Triage and the “ABCD” Concept

ETAT Module 1

Adapted from Emergency Triage Assessment and Treatment (ETAT): Manual for Participants, World Health Organization, 2005

Learning Objectives

- Understand the importance of continually assessing the medical needs of all children from arrival at the healthcare facility until discharge
- Recognize emergency (ABCD) and priority signs
- Assign children triage categories, based on emergency and priority signs
- Identify the appropriate immediate response for children in each triage category

Target Audience

- All centre staff who have contact with patients
- Assessment and immediate response to emergency and priority patients will vary depending on whether or not you are a healthcare provider

Overview

- What is triage?
- Performing a rapid assessment
- The ETAT tool
- Emergency signs
- Priority signs

Triage: what and why

- **What**: Sorting patients into priority groups according to their needs and the resources available
- **Why**: Identify and treat seriously ill children as soon as possible to prevent deterioration in their conditions

Triage process

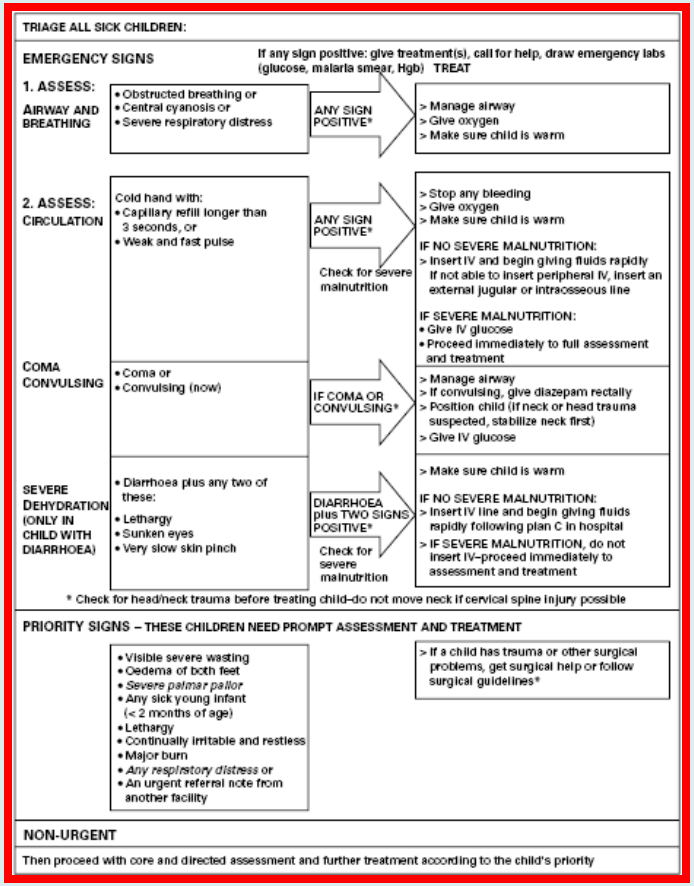
- **When**: as soon as the child arrives at the healthcare facility and periodically throughout the visit
- **Where**: at various locations, depending on the facility (outpatient queue, waiting room, designated triage area)
- **Who**: all clinical staff
- **How**: rapid assessment performed within 15-20 seconds, without using equipment or taking vital signs

How to perform a rapid assessment

- Look and listen
- What is the overall appearance of the child?
  - Is he playful and interactive?
  - Is she quiet or poorly responsive?
- For children who are ill appearing, systematically look for the presence of emergency and priority signs

ETAT: Emergency Triage Assessment Treatment Tool

- Reliably sorts children into the following treatment categories:
  - immediate emergency treatment (E)
  - rapid assessment and treatment (P)
  - with non-urgent conditions (N)



Adapted from ETAT manual for participants, Chart 2 page 67

Emergency Signs

Airway
Breathing (severe)
Circulation
Coma
Convulsion
Dehydration (severe)

Priority Signs

3TPR

T: tiny baby, temperature, trauma
P: pallor, poisoning, pain
R: respiratory distress, restless, referral

MOB

M: malnutrition
O: oedema
B: burn

Emergency signs

- Airway
- Breathing
- Circulation
- Coma
- Convulsion
- Dehydration (severe)

Airway

- Is the airway obstructed?
- Signs of airway obstruction
  - Complete obstruction: no air movement
  - Partial airway obstruction: noisy breathing during inspiration

Case # 1

You are at the registration desk. You notice a child with a small toy in her mouth. Suddenly, she begins to choke.

What should you do?

She is in severe distress and choking but she is not making any sound.

What is her triage category?

What should you do next?

Emergency

Call the triage nurse.

