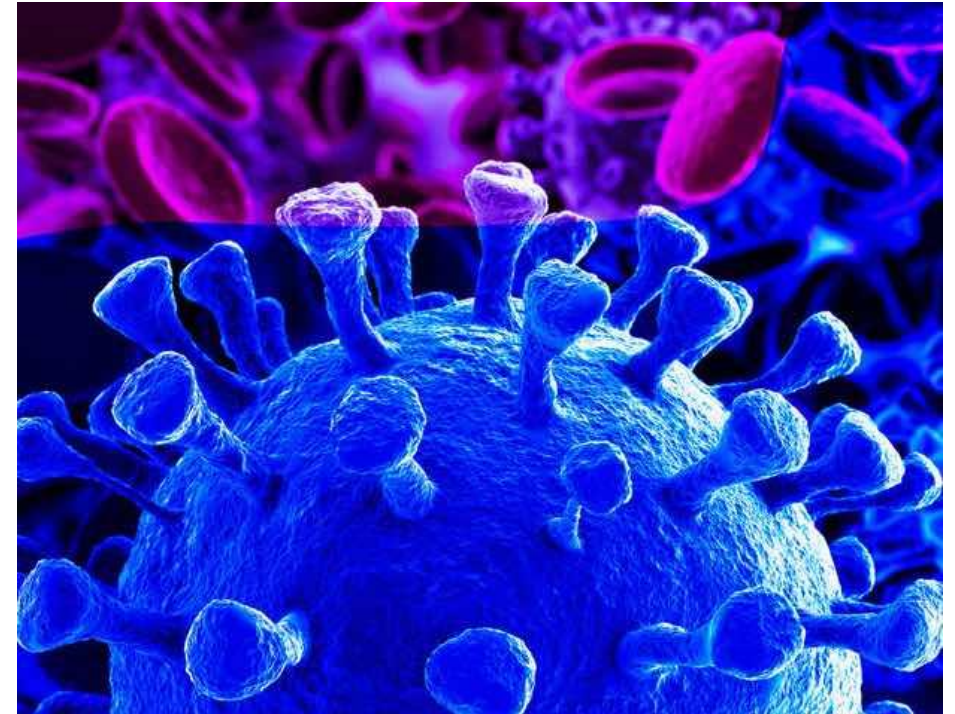


# Approach to a Suspected Covid-19 Paediatric Patient

*IPC & Patient Triage in the In-Patient Facility*

31-03-2020: Diana Marangu





# INTERIM GUIDELINES ON MANAGEMENT OF COVID-19 IN KENYA

## COVID-19, Infection Prevention and Control (IPC) and Case Management

These consolidated guidelines provide recommendations for comprehensive prevention and case management strategies in Kenya

### Scope of the Guidelines:

Infection prevention and control  
Patient triage

Emergency Medical Services  
Case management  
Laboratory testing algorithm

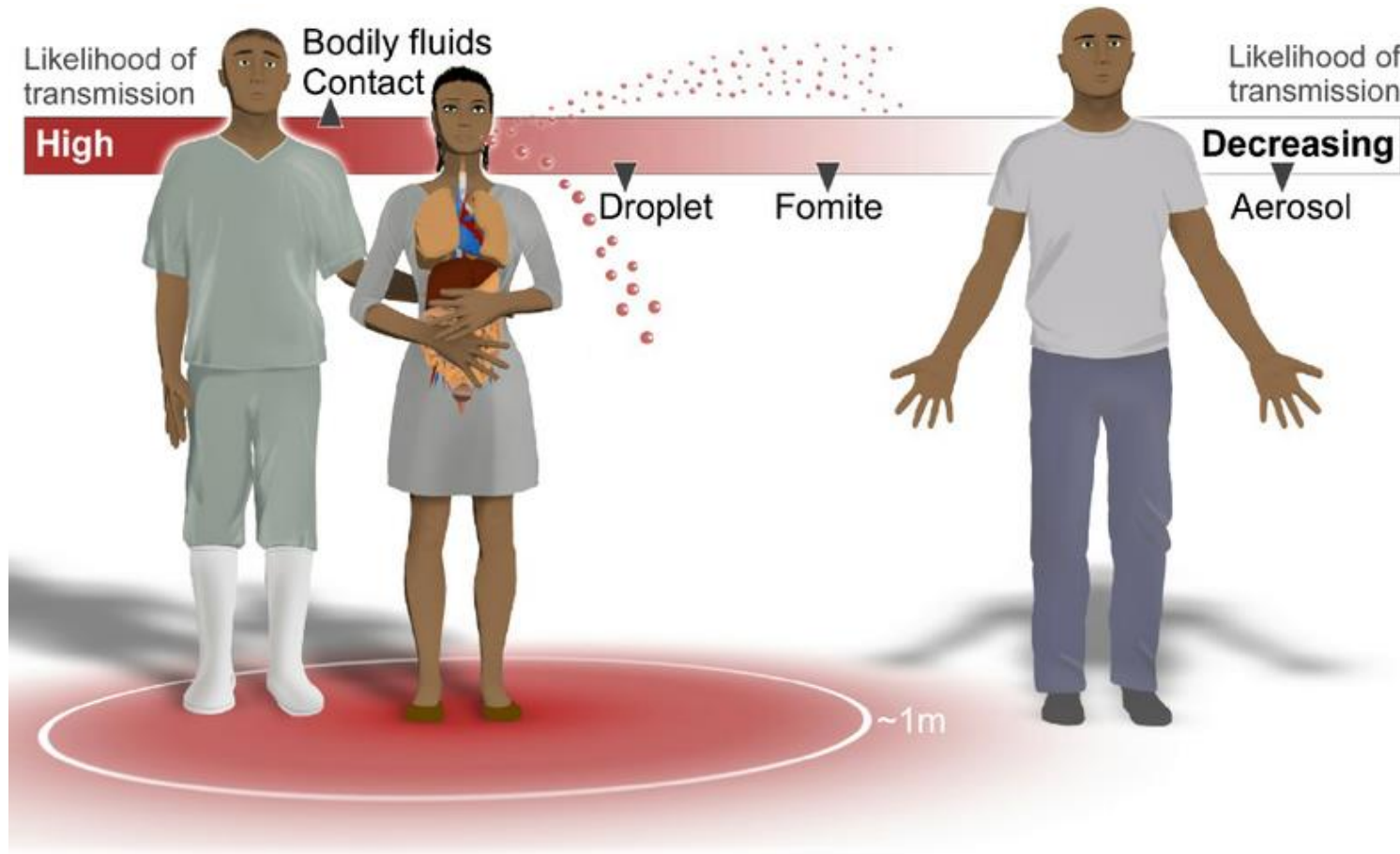
**Focus -> Child**

### Target Audience:

Health care workers taking care of patients suspected or confirmed to have COVID-19

**YOU!**

# Transmission: *SARS-CoV-2*



## Direct

- **Contact:** e. g body fluids
- **Droplet:** large nuclei ( $>5\mu$ ) spread within 1 meter by coughing, sneezing, talking

## Indirect

- **Air-borne** – fine droplets/dust with infectious agent aerosolized by procedures

# Infection Prevention and Control (IPC) Precautions

- **Sets of practices & procedures** to prevent transmission of infectious agents
  1. Standard precautions
    - **Applied all times**, for **all patients**, regardless of perceived/confirmed infectious status
  2. Transmission based precautions: **SARS-CoV-2**
    - **Contact** precautions
    - **Droplet** precautions
    - **Airborne** precautions

# Standard precautions include:

- **Hand washing**
- **Respiratory hygiene**
- **Use of personal protective equipment (PPE) e.g. gloves**
- **Disinfection & sterilization of patient care equipment**
- **Routine cleaning of frequently touched surfaces etc.**

## Respiratory hygiene/ Cough etiquette



## Hand hygiene





# 1. Contact precautions

## Health worker: Use of PPE

- **Gloves:** non-sterile, clean, disposable gloves
- **Gowns:** appropriately-sized disposable which is worn once before disposal
- **Apron:** disinfect – remains in the isolation room



## Patient

- Use **disposable equipment** or **dedicated reusable equipment** for each patient (*clean and disinfect between each patient use*)
- **Isolation** or **cohorting** of patients
- **Limit patient movement** and **minimize contact with non-infected persons**

## 2. Droplet precautions

*Taken in addition to Standard and Contact Precautions*

Health worker: Use of PPE

- Medical-surgical/N95 mask when within 1m (3") of patient
- Wear **face shield or goggles**



Patient

- **Isolate the patient** in a well ventilated single room
  - *If not possible, cohort patients with same suspected etiology in same room*
  - Beds at least 1m apart; arranged to keep a distance between patients
- **Limit patient movement out of the isolation room**
- Patient uses a *surgical mask when outside* the isolation room

### 3. Airborne precautions

*Taken in addition to Standard, Contact and Droplet Precautions*

- Health worker: N95 mask/equivalent
  - check seal with each use
- **Negative pressure isolation room**
  - air exhaust to outside
- Patient: surgical mask while *inside and outside* of the isolation room



#### AEROSOL GENERATING PROCEDURES

- Endotracheal intubation
- Nebulizer treatment
- Manual ventilation
- Cardiopulmonary resuscitation
- NIV, Mechanical ventilation
- Bronchoscopy



# PPE to Be Provided to Staff According to Risk Categories

Risk Category	Characteristic of Exposure of Staff	Examples of Staff	Surgical Masks	Gloves	Gown	Particulate Respirators (e.g. N95 masks)	Eye Protection (e.g. Goggles/ Face Shield)
1	<b>Health care workers who manage patients clinically and have close contact (&lt;1 meter) with known/suspected COVID-19 patients or their infectious material</b>	<b>E.g. Doctors, nurses</b>	✓	✓	✓	✓	✓
2	<b>Non-health care worker staff who have close contact (&lt;1 meter) with known/suspected COVID-19 patients or their infectious material</b>	<b>E.g. Security personnel, receptionist, cleaning staff</b>	✓	✓	✓	X	X
3	<b>Staff with close contact (&lt;1meter) with persons of "unknown" COVID-19 status</b>	E.g., Essential duty travelers	✓	X	X	X	X
4	<b>Staff infected with COVID-19</b>	E.g. Patients	✓	X	X	X	X
5	Staff with no known close contact (<1 meter) with known/ suspected COVID-19 patients or their infectious material	E.g. Critical staff "quarantined" in work space, and not working in the fever clinic	X	X	X	X	X



V25032020

MINISTRY OF HEALTH

## Case Definition for Novel Coronavirus Disease (COVID-19)

*The case definition is based on the current information available and may be revised as new information accumulates.*

### Suspect case

- A. A patient with acute respiratory illness (fever or cough or shortness of breath), AND
- A history of travel to a foreign country during the 14 days prior to symptom onset; OR
  - Having been in contact\* with a confirmed or probable COVID-19 case (see definition of contact) in the last 14 days prior to symptom onset
- B. A patient with severe acute respiratory illness (fever or cough or shortness of breath; AND requiring hospitalization) AND in the absence of an alternative diagnosis that fully explains the clinical presentation.

### Probable case

- A. A suspect case for whom testing could not be performed for any reason OR
- B. A suspect case for whom testing for the COVID-19 virus is inconclusive.

### Confirmed case

A person with laboratory confirmation of COVID-19 infection, irrespective of clinical signs and symptoms.

#### \*Definition of a Contact

A contact is a person who experienced any one of the following exposures during the 2 days before and the 14 days after the onset of symptoms of a probable or confirmed case.

Close contact is defined as:

- Working together in close proximity or sharing the same environment with a COVID-19 patient
- Face-to-face contact within 1 meter and for more than 15 minutes
- Traveling together with a COVID-19 patient in any kind of conveyance
- Living in the same household as a COVID-19 patient
- Health care associated exposure, including providing direct care for COVID-19 patients, working with health care workers infected with novel coronavirus, visiting patients or staying in the same close environment as a COVID-19 patient.

Note: for confirmed asymptomatic cases, the period of contact is measured as the 2 days before through the 14 days after the date on which the sample was taken which led to confirmation.

### Lay/Community Case Definition

Any person presenting with hotness of the body or cough or difficulty in breathing having history of travel from outside the country OR lived with or visited somebody known to have Coronavirus disease.

Dr. PATRICK AMOTH  
Ag. DIRECTOR GENERAL FOR HEALTH  
25<sup>th</sup> March, 2020

# Case Definition...25-03-2020

## SUSPECT

- A. Patient with **ARI (fever/cough/SOB)** AND
- Hx of travel to a foreign country 14/7 prior OR
  - **Contact\*** with confirmed/probable COVID-19 case in the last 14/7 prior to symptom onset

- B. Patient with **ARI (fever/cough/SOB)** AND
- Requiring hospitalization AND
  - In the absence of an alternative diagnosis that fully explains the clinical presentation

Page 24

## A. Triage & Cohort

- Identify suspected case ASAP – *ideally prior to entering facility e.g. TRIAGE nurse at the reception*
- **GROUP ALL CHILDREN WITH RESPIRATORY SYMPTOMS (COHORT)**
  - **GIVE A SURGICAL MASK** – *caregivers should support their children to maintain cough hygiene by ensuring the child wears their mask\**
  - **SEPARATE 2 METERS AWAY** from other children in the waiting area
  - *Good hand hygiene and cough etiquette should be taught*

## B. Screen & Isolate Suspected Case

- ***Do not wait for lab confirmation – Refer to Isolation***
  - Inform Public Health and Isolation Unit by Phone
  - Separate patients by 2 meters
  - Observe standard, contact and droplet precautions
- **Isolation for children:**
  - **Away from the paediatric in-patient ward;** Separate from the adult isolation ward
  - **Accommodate a caregiver to stay with the child** during the duration of admission
  - **Children most at risk are those with co-morbidities** e.g. sickle cell anaemia, congenital or acquired heart diseases, cancer, HIV etc.

## C. Test

- **Obtain nasopharyngeal/oropharyngeal swab in full personal protective equipment (PPE) for SARS-CoV-2 testing by RT-PCR (+/- PCR for other respiratory viruses)**
- **Chest radiography\*, bloods, blood gases** – not routine
  - Considered if *persistent fever, altered fluid balance, signs of liver dysfunction, or respiratory failure*
  - *Portable CXR or POCUS – avoid patient movement to the radiology department*

## D. Classify disease severity & initiate appropriate treatment

Guidelines follow our national paediatric protocol

- URTI (uncomplicated illness) → in-patient isolation/home care (*antipyretics*)
- Pneumonia (mild illness) → in-patient isolation/home care (*antibiotics*)
- **Severe pneumonia:** with danger signs -> in-patient (*oxygen, antibiotics etc.*)
- **\*Critical cases** – respiratory failure requiring mechanical ventilation, shock, other organ failure that requires ICU care