

COVID INFECTION OR ANY OTHER INFECTION

How to differentiate with a public
health lens?

Dr B. Antony Terance

GKNM Hospital.

OUTLINE

- What is Corona Virus ?
- COVID 19 Disease ?
- How it differs from other infections ?
- Prevention and Treatment

Corona virus (COVID 19)

A *virus* is a submicroscopic infectious agent

Replicates only inside the living cells of an organism.

Corona virus has spikes and resembles the **crown**





COVID 19 – Timeline

Late 2019, a novel coronavirus was identified as the cause of an outbreak of acute respiratory illness in Wuhan, a city in China.

February 2020, the World Health Organization (WHO) designated the disease **COVID-19**, which stands for coronavirus disease 2019.










March 2020, WHO declared COVID 19 as a **Pandemic**



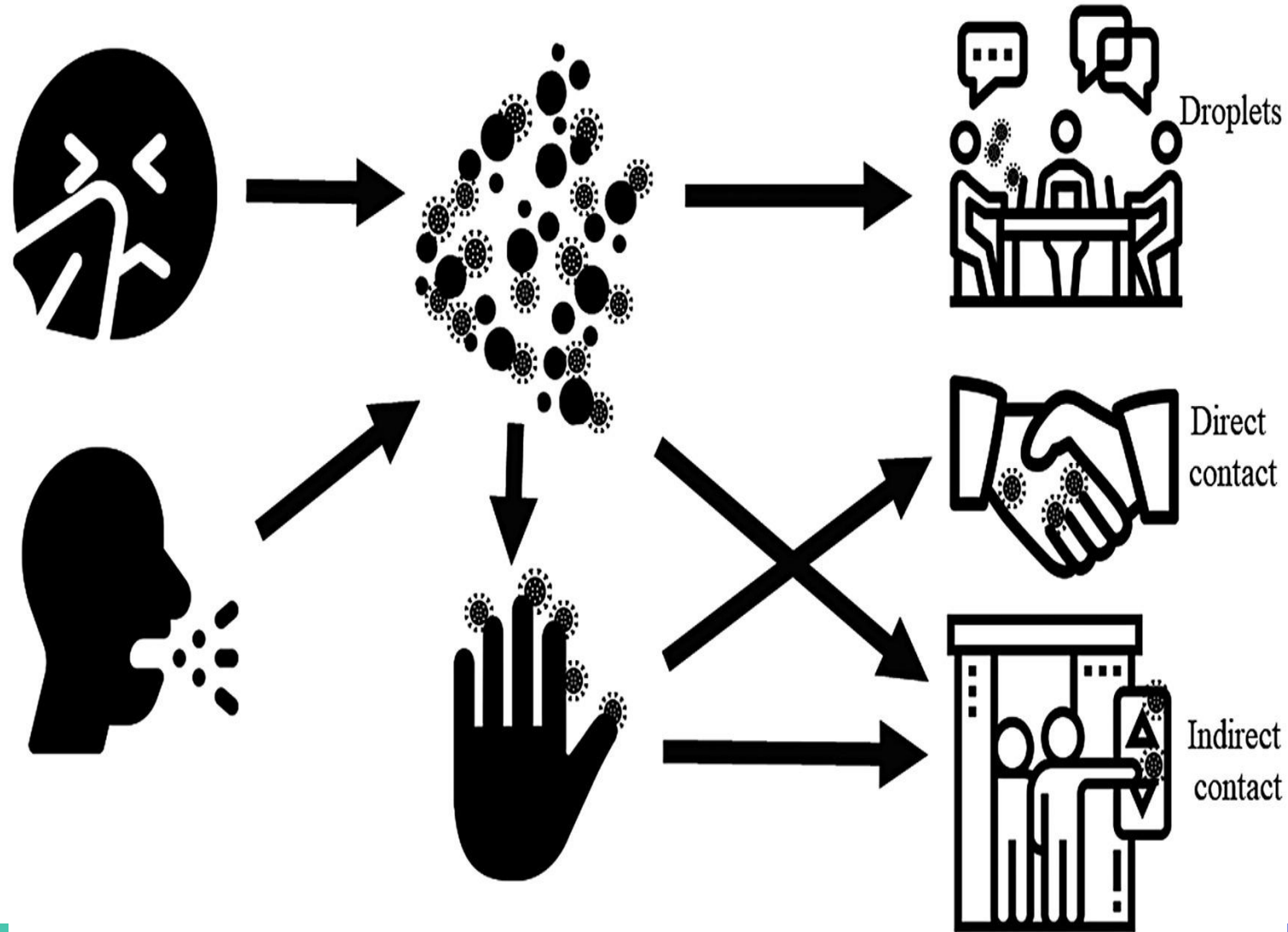
WHO Coronavirus Disease (COVID-19) Dashboard