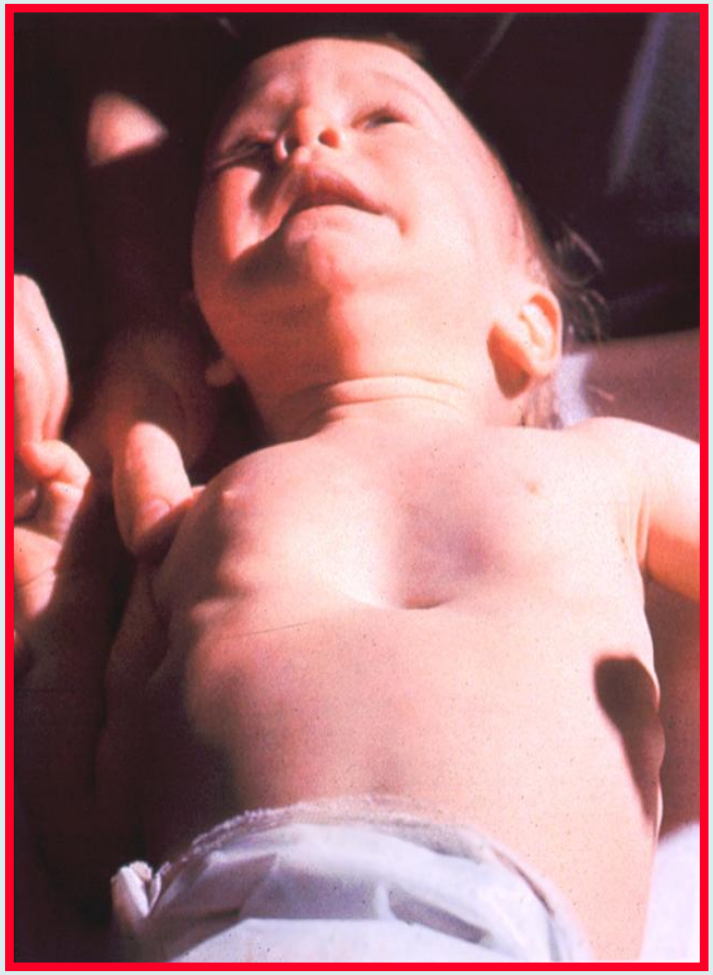
Breathing (1)

- What is the child's color?
  - Pink
  - Pale
  - Grey
  - Blue
- Is the child breathing? Does the chest wall move with inspiration and expiration?

Breathing (2)

- Is there increased work of breathing?
  - Can the child nurse or talk?
  - Is there severe indrawing of the chest?
- What is the rate and pattern of breathing?
  - Too fast
  - Too slow
  - Agonal breathing: irregular, slow
  - Abnormal patterns
    - Deep, slow (as with acidosis)
    - Irregular (as with brain abnormalities)

Increased Work of Breathing



- Anxious
- Nasal flaring
- Indrawing of chest
  - Between the ribs
  - Below the breast bone

PALS: Rapid Cardiopulmonary Assessment, American Heart Association 2001

Case # 2

A caretaker calls you to the waiting room because she is concerned about the child sitting next to her. The infant is pale and appears anxious and uncomfortable.

Is this baby sick or well?

He is sick.

What should you do next?

Assess airway and breathing.

There is no noisy breathing. The respiratory rate is rapid and there is marked indrawing of the chest.

Describe his respiratory status.

The airway is patent. He has increased work of breathing.

What is his triage status?

What should you do?

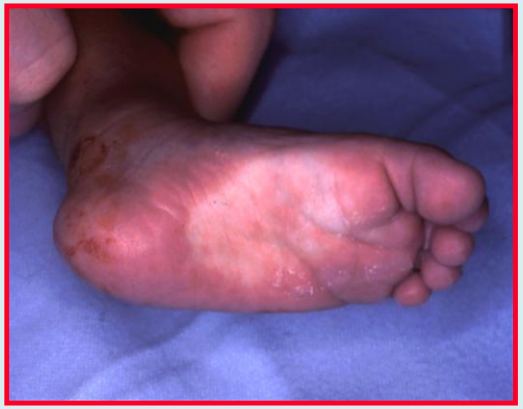
Emergency (respiratory distress)

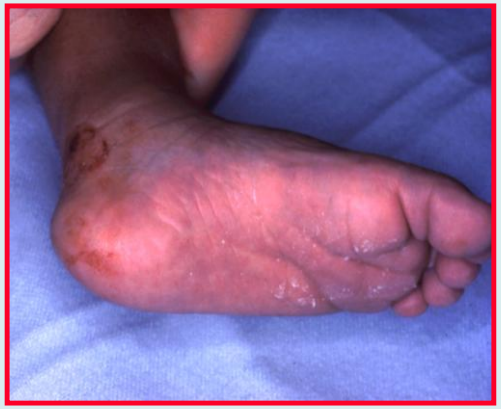
Call for help.

Circulation

- If the child's hands are warm, circulation is OK.
- For children with cold hands, assess the capillary refill

Prolonged Capillary Refill





- Press an area on the patient's extremity with your finger until it is pale.
- Color should return to the skin within 3 seconds after you remove your finger.

PALS: Rapid Cardiopulmonary Assessment, American Heart Association 2001

Coma (mental status)

- A (alert)
- V (responds to voice): lethargic
- P (responds to pain): coma
- U (unresponsive): coma

Coma (mental status)

- A
- V
- P (responds to pain): **coma**
- U (unresponsive): **coma**

Case # 3

A mother comes to the registration desk with her infant wrapped in a blanket.

What should you do in order to assess the baby?

Ask the mother to unwrap the baby.

She is limp and unresponsive.

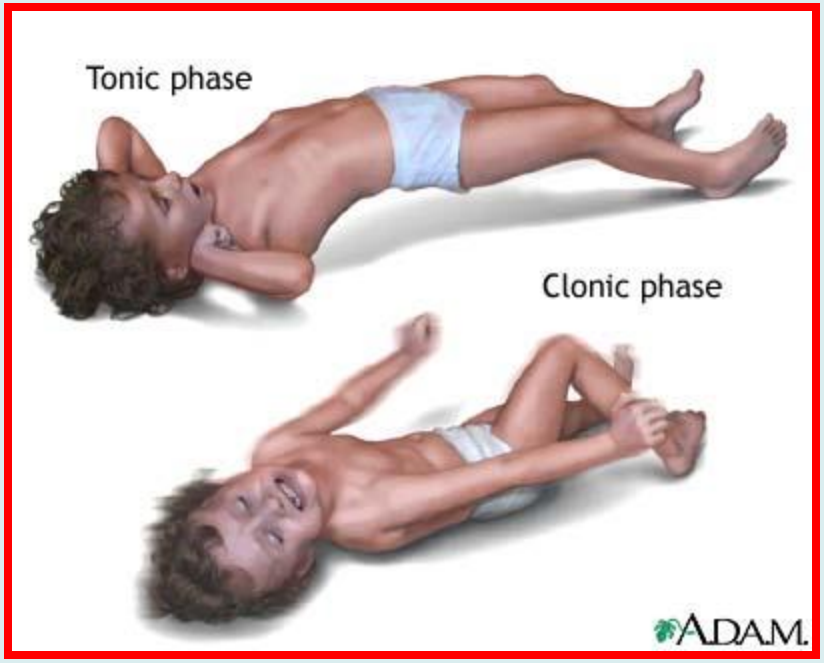
What is her triage category?

What should you do?

Emergency (U = coma)

Call for help.

Convulsions



www.nlm.nih.gov,accessed 2/9/08

- Sudden loss of consciousness
- Uncontrolled jerking of arms and/or legs
- Twitching of face and/or eyes

Dehydration (with severe diarrhea)

- Lethargy
- Sunken eyes
- Skin pinch goes back very slowly (longer than 2 seconds)

Accessed through Google images, 2/9/08

Case # 4

As you walk through the waiting room, you notice a lethargic small child lying in his mother's lap. His eyes are sunken. His mother says that he has had diarrhea for 3 days.

What is his triage category?

