglycemia*
  - *CA: 40, 14, 13, 26, 1*

Very weak (e.g., can't stand)

- *R/O: DKA, severe hyperglycemia, hypoglycemia*
  - *CA: 40, 13, 15, 1*

Sounds like a life-threatening emergency to the triager

  - *CA: 40, 1*

**Go to ED Now**

[1] Vomiting AND [2] signs of dehydration (e.g., very dry mouth, lightheaded, etc.)

  - *Reason: may need IV hydration, possible DKA*
  - *CA: 41, 12, 81, 1*


  - *R/O: DKA*
  - *CA: 41, 12, 81, 1*

**Go to ED Now (or PCP triage)**

Blood glucose > 500 mg/dl (27.5 mmol/l)

  - *CA: 42, 80, 87, 1*

[1] Blood glucose > 240 mg/dl (13 mmol/l) AND [2] urine ketones moderate-large (or more than 1+)

  - *R/O: DKA*
  - *CA: 42, 80, 87, 1*

   \textit{R/O: DKA}
   \textit{CA: 42, 80, 87, 1}

[1] New onset Diabetes suspected (e.g., frequent urination, weak, weight loss) AND [2] vomiting or rapid breathing

   \textit{CA: 42, 80, 87, 1}

Vomiting lasting > 4 hours

   \textit{R/O: DKA, dehydration}
   \textit{CA: 42, 80, 87, 1}

Patient sounds very sick or weak to the triager

   \textit{R/O: severe dehydration, DKA, hyperglycemia, hypoglycemia, possible bacterial infection}
   \textit{CA: 42, 80, 87, 1}

\textbf{See Physician within 4 Hours (or PCP triage)}

Fever > 100.5 F (38.1 C)

   \textit{Reason: diabetics are immuno-compromised, consider possibility of bacterial infection}
   \textit{CA: 43, 72, 73, 27, 1}

\textbf{Call PCP Now}

Blood glucose > 400 mg/dl (22 mmol/l)

   \textit{Reason: significant hyperglycemia}
   \textit{CA: 49, 24, 27, 1}

[1] Blood glucose > 300 mg/dl (16.5 mmol/l) AND [2] two or more times in a row

   \textit{Reason: obtain PCP input regarding medication adjustment and diet}
   \textit{CA: 49, 27, 1}

Urine ketones moderate - large

   \textit{Reason: obtain PCP input regarding medication adjustment and diet}
   \textit{CA: 49, 25, 27, 1}

Caller has urgent medication question about med that PCP prescribed and triager unable to answer question

   \textit{CA: 49, 9, 1}

\textbf{See Physician within 24 Hours}

[1] Symptoms of high blood sugar (e.g., frequent urination, weak, weight loss) AND [2] not able to test blood glucose

   \textit{CA: 44, 6, 27, 1}

New onset Diabetes suspected (e.g., frequent urination, weak, weight loss)

   \textit{CA: 44, 6, 27, 1}

\textbf{Call PCP within 24 Hours}
Caller has nonurgent medication question about med that PCP prescribed and triager unable to answer question

*Reason: obtain PCP input regarding insulin dosing*
*CA: 50, 9, 1*

**Home Care**


*Reason: hyperglycemia*
*CA: 48, 5, 6, 4, 11, 2, 3, 10, 8, 1*


*Reason: hyperglycemia*
*CA: 48, 5, 6, 11, 2, 3, 10, 8, 1*

Blood glucose 60-240 mg/dl (3.5 -13 mmol/l) (all triage questions negative)

*CA: 48, 5, 22, 3, 2, 10, 23, 7, 1*

Sick day rules for Type 1 Diabetes, questions about

*CA: 48, 17, 28, 29, 30, 19, 20, 31, 32, 8, 1*

Sick day rules for Type 2 Diabetes, questions about

*CA: 48, 18, 19, 21, 31, 32, 8, 1*
1. CARE ADVICE given per Diabetes - High Blood Sugar (Adult) guideline.

2. MEASURE AND RECORD YOUR BLOOD GLUCOSE:
   - Measure your blood glucose before breakfast and before going to bed.
   - Record the results and show them to your doctor at your next office visit.