Data last updated: 2020/9/23, 4:47pm CEST

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Name	Cases - cumulative total 	Deaths - cumulative total	Deaths - newly reported in last 24 hours
Global	31,425,029	967,164	4,520
 United States of America	6,779,609 	198,793	430
 India	5,646,010 	90,020	1,085
 Brazil	4,558,068 	137,272	377
 Russian Federation	1,122,241 	19,799	150

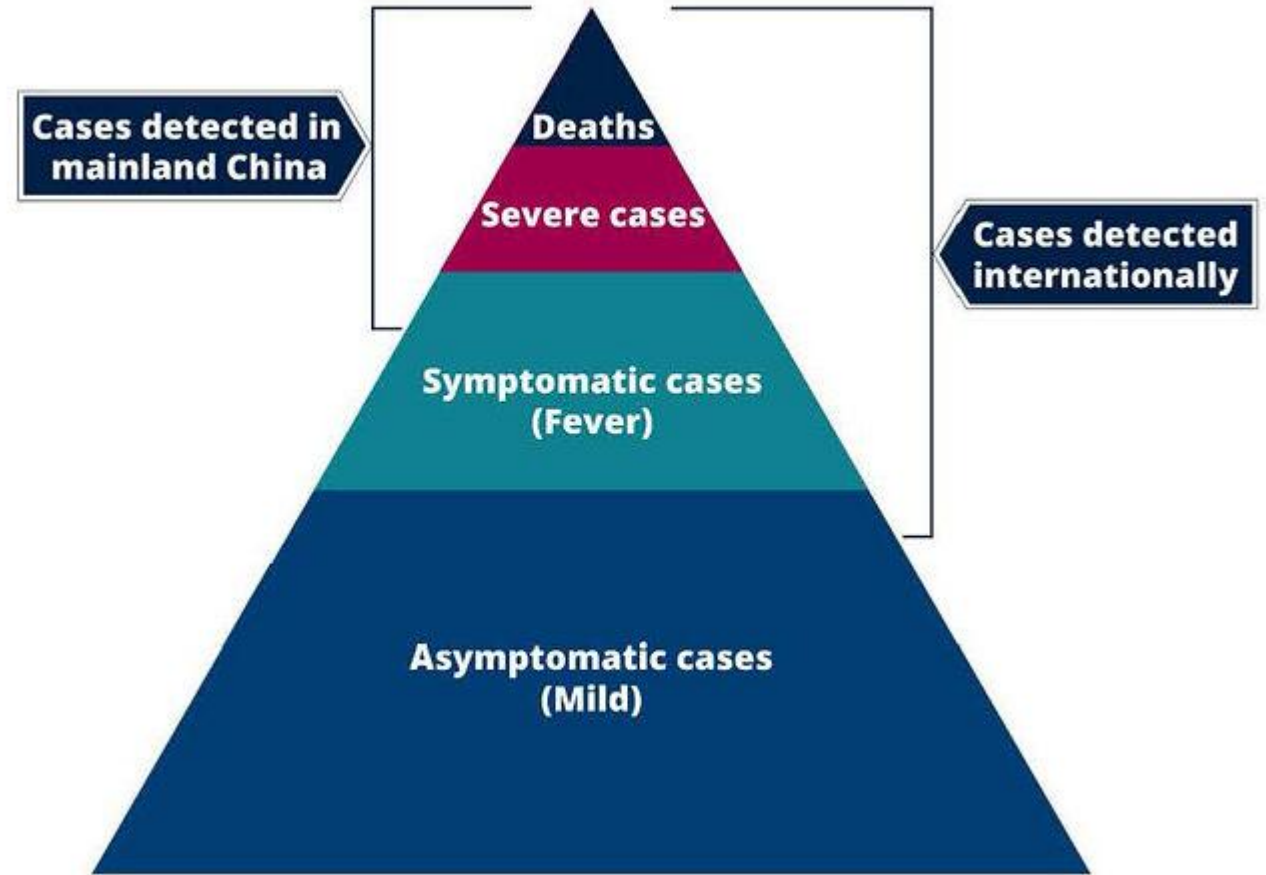
COVID-19 transmission routes: droplets, direct contact, and indirect contact



COVID 19

“Most people will have mild disease and get better without needing any special care.”

80% of all the COVID-19 cases have relatively minor symptoms



COVID 19 - Children



What Do We Know About Children and Coronavirus Transmission?

As of late July, children under the age of 18 account for:

7%

of COVID-19 cases in the US

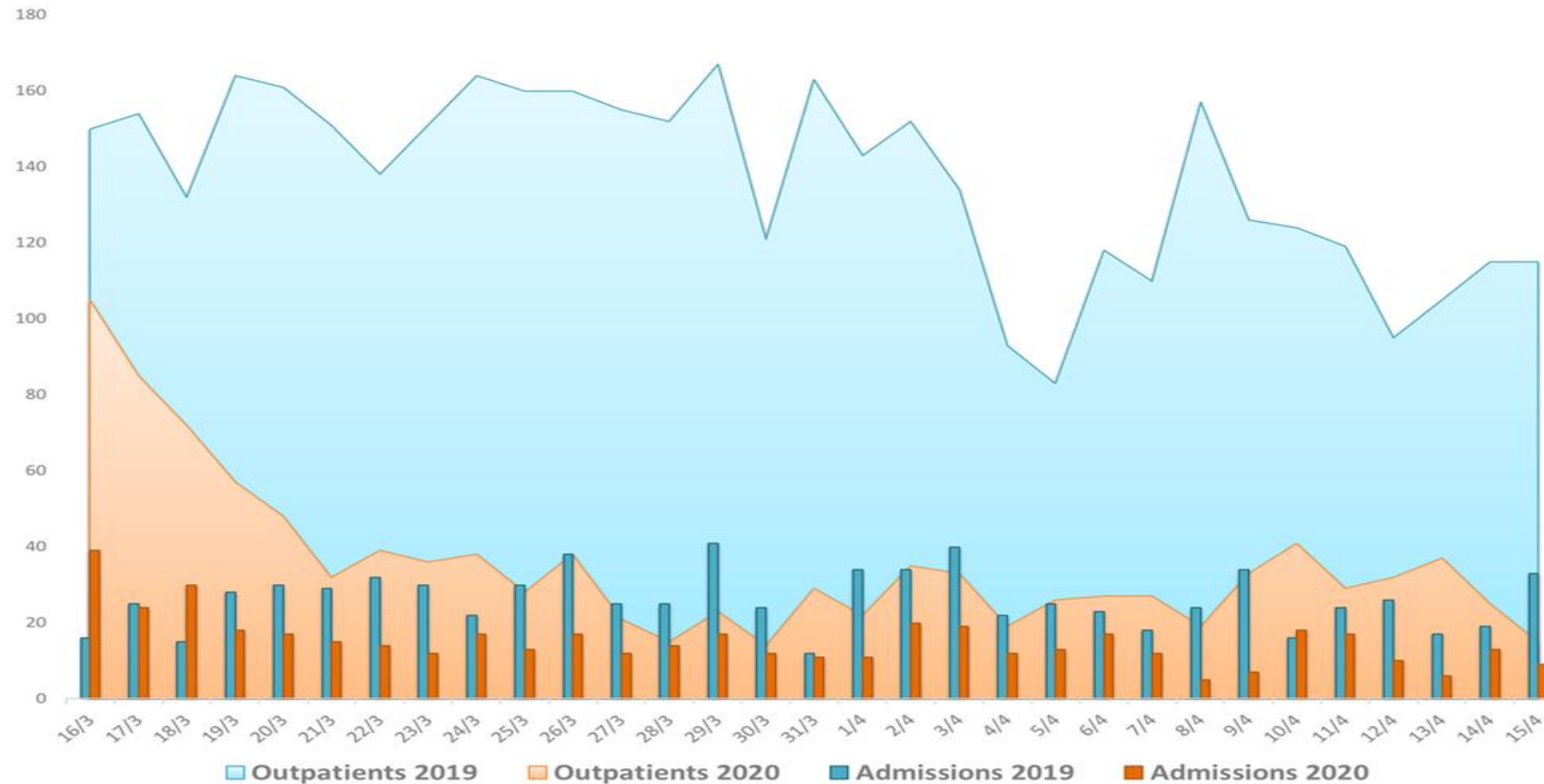
1%

of COVID-19 hospitalizations

<1%

of COVID-19 deaths

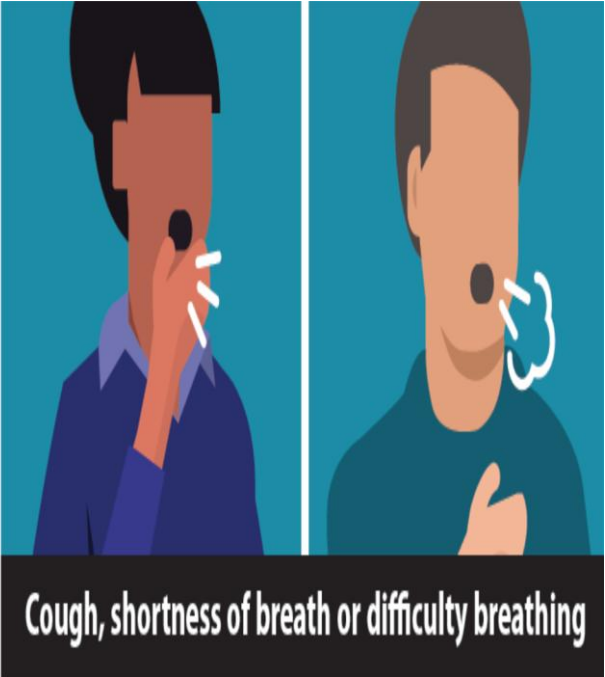
The Effect of COVID-19 on Paediatric Emergencies and Admissions in Morocco





COVID 19 : Incubation period 2 days to 2 weeks

Flu like illness



COVID 19 - GI Symptoms



COVID 19 - Symptoms



COVID 19 - Symptoms

Symptom	Prevalence (%)
Dry cough	60.4
Shortness of breath or breathing difficulties	41.1
Fever	55.5
Muscle pain	44.6
Headache	42.6
Sore throat	31.2
Smell and taste disturbance	64.4
Fatigue	68.3

FLU



Symptoms:
Begin 1-4 days
after exposure



Cause:
Influenza virus (there
are many strains)



Complications:
Less likely to occur
because of immunity
built up over time



Prevention:
Flu shot

COVID-19



Symptoms:
Begin 1-14 days
after exposure



Cause:
SARS-CoV-2 virus



Complications:
Severe respiratory
complications
may come on
extremely quickly



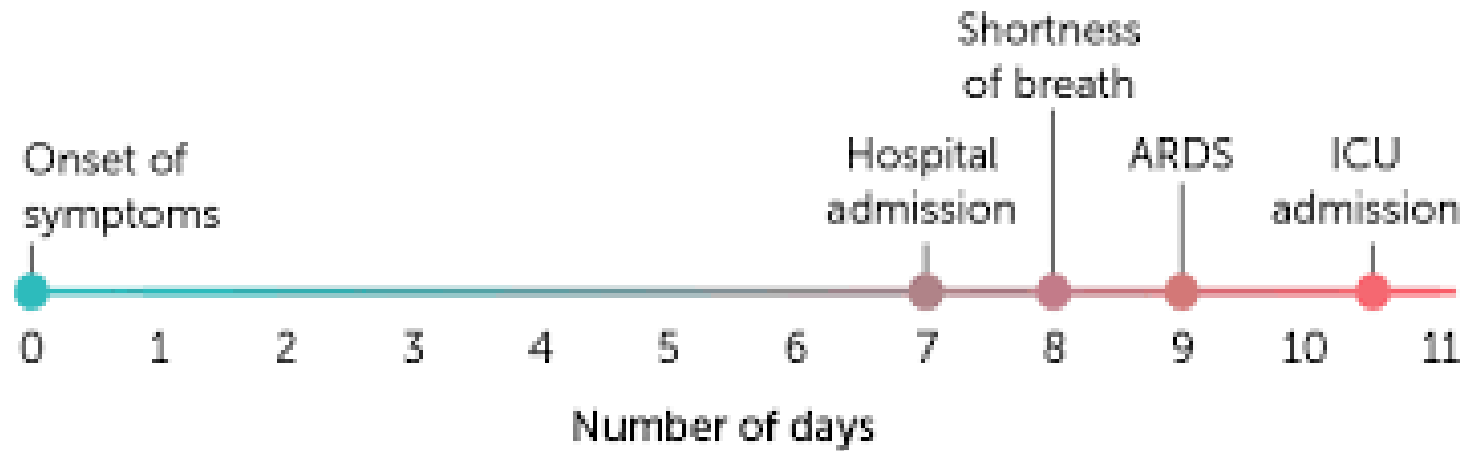
Prevention:
Self-isolation

Transmitted by
respiratory droplets
from an infected person



Cause fever,
cough,
fatigue

COVID 19 - timeline



COVID 19 - Severe Disease

Very rare in children



Watchout for **MIS-C**
Multisystem Inflammatory Syn. Children

Continuous high grade fever
Tiredness
Breathing difficulty
Cold hand and feet
Rash
Red eyes

The average number of people that one person with a virus infects, based on the R0 scale

COVID-19: 2–2.5

Infected person

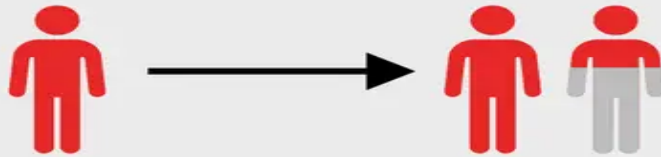
Average people infected



H1N1: 1.2–1.6

Infected person

Average people infected



Ebola: 1.6–2

Infected person

Average people infected



COVID 19 - Testing RT-PCR



COVID 19 Treatment

Mild disease

1. Supportive care
2. Monitor for progression – Tiredness, SOB, Cold peripheries
3. Prevent transmission – isolation for minimum of 10 days

Severe Disease – Hospitalisation

COVID 19 - Preventions

3 M to follow

Mandatory Masking

Maintaining 2 metres distance

Meticulous Handwashing

3 C to avoid

Close Contact

Crowded Environment

Covered places



Masks for children

WHO and UNICEF advise that children aged **12 and over** should wear a mask under the same conditions as adults

Children aged **5 years and under** should not be required to wear masks

Non medical masks are good enough.
Medical masks only if the child has underlying disease.



Masks for children – Common mistakes



COVID 19: Milder infection due to masks ?



“Like any poison, the coronavirus is deadlier with higher doses”

“Small initial exposures tend to lead to mild or asymptomatic infections, while larger doses can be lethal.”

Facial Masking for Covid-19 — Potential for “Variolation” as we await a Vaccine
Monica Gandhi, M.D., M.P.H., and George W. Rutherford, M.D
NEJM



Hand hygiene



Coronavirus

Wash your hands with soap and water more often for 20 seconds



Palm to palm



The backs of hands



In between the fingers



The back of the fingers



The thumbs



The tips of the fingers

Use a tissue to turn off the tap.
Dry hands thoroughly.





unicef
for every child



கோவிட் - 19

பற்றிய புரிதல்கள்

இது குழந்தைகளின்
முதற்கட்ட முயற்சி

Summary

COVID 19 affects children – **Few and mild**

Watch for **Danger signs**

Difficult to differentiate from other infections - **Test**

Prevention – **universal masking and hygiene** are important public health interventions

THANK YOU