

- Corona virus' **name** came from the fact that it looks like a **crown** (تاجي الشكل).
- COVID-19 is the disease caused by a new coronavirus called **SARS-CoV-2**.
- (WHO) first learned of this new virus on **31 December 2019** in Wuhan..
- February 11, 2020 the WHO announced an official name (COVID-19).
- It is a large family of viruses that cause illness ranging from the common cold to severe diseases.
- CoV strains: Middle East Respiratory Syndrome (**MERS-CoV**) & Severe Acute Respiratory Syndrome (**SARS-CoV**).
- novel (new) coronavirus (CoV) now called 2019-nCoV, is a new strain of coronavirus & had not detected in Wuhan (not identified in humans).
- Coronaviruses are **zoonotic**.
- Several known coronaviruses are circulating in animals that have not yet infected humans.

Signs and Symptoms



- **Is the new virus (2019-nCoV) the same as SARS? No.**
- **MOST COMMON Signs and Symptoms of 2019-nCoV:**

Fever | Dry Cough | Fatigue. FDF.

- **LESS COMMON ones:**

- Loss of taste or smell, Nasal congestion, Conjunctivitis (red eyes), Sore throat, Headache, Muscle or joint pain, skin rash, Nausea or vomiting, Diarrhea, Chills or dizziness.
- Irritability, Confusion, Reduced consciousness (sometimes with seizures), Anxiety, Depression, Sleep disorders, More severe and rare neurological complications such as strokes, brain inflammation, delirium هذيان and nerve damage.

- **Symptoms of SEVERE COVID-19:**

Shortness of breath, Loss of appetite, Confusion, Persistent pain or pressure in the chest, High temperature (above 38°C), Loss of speech or movement.

- **Complications leading to death:**

respiratory failure, acute respiratory distress syndrome (ARDS), sepsis and septic shock, thromboembolism, and/or multiorgan failure, including injury of the heart, liver or kidneys.

- **Do smokers are likely to get more severe symptoms if infected? Yes**, smokers are at higher risk of developing severe COVID-19 outcomes and death. Smoking reduces lung capacity and increases the risk of many respiratory infections including COVID-19.

- **Are smokers at risk of getting the COVID-19 virus higher than a non-smoker?** no peer-reviewed studies that have evaluated the risk of SARS-CoV-2 infection associated with smoking, but tobacco smokers (cigarettes, waterpipes, bidis, cigars, heated tobacco products) may be more vulnerable, as the act of smoking involves contact of fingers with the lips, which increases the possibility of transmission of viruses from hand to mouth. Smoking waterpipes (shisha or hookah), often involves the sharing of mouth pieces and hoses, which facilitate COVID-19 transmission.

- The relationship is co-relationship (not causative).

- How long does it take to develop symptoms?

5-6 days and can range from 1-14 days (some resources disagree up to 21 days).

- people who get COVID-19:

80% recover from the disease without needing hospital treatment.

15% become seriously ill and require oxygen

5% become critically ill and need intensive care.

- You can never tell which category you will be from.

- In rare situations, children can develop a severe inflammatory syndrome a few weeks after infection.

- People > 60 years, and those with underlying medical problems like high blood pressure, heart and lung problems, diabetes, obesity or cancer, are at higher risk of developing serious illness.

- **anyone** can get sick with COVID-19 and become seriously ill or die at any age.

- **What's the difference between illness caused by 2019-nCoV, the flu or a cold?** it can be difficult to identify the disease based on symptoms alone. That's why laboratory tests are required to confirm if someone has 2019-nCoV.

- Are there long-term effects of COVID-19?

Some people continue to experience symptoms, including fatigue, respiratory and neurological symptoms.

- COVID-19 most commonly spreads during close contact.

People who are physically near (within **6 feet**) a person with COVID-19 or have a direct contact are at greatest risk of infection.

- Infections occur mainly through exposure to respiratory droplets.

- As the respiratory droplets travel further from the person with COVID-19, the concentration of these droplets decreases. Larger droplets fall out of the air due to gravity. Smaller droplets and particles spread apart in air.

- With passing time, the amount of infectious virus in respiratory droplets also decreases.

COVID-19 can sometimes be spread by airborne transmission, which means that exposure to virus in small droplets and particles that can linger in air for minutes to hours. These viruses may be able to infect people who are further than 6 feet away from the person who is infected or after that person has left the space.

- tuberculosis, measles, and chicken pox are spread by airbornes.

- under certain conditions, people with COVID-19 infect others who are more than 6 feet away. These transmissions occur within enclosed spaces that had inadequate ventilation.

When the infected person is breathing heavily, (eg while singing or exercising), scientists believe that the amount of infectious smaller droplet and particles became concentrated enough to spread the virus to other people.

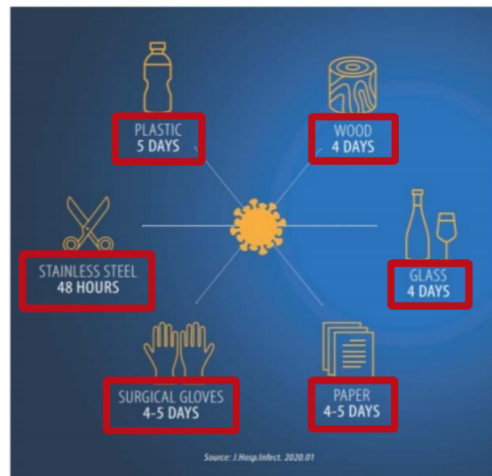
- it is much more common for COVID-19 to spread through **close contact** than through airborne transmission.