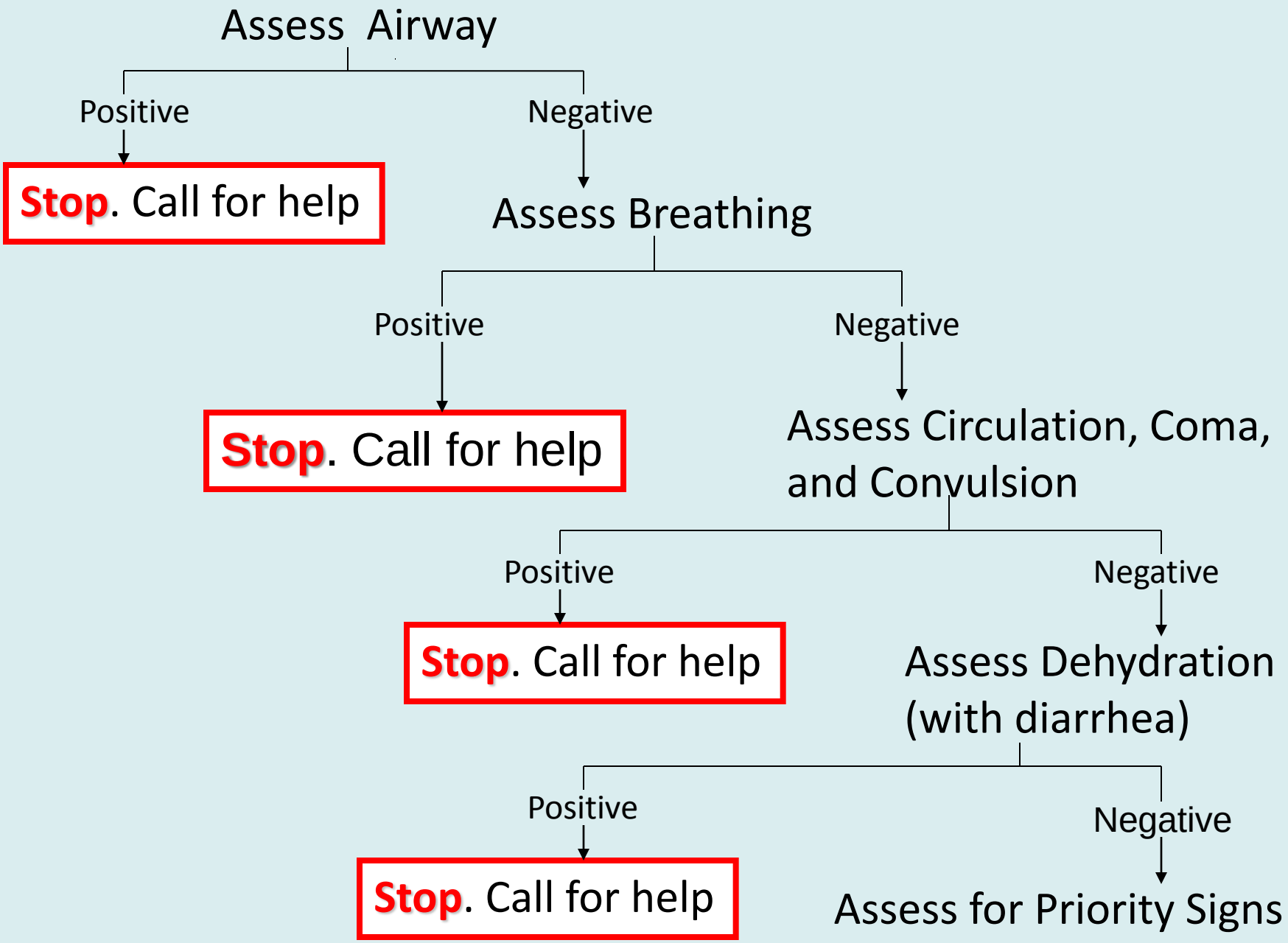
Emergency (Severe dehydration)

Call for help.

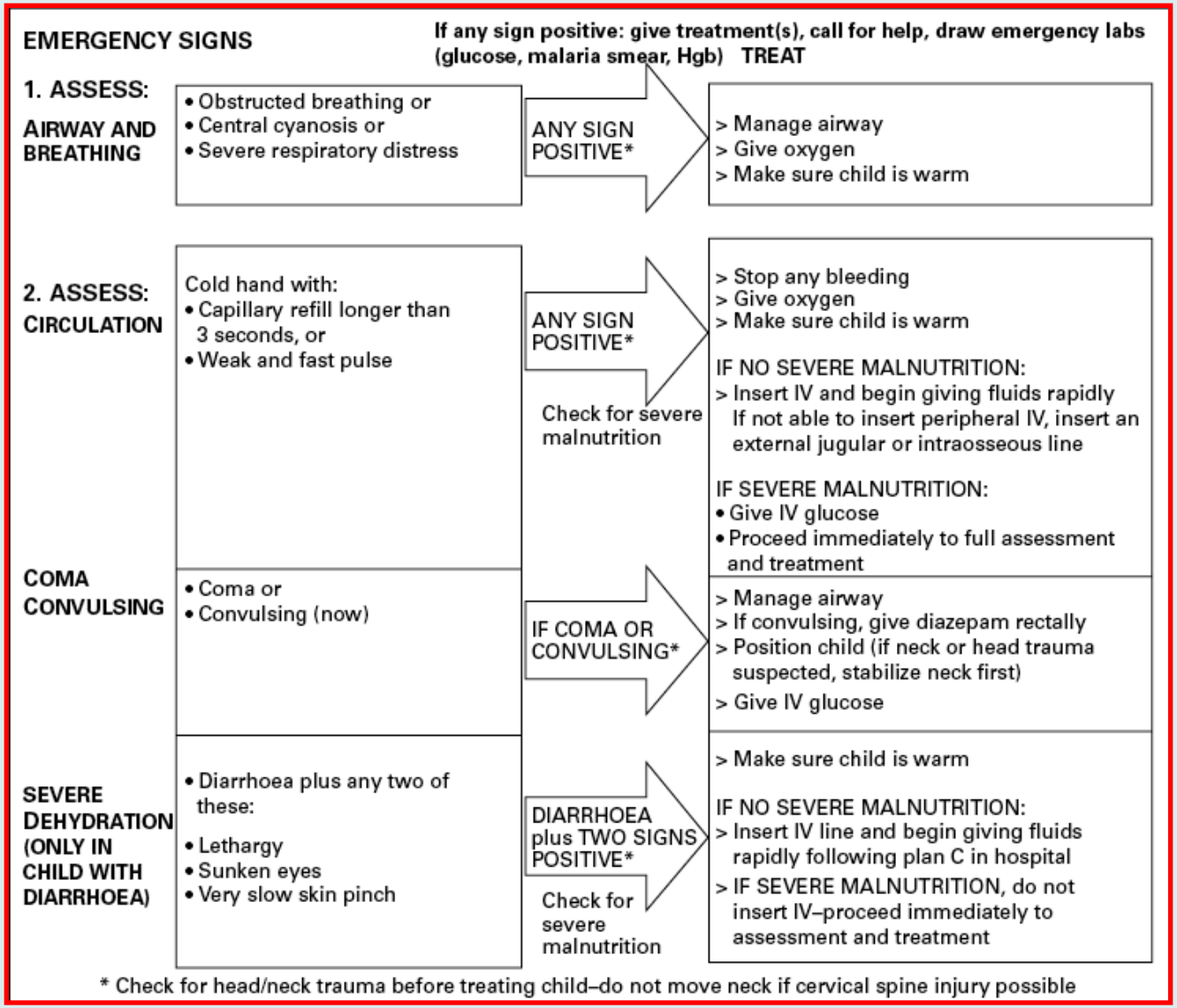
Triage process to identify emergency signs