3. DAILY BLOOD GLUCOSE GOALS - You and your doctor should decide on what your blood glucose goals should be. Typical goals for many people who perform daily finger-stick blood testing at home are:
   - Before breakfast: 80-130 mg/dL (4.5-7 mmol/l)
   - 2-3 hours after a meal: Less than 200 mg/dL (11 mmol/l)
   - Before bedtime: 100-150 md/dL (5.5-8 mmol/l)

4. TREATMENT - INSULIN:
   - Continue to take your insulin, as prescribed by your doctor.
   - Sliding Scale Insulin: IF your doctor has given you instructions to take extra rapid-acting (e.g., lispro, aspart) or short acting (regular) insulin when your blood sugar is high, give yourself the insulin dose your doctor has recommended

5. HIGH BLOOD SUGAR (Hyperglycemia):
   - Definition: Fasting blood glucose > 140 mg/dL (7.5 mmol/l) or random blood glucose > 200 mg/dL (11 mmol/l).
   - Symptoms of mild hyperglycemia: Frequent urination, increased thirst, fatigue, blurred vision.
   - Symptoms of severe hyperglycemia: Confusion and coma.
   - Contributing factors: Non-compliance with medications, non-compliance with diet, infection

6. TREATMENT - LIQUIDS:
   - Drink at least one glass (8 oz) of water per hour for the next 4 hours (Reason: adequate hydration will reduce hyperglycemia).
   - Generally, you should try to drink 6-8 glasses of water each day.

7. CALL BACK IF:
   - Urine ketones are moderate or large (or more than 1+)
   - Glucose > 300 mg/dL (16.5 mmol/l) two or more times in a row
   - You become worse.

8. CALL BACK IF:
   - Blood glucose > 300 mg/dL (16.5 mmol/l), two or more times in a row.
   - Urine ketones become moderate or large
   - Vomiting lasting > 4 hours
   - Rapid breathing occurs
   - You become worse or have more questions.

9. CALL BACK IF:
   - You have more questions.
   - You become worse.
10. **CHECK URINE FOR KETONES:**
   - All diabetics who require insulin therapy should keep a testing kit for urine ketones in their home. You can buy one at your local pharmacy.
   - Check your urine for ketones whenever you are ill or if your blood glucose is > 240 mg/dL (13 mmol/l).

11. **TREATMENT - DIABETES MEDICATIONS:** Continue taking your diabetes pills.

12. **DRIVING:** Another adult should drive. If immediate transportation is not available via car or taxi, then the patient should be instructed to call EMS-911.

13. **FIRST AID ADVICE for HYPOGLYCEMIA -- GLUCOSE**
   IF BLOOD GLUCOSE < 70 mg/dl (3.9 mmol/l) or UNKNOWN (pending EMS arrival):
   - Give glucose by mouth IF able to swallow.
   - Sources: juice (1 cup; 240 ml), honey (3 tsps; 15 ml), table sugar (3 tsps; 15 ml), glucose paste (25-50 gms)

14. **FIRST AID ADVICE for HYPOGLYCEMIA -- IM GLUCAGON**
   IF BLOOD GLUCOSE < 70 mg/dl (3.7 mmol/l) or UNKNOWN (pending EMS arrival):
   - If family has glucagon for hypoglycemic emergencies AND the caller knows how to use it, encourage the caller to give the glucagon now.
   - Inject it IM into the upper outer thigh.
   - Adult dosage is 1 mg

15. **NOTE to TRIAGER:** Don't worry about giving GLUCOSE to a patient whose blood glucose is unknown (and could be high); if it turns out the blood glucose is high, the hospital can treat this easily.

16. **NOTE to TRIAGER:** Don't worry about giving GLUCAGON to a patient whose blood glucose is unknown (and could be high); if it turns out the blood glucose is high, the hospital can treat this easily.

17. **SICK DAY RULES - TYPE 1 DIABETES**
   - Do not stop taking your insulin (Reason: during illness the blood sugar often rises).
   - Check your blood glucose every 2-4 hours. Write down the results.
   - Check for ketones in your urine. Ketones can be a sign of dehydration or poorly controlled diabetes.
   - Drink liquids. It is important to prevent dehydration. Drink small amounts frequently.
   - Avoid hypoglycemia. If your appetite is bad, you are not eating solid food, and your blood glucose is less than 200 mg/dl (11 mmol/l), then you should be drinking sugar containing liquids. Examples are soda, clear juices, sports drinks.

18. **SICK DAY RULES - TYPE 2 DIABETES**
   - Do not stop taking your diabetes medications. (Reason: during illness the blood sugar often rises).
   - Check your blood glucose every 4 hours. Write down the results.
19. **SICK DAY RULES - DIET:**
- Appetite OK, minimal nausea: Continue your normal diabetic meal plan. Avoid spicy or greasy foods.
- Appetite fair, moderate nausea: Eat a bland diet. Try small amounts of food 6-8 times a day. Take 1/2 to 1 cup of food or liquids every 1-2 hours.
- Appetite poor, severe nausea, can't eat solid food: Drink plenty of liquids. Try to drink 4-8 oz (120-240 ml) per hour. If glucose > 240 mg/dl (13 mmol/l), drink sugar-free liquids (e.g., water, broth). If glucose < 200 mg/dl (11 mmol/l), drink sugar-containing liquids (e.g., sports drinks, juice, soda).
- Advance diet as you improve.

20. **SICK DAY RULES - LIQUIDS:**
- Drink more fluids, at least 8-10 glasses daily (8 oz or 240 ml each glass).
- Even more liquids are needed if there is fever, vomiting or diarrhea.

21. **SICK DAY RULES - LIQUIDS:**
- Drink more fluids, at least 8-10 glasses daily (8 oz or 240 ml each glass). Even more liquids are needed if there is fever, vomiting or diarrhea.
- If glucose > 240 mg/dl (13 mmol/l), drink sugar-free liquids (e.g., water).
- If glucose < 120 mg/dl (6.5 mmol/l), drink sugar-containing liquids (e.g., sports drinks, juice, soda).

22. **GENERAL DIABETES ADVICE:**
- Physician: See your physician regularly.
- Testing: Test your blood glucose - Follow your physician’s advice regarding how often.
- Record-keeping: Keep a daily record of how you are feeling and the results of your tests.
- Medications: Take your diabetes medications as prescribed.
- Eat healthy: Work with your doctor or a dietician to develop healthy meal plan.
- Exercise: Staying physically active is important.
- Eye exam: Get an eye exam once a year (by an ophthalmologist).
- Feet: Keep your feet clean and dry; check your feet daily for sores.

23. **RESOURCES - Reliable educational information is available from:**

24. **RECHECK:** If you have not done so already, recheck your blood sugar to make certain that it is really that high.

25. **DRINK EXTRA FLUIDS:** Drink at least one glass (8 oz) of water per hour.

26. **NOTE to TRIAGER:** Don't worry about giving GLUCAGON or GLUCOSE to a patient whose blood glucose is unknown (and could be high); if it turns out the blood glucose is high, the hospital can treat this easily.

27. **CALL BACK IF:**
- Vomiting occurs
- Rapid breathing occurs
- You become worse.
28. INSULIN - DO NOT STOP TAKING IT:
- If you are supposed to be using insulin, do not stop taking it.
- The reason is that sometimes during an illness you may need even more insulin than usual.

29. INSULIN - SUPPLEMENTAL INSULIN FOR HYPERGLYCEMIA:
- NOTE TO TRIAGER: Supplemental rapid-acting (e.g., lispro, aspart) or short acting (regular) insulin is sometimes needed in addition to usual insulin doses for treating hyperglycemia. Most patients should already have been given 'sick day rules' education by their doctor and instructions on when to use supplemental insulin.
- TOTAL DAILY DOSE (TDD): The TDD is calculated by adding up ALL insulin administered during a USUAL day.
- TYPICAL SICK DAY INSULIN SUPPLEMENTATION - URINE KETONES NEGATIVE OR TRACE: If glucose is 80-240 mg/dl (4.5-13 mmol/l), give usual dose. If glucose is 250-400 mg/dl (14-22 mmol/l), supplemental insulin dosage is 10% of TDD. If glucose is over 400 mg/dl (22 mol/l), supplemental insulin dosage is 20% of TDD.
- TYPICAL SICK DAY INSULIN SUPPLEMENTATION - URINE KETONES MODERATE: If glucose is 80-240 mg/dL (4.5-13 mmol/l), give usual dose. If glucose is 250-400 mg/dL (14-22 mmol/l), supplemental insulin dosage is 20% of TDD. If glucose is over 400 mg/dl (22 mol/l), supplemental insulin dosage is 20% of TDD.
- THE TRIAGE NURSE MUST DISCUSS ALL INSULIN DOSING WITH THE DOCTOR BEFORE GIVING RECOMMENDATIONS TO THE PATIENT. In most cases it is best if the doctor talks directly with the patient.

