

# ASTHMA

# All the First Aid you need to know

# What's covered;

Definition : What Asthma is

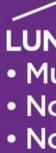
- Causes of Asthma
- ♦ First Aid for asthmatic attacks.
- Types of inhalers ; When to use which
- Home remedies in case inhalers are unavailable
- Special considerations in kids
- Emergency contacts Q&A





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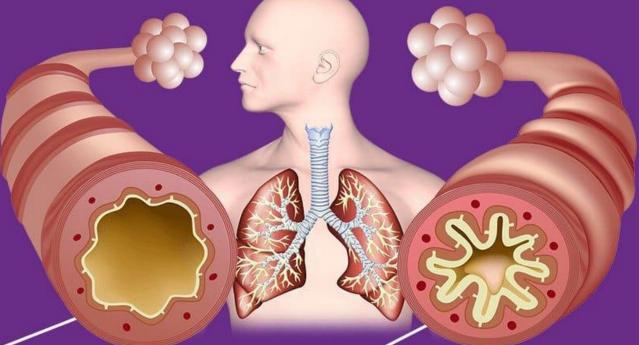
- Asthma is a condition in which part of the air passages  $\bullet$ become narrow and swell - in addition to overproduction of thick sticky mucus.
- The air we breathe gets into the body through the nose  $\bullet$ or mouth, down the windpipe (trachea) and then follows two branches (left and right) as it gets into the lungs. Asthma mainly affects these branches - called the bronchi.
- Usually, these bronchi narrow and expand as per demand.





First Aid & Health education

### What happens to your lungs when you have asthma



LUNG WITHOUT ASTHMA Muscles relaxed • Normal airways Normal amount of mucus

### LUNG WITH ASTHMA Muscles tighten

- Airways swell
- Mucus clogs the airways
- Lungs have difficulty moving air in and out



Asthma and Alleray

aafa.org

# What happens in Asthma

- In Asthma, however, various factors narrow these air passages to prevent what the body considers to be impurities from getting into the lungs. At the same time, more oxygen is needed to meet the body's demands.
- $\P$  Think of inflating a balloon  $\P$  The balloon can inflate and deflate easily in a normal situation but in Asthma, the balloon neck outlet is reduced in size; making air exit difficult.
- The characteristic 'wheezing' sound is produced as the person attempts to get air OUT of their lungs.





## Who is likely to develop Asthma?

The exact cause is unknown but risk factors include: 

Family history - If a close family member e.g. parent or sibling is Asthmatic, you are at risk due to the genetic similarities.

Allergies - Having pre existing allergic conditions e.g. eczema. Air pollution is also a major risk factor especially in urban areas.

Obesity - increases risk in both children and adults.

- Occupational hazards long term exposure to environmental allergens e.g. chemicals, fumes and dust. ŧ
- Smoking Exposure to tobacco smoke over time for both active and passive smokers ŧ
- For newborns Low birth weight, prematurity and viral respiratory infections.



### Asthma triggers

Outdoor irritants - Prolonged exposure to dust and smoke from cars, factories or burning trash can trigger an attack. Inhaling pollutants causes airway inflammation (swelling).

- $\Rightarrow$  Pets fur from animals (e.g. dogs & cats) can trigger an attack if you are allergic.
- $\clubsuit$  Tobacco smoke affects both passive and active smokers.
- $\clubsuit$  Strong perfumes Strong scents and smells can trigger an attack.
- Mold found in moist areas such as bathrooms and kitchens. Can trigger an attack despite not having a mold allergy.
- $\clubsuit$  Cold dry air causes airways to narrow because they lose water.
- Medications Some drugs can trigger an attack or worsen your symptoms e.g. Aspirin
- $\clubsuit$  Strong emotions can lead to fast breathing , triggering an attack.



ASTHMA TRIGGERS



# Signs & Symptoms

- During an Asthmatic attack, inflammation(swelling) and overproduction of mucus reduces the airway size, making it difficult for air to pass.
- You may observe the following signs :  $\bullet$
- Difficulty in breathing
- Coughing
- Wheezing a high pitched whistling sound produced mainly when breathing out
- The casualty may sit and lean forward with their elbows on their knees

The casualty may experience the following symptoms:

- Tightness in the chest ŧ
- ♦ Anxiety





## What to do if you suspect someone is having an attack

Move them away from whatever triggered the attack. Help them sit, reassure and help them lean forward.