Triage steps	Response
Assess Airway	Positive: **Stop**. Call for help Negative: assess Breathing
Assess Breathing	Positive: **Stop**. Call for help Negative: assess Circulation
Assess Circulation (coma, convulsions)	Positive: **Stop**. Call for help Negative: assess Dehydration
Assess Dehydration	Positive: **Stop**. Call for help Negative: assess Priority signs

Adapted from ETAT manual for participants, page 8


Assess Airway
Positive
Negative
Stop. Call for help
Assess Breathing
Positive
Negative
Stop. Call for help
Assess Circulation, Coma, and Convulsion
Positive
Negative
Stop. Call for help
Assess Dehydration (with diarrhea)
Positive
Negative
Stop. Call for help
Assess for Priority Signs

If any sign is positive, call for help!!



Adapted from ETAT manual for participants, Chart 2 page 67

Priority Signs

- 3TPR
  - T: tiny baby, temperature, trauma
  - P: pallor, poisoning, pain
  - R: respiratory distress, restless, referral
- MOB
  - M: malnutrition
  - O: oedema
  - B: burn

Priority signs: 3TPR

- T
  - Tiny baby
  - Temperature
  - Trauma (or other surgical condition)
- P
  - Pallor (severe)
  - Poisoning
  - Pain (severe)
- R
  - Respiratory distress
  - Restless, continuously irritable, or lethargic
  - Referral (urgent)

Tiny Baby: under two months of age

- More difficult to assess properly
- More likely to get serious infections
- More likely to deteriorate quickly

Temperature

- Hot to touch: fever is a sign of infection
- Cold to touch: may be a sign of poor circulation or serious infection

Trauma

(or other urgent surgical condition)

- Head injury
- Fracture
- Acute abdomen

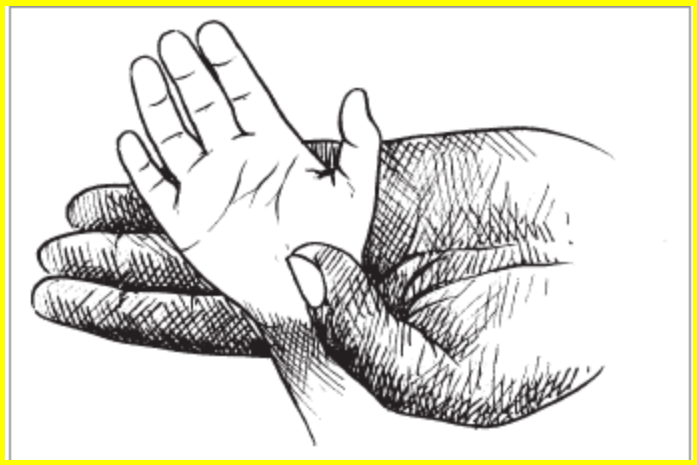
Poisoning

- Ask caretaker if this is the reason for visit
- Child's condition can deteriorate rapidly
- Specific treatments may be required

Pain

- Pain may be due to serious conditions (meningitis, acute abdomen, sickle cell painful crisis)
- Patient should receive treatment for pain relief

Pallor



ETAT provider manual, page 7

- Unusual paleness of skin
- Compare the child's palm to your palm
- Indication of anemia

Respiratory Distress

- Signs of respiratory distress that are not severe
- Rapid breathing
- Indrawing of chest
- Noisy breathing
  - inspiratory: stridor (upper airway obstruction)
  - expiratory: wheezing (lower airway obstruction)

Restlessness

- Restlessness, continuous irritability, and/or lethargy may be due to serious conditions (meningitis, acute abdomen, sickle cell painful crisis)

Referral (from another centre)

- Look carefully at patients who are referred from another centre. The patient has already been evaluated by another healthcare provider who has determined that he is very sick.
- Use information from the referring centre and your assessment to determine if the child has an urgent condition.

Priority signs: MOB

- Malnutrition (visible wasting)
- Oedema of both feet
- Burn (major)

When management resources are limited

- Use guidelines from Integrated Management of Childhood Illness (IMCI).
- IMCI chartbook uses the same assessment and classification principles as ETAT.
- Management recommendations emphasize recognizing patients that should be stabilized and transferred.

Assessment and classification: IMCI under 2 months

ABCD

- Severe disease OR
- Local bacterial infection

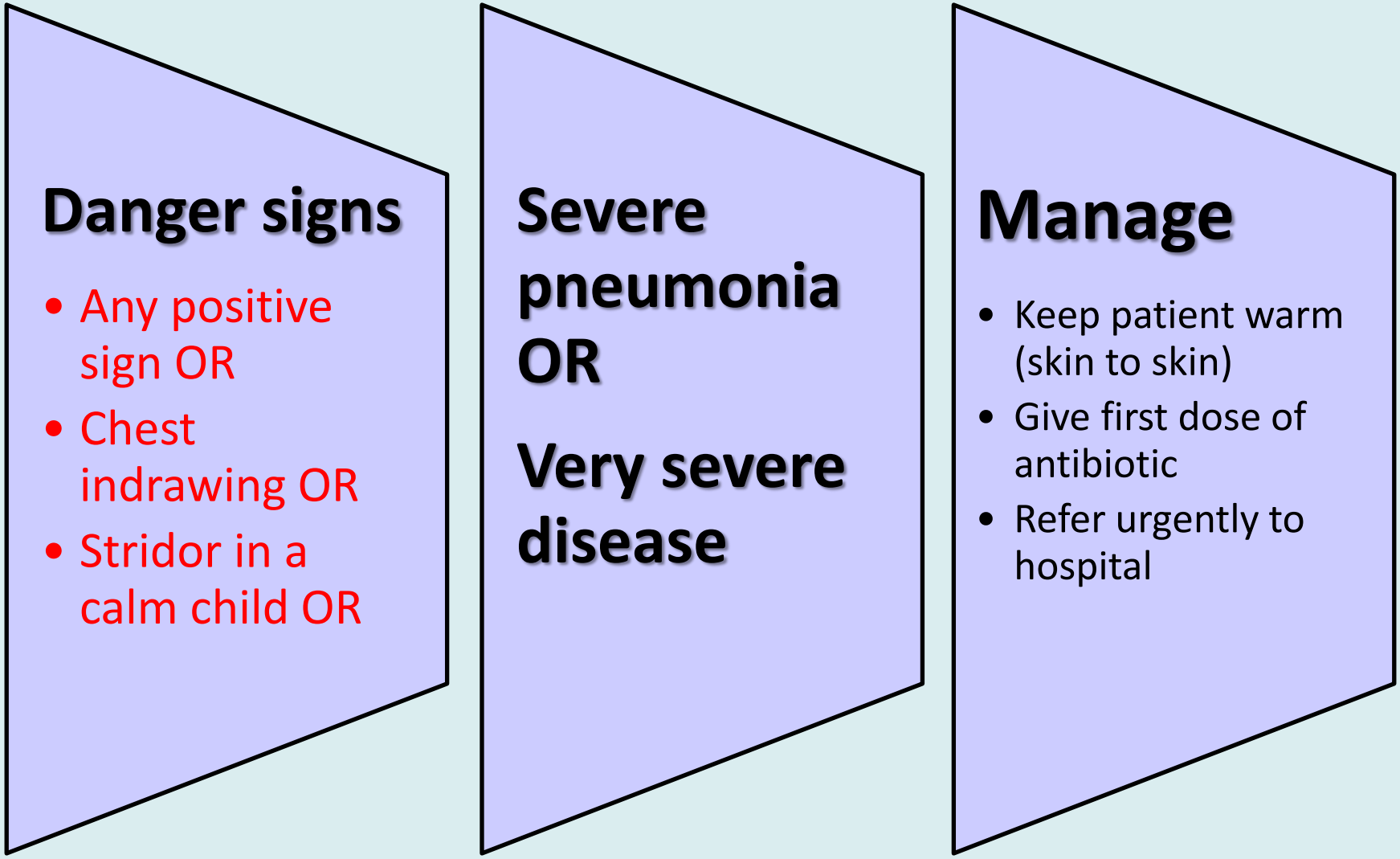
Positive sign

- Not feeding well OR
- Convulsion OR
- Rapid breathing OR
- Severe chest indrawing OR
- Fever OR low temperature
- Poorly responsive