30. INSULIN - DECREASED INSULIN FOR HYPOGLYCEMIA:
- NOTE TO TRIAGER: Decreased insulin dosing is sometimes needed in patients with a blood glucose < 80 mg/dl (4.5 mmol/l), especially if there is decreased oral intake.
- TYPICAL SICK DAY INSULIN REDUCTION: For blood glucose < 80 mg/dl (4.5 mmol/l) and there is decreased oral intake: Do not give rapid-acting (e.g., lispro, aspart) or short-acting (regular) insulin. Reduce intermediate-acting insulin (e.g., NPH, Lente, 70/30) by 20%.
- THE TRIAGE NURSE MUST DISCUSS ALL INSULIN DOSING WITH THE DOCTOR BEFORE GIVING RECOMMENDATIONS TO THE PATIENT. In most cases it is best if the doctor talks directly with the patient.

31. CHECK BLOOD GLUCOSE:
- When you are ill, you should measure your blood glucose every 2-4 hours.
- Write down the results.

32. CHECK URINE FOR KETONES:
- Check your urine for ketones whenever you are ill or if your blood glucose is > 240 mg/dL (13 mmol/l).
- You can buy a testing kit at your local pharmacy.

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 ER at __________ Hospital. Leave now. Drive carefully.
42. GO TO ED NOW (or PCP triage):
   - IF NO PCP TRIAGE: You need to be seen. Go to the ER/UCC at ___________ Hospital within the next hour. Leave as soon as you can.
   - IF PCP TRIAGE REQUIRED: You may need to be seen. Your doctor will want to talk with you to decide what’s best. I'll page him now. If you haven’t heard from the on-call doctor within 30 minutes, go directly to the ER/UCC at ___________ Hospital.

43. SEE PHYSICIAN WITHIN 4 HOURS (or PCP triage):
   - IF NO PCP TRIAGE: You need to be seen. Go to _______________ (ED/UCC or office if it will be open) within the next 3 or 4 hours. Go sooner if you become worse.
   - IF PCP TRIAGE REQUIRED: You may need to be seen. Your doctor will want to talk with you to decide what’s best. I'll page the doctor now. If you haven't heard from the on-call doctor within 30 minutes, call again. (Note: If PCP can't be reached, send to ED/UCC or office.)

44. SEE PHYSICIAN WITHIN 24 HOURS:
   - IF OFFICE WILL BE OPEN: You need to be examined within the next 24 hours. Call your doctor when the office opens, and make an appointment.
   - IF OFFICE WILL BE CLOSED AND NO PCP TRIAGE: You need to be examined within the next 24 hours. Go to ________ at your convenience.
   - IF OFFICE WILL BE CLOSED AND PCP TRIAGE REQUIRED: You may need to be seen within the next 24 hours. Your doctor will want to talk with you to decide what’s best. I'll page the doctor now. (EXCEPTION: from 10 pm to 7 am. Since this isn’t serious, we’ll hold the page until morning.)

45. SEE PCP WITHIN 3 DAYS: You need to be examined within 2 or 3 days. Call your doctor during regular office hours and make an appointment.

46. SEE PCP WITHIN 2 WEEKS: You need an evaluation for this ongoing problem within the next 2 weeks. Call your doctor during regular office hours and make an appointment.

47. 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. I'll page him now. If you haven’t heard from the on-call doctor within 30 minutes, call again.

50. CALL PCP WITHIN 24 HOURS: You need to discuss this with your doctor 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 him 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 within the next few days. Call him/her during regular office hours.

52. GO TO L&D NOW: You need to be seen. Go to the Labor and Delivery Unit or the Emergency Room at ___________ Hospital. Leave now. Drive carefully.
72. **FEVER MEDICINES:**
   - 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 DOSING (e.g., Tylenol): 650 mg by mouth every 4 hours or 1,000 mg by mouth every 6 hours. Maximum dose per day = 4,000 mg.
   - IBUPROFEN DOSING (e.g., Motrin, Advil): 400 mg by mouth every 6 hours or 600 mg by mouth every 8 hours.
   - AGE > 65 YEARS: Acetaminophen is generally considered safer than ibuprofen. Acetaminophen dosing interval should be increased to every 8 hours because of reduced liver metabolism. Maximum dose per day = 3,000 mg.
   - Be certain to read the package instructions.

73. **CAUTION - NSAIDS:**
   - Do not take ibuprofen if you have stomach problems, kidney disease, or other contraindications to using nonsteroidal anti-inflammatory drugs.
   - Do not use if pregnant.
   - Do not use ibuprofen for >7 days without consulting your PCP.

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

81. **BRING MEDS:** Be certain to bring your medications with you to the Emergency Department.

87. **BRING MEDS:** Be certain to bring your medications or a list of your meds with you, when you go to see the doctor.

89. **CALL BACK IF:**
   - You become worse.

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