- Ask about their medication and call for advanced medical help.
- Assist the casualty in using their own medication i.e. inhalers.
- Continue monitoring them as you wait for help to arrive.





# Steps to use an inhaler

An inhaler contains quick-acting medication to widen the airway and ease breathing after an Asthmatic attack. 

 $\checkmark$  Check expiry and shake well before use.

Have the casualty in a half-sitting position and remove the inhaler cap.

Advise the casualty to take a deep breath and tilt their head back to allow their airway to open. 2 Ask them to exhale slowly.

- Place the inhaler in their mouth to form a seal with their lips. 3
- Ask them to breathe in as you press the inhaler downwards to deliver the medication. 4

Advise them to hold their breath for about 10 secs to allow the drug to be absorbed. Repeat puffs after a minute 5 and seek advanced medical help if no improvement.







## You might have seen different types of inhalers but what exactly is their difference?

We have two broad classifications:

Preventor Inhalers - Used every day to reduce the inflammation & sensitivity of your airways, which stops your symptoms occurring.

Reliever inhalers - give you quick relief during an attack by relaxing the muscles of the airways into the lungs, which makes it easier to breath - E.g. Salbutamol ('Ventolin'). Their top covers(caps) are dominantly Blue. 🛑



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# What to do if you suspect someone is having an attack

Cap Color Differences:

Reliever - Mostly Blue 🥔

Preventor – Any Other



NB : This info. does not substitute your physician's treatment plan. Always consult your Primary Healthcare Provider regarding your medications and treatment plan.



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# What to do when an inhaler is not available

### M Alternative 1: Steam inhalation.

Have the person inhale steam from boiling water. The warm moist air is thought to help loosen mucus in the nasal passages, throat and lungs.

### Alternative 2 : Breathing exercises.

A few breathing exercises have been found to be effective in both prevention and during an attack:

- Deep diaphragmatic breathing 1
- 2 Buteyko breathing technique
- 3 Pranayama

Seek medical help after using home remedies for an attack to prevent recurrence.





National Police Service – 999 / 112 / 911

## E – Plus (Kenya Red Cross)\* – 0700 395 395 / 1514

## AMREF - 0730 811 000

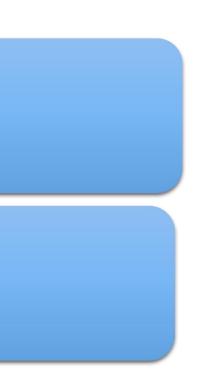
## St. John Ambulance – 0721 225 285

## AAR – 0725 225 225 / 0734 225 225

## **Rescue / Flare – 0714 911 911**



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## About us

The Quick Fix Learning Hub is an organization committed to reducing preventable deaths in Kenya by bridging the barriers that hinder access to first aid and health education.

LEARN MORE





# Upcoming Classes & Webinars

7th October: Basic Life Support (BLS) - 5,000/=

 17th - 19th October : Advanced Cardiovascular Life Support - 15,000/=

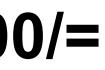
28th October : Child & Infant Care First Aid - 2,000/=

28th October : Basic First Aid - 2,500/=





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## BASIC LIFE SUPPORT COURSE



DATE 7 OCTOBER 2023

) TIME 08.30 AM - 2.30 PM





NEW URBANE HOTEL, NEXT TO ST.PETERS CLAVER'S CHURCH NAIROBI

### COURSE COST

- TEA & SNACKS
- COURSE CERTIFICATION
- FREE HARD COPY BLS
  HANDOUT

KSH. 5,000

### CONTACT 0707079192 TO BOOK A CLASS

Certificate validity : 2 years

American Heart Association



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First Aid & Health education

# 0707079192



## ADVANCED CARDIOVASCULAR LIFE SUPPORT





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## BASIC FIRST AID COURSE



DATE SATURDAY 28TH OCTOBER

TIME 09.00 AM - 3.00 PM





### COURSE COST

- TEA & SNACKS
- COURSE CERTIFICATION
- FREE HARD COPY FIRST
  AID GUIDE (LEAFLET)

KSH. 2,500

### CONTACT 0707079192 TO BOOK A CLASS

Certificate validity : 1 year





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## CHILD CARE FIRST AID COURSE

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### **The Quick Fix**

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