Manage

- Keep patient warm (skin to skin)
- Give first dose of antibiotic
- Refer urgently to hospital

IMCI Danger signs for ≥2 months-5 years



IMCI: Temperature ≥2 months-5 years

Any general danger sign

OR

Stiff neck

Very severe febrile disease

Manage

- Keep patient warm (skin to skin)
- In areas endemic for malaria, give first dose of quinine for severe malaria
- Give first dose of antibiotic
- Treat to prevent low blood sugar
- Give one dose of paracetamol for high fever (≥ 38.5)
- Refer urgently to hospital

IMCI: Malnutrition for ≥2 months-5years

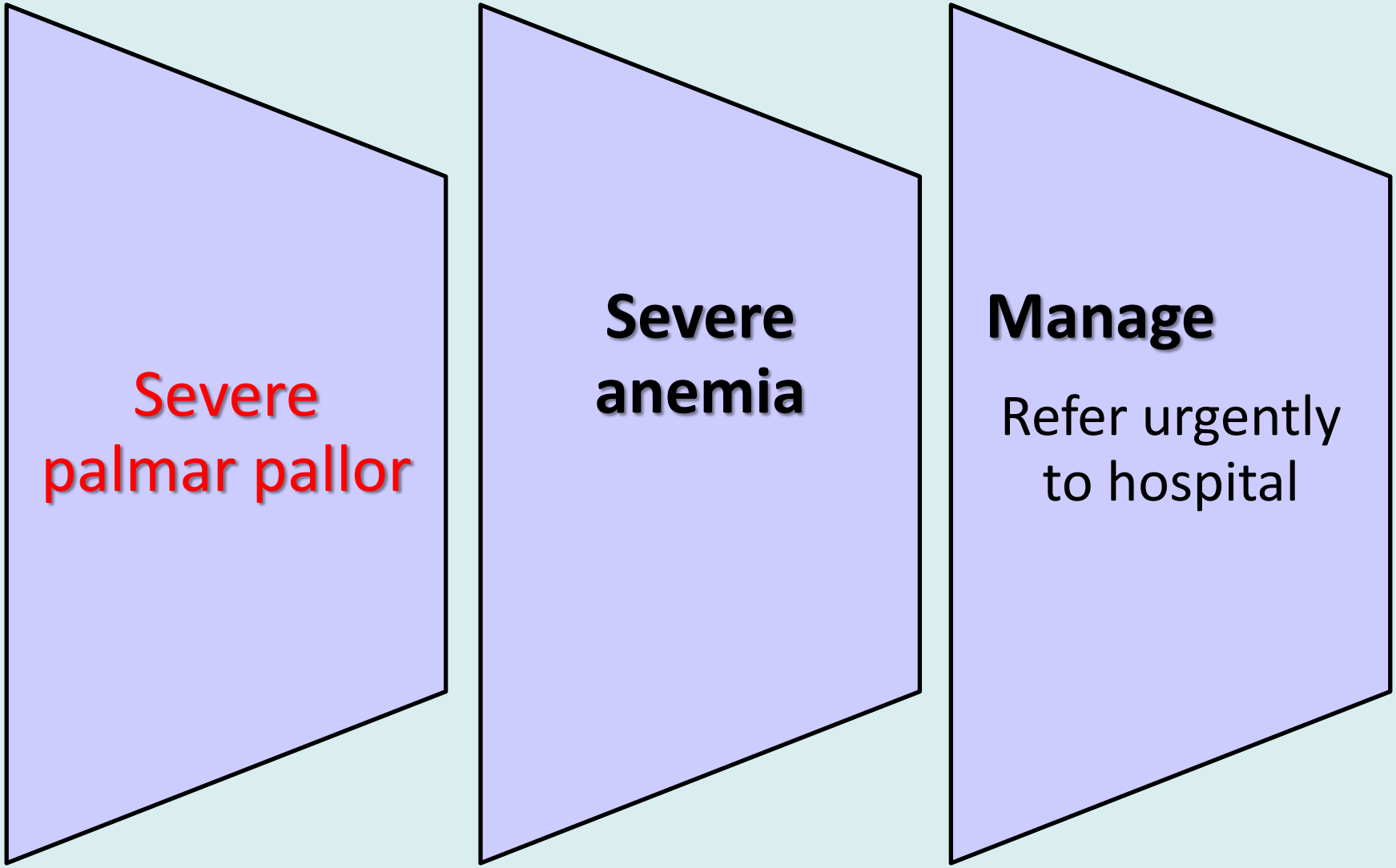
Visible wasting OR edema of both feet

Severe malnutrition

Manage

- Keep patient warm (skin to skin)
- Treat to prevent low blood sugar
- Refer urgently to hospital

IMCI: Severe anemia ≥2 months-5 years



Summary

Emergency Signs

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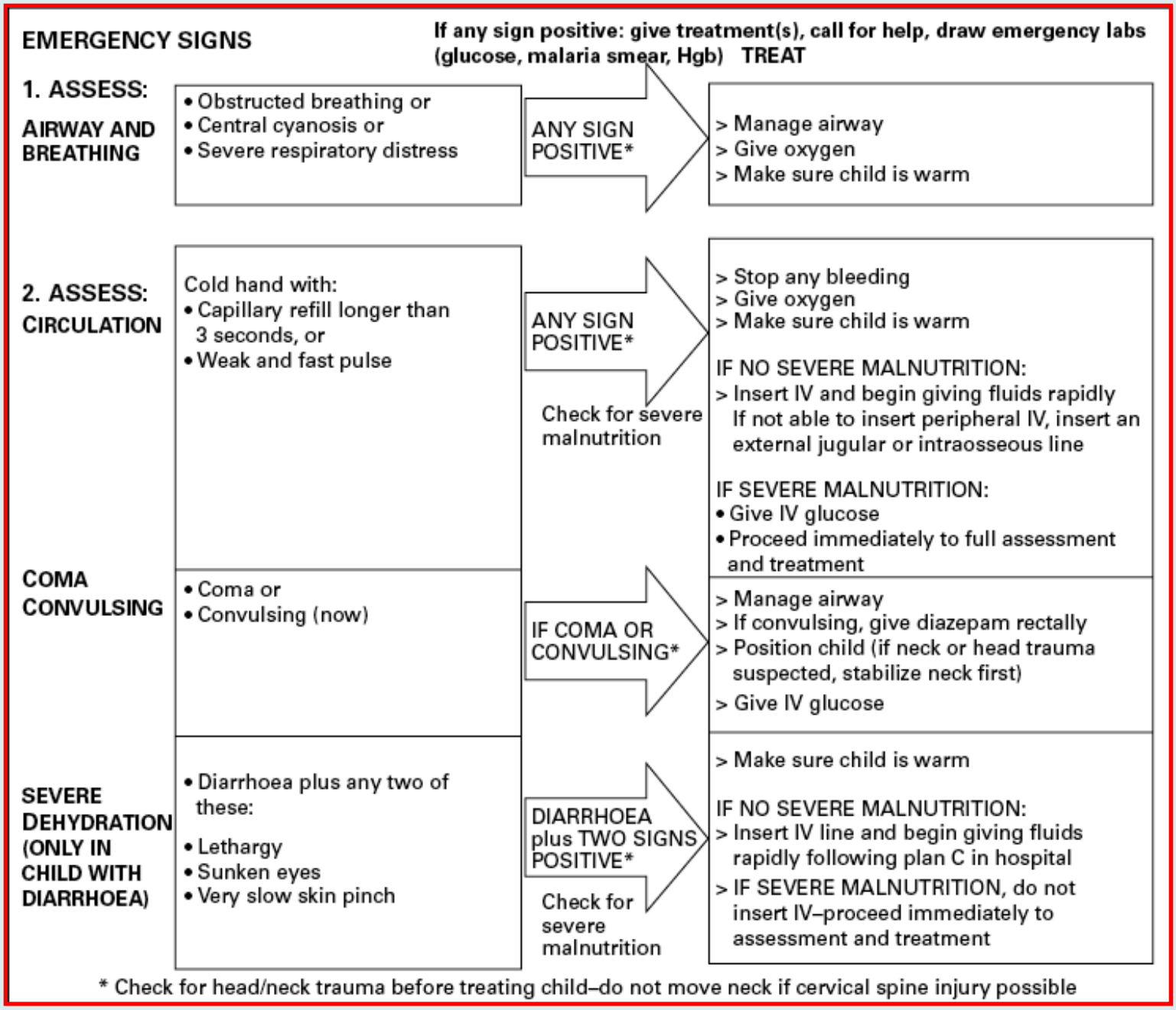
ETAT categories: Emergency

- Rapid assessment performed within 15-20 seconds
- Identify emergency signs (ABCCCD)
- Call for help
- Initiate appropriate emergency treatment



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ETAT categories: Priority

- No emergency signs
- Identify priority signs (3 TPR-MOB)
- Child needs prompt, but not emergency assessment and treatment
- Notify triage nurse who will complete triage evaluation
- Move to front of queue

ETAT categories: Non-urgent

- No emergency signs
- No priority signs
- Child may be seen in queue