- COVID-19 spreads less commonly through contact with contaminated surfaces, but not thought to be a common way that COVID-19 spreads by.

COVID-19 Transmission



How long does the virus survive on surfaces?



- COVID-19 rarely spreads between people and animals:

CDC is aware of a small number of pets worldwide, including cats and dogs, reported to be infected with the virus that causes COVID-19, mostly after close contact with people with COVID-19..

- At this time, the risk of COVID-19 spreading from animals to people is low.

- People with suspected or confirmed COVID-19 should avoid contact with animals, including pets, livestock, and wildlife.

- The consumption of raw or undercooked animal products should be avoided. Raw meat, milk or animal organs should be handled with care, to avoid cross contamination.

- Can children catch COVID-19? Yes.

<18 years children have few deaths and usually mild disease.

- Can COVID-19 be passed through breastfeeding? NO (No evidence).

But infected/suspected COVID-19 women, before breastfeeding, should:

1. Wash hands frequently 2. Wear a medical mask 3. Sneeze or cough into a tissue 4. Routinely clean and disinfect surfaces.

*Non-medical masks (e.g. home-made or cloth masks) have not been evaluated.

- Reinfection with COVID-19 is expected & reported.

- What test should I get to see if I have COVID-19?

PCR (most common molecular test), within a few days of exposure and around the time that symptoms may begin.

- Samples are collected from the nose and/or throat with a swab.

Can I be classified with PCR test as False Negatives? YES! (I can be infected, but the viruses didn't reach yet to a detectable level).

- What about rapid tests (Rapid antigen tests/rapid diagnostic tests RDT)?

- RDT detect viral proteins (antigens).

- Samples are collected from the nose and/or throat with a swab.

- These tests are cheaper than PCR.

- Faster, but less accurate.
- These tests perform best when there is more virus circulating in the community and when sampled from an individual during the time they are most infectious.
- **I want to find out if I had COVID-19 in the past, what test could I take?**

Antibody tests (serological tests), done on blood samples.

- **They can't diagnose COVID-19 in the early stages.**

- **Are there treatments for COVID-19?**

Optimal supportive care includes

- oxygen for severe disease.
- ventilation for patients who are critically ill.
- **Dexamethasone** is a corticosteroid that can help reduce the length of time on a ventilator and save lives.

- Remdesivir, hydroxychloroquine, lopinavir/ritonavir and interferon regimens have little or no effect on 28-day mortality or the in-hospital course of COVID-19.

(Results are from the WHO's Solidarity Trial)

- Hydroxychloroquine (treats malaria) has not been shown to offer any benefit.
- WHO does not recommend self-medication with any medicines, including antibiotics, as a prevention or cure for COVID-19

- **Are antibiotics effective in preventing or treating COVID-19? NO,** Antibiotics do not work against viruses.

In hospitals, physicians will sometimes use antibiotics to prevent or treat secondary bacterial infections which can be a complication of COVID-19 in severely ill patients.

- **Protection against COVID-19:**

Wearing Masks, physical distancing, avoiding crowded, closed and close-contact settings, good ventilation, cleaning hands, covering sneezes and coughs, & more.

- **Who should wear what kind of mask?**

- Medical masks are recommended for:

Health workers.

Anyone who is feeling unwell.



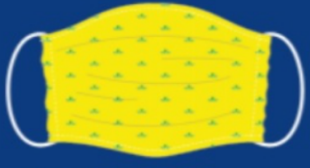
Anyone awaiting COVID-19 test results or who has tested positive.

People caring for someone who is a suspected or confirmed case of COVID-19.

People aged 60 or over.

People of any age with underlying health conditions.

Non-medical, fabric masks can be used by the general public under the age of 60 and who do not have underlying health conditions.

	 Respirators (including N95)	 Surgical Masks	 Non-Medical Masks
Evaluation, Testing, and Certification	Respirators are evaluated, tested and certified by the National Institute for Occupational Health and Safety (NIOSH).	Surgical masks are classified by the American Society for Testing and Materials (ASTM).	Have not been evaluated or tested to recognized standards.
Purpose	Respirators protect from exposure to airborne particles, including viruses.	Surgical masks are a barrier to spreading droplets and spit.	Non-medical masks help limit the spread of droplets and spit when you sneeze or cough.
Fit (Face Seal)	Respirators are designed to seal tight to the face of the wearer.	Are not designed to seal tight against the face.	Are not designed to seal tight against the face.
Filtration	Respirator filters that collect at least 95% of the challenge aerosol are given a 95 rating.	Surgical masks do not effectively filter small particles from the air.	Fabrics are not the same as materials used in certified masks and do not necessarily filter viruses.
Use Limitations	Generally single use but repurposing may be appropriate in certain circumstances. Follow manufacturer's instructions.	Generally single use, but repurposing may be appropriate in certain circumstances. Follow manufacturer's instructions.	Can be difficult to breathe through fabric. Wash between uses.
Who Should Use and When	Health care workers and others when providing direct care to a COVID-19 patient.	Health care workers and others when providing direct care to a COVID-19 patient.	General public when consistent physical distancing is not possible, such as in stores and shopping areas, and on public transit.

- **Should I wear a mask at school?** There is no defined answer, answers different based on the epidemic state.

- If you have your child going with you to a crowded places like hospitals, yes, he can wear a mask. For sure, we won't recommend to put a mask on an infants as this will lead to compromise their breathing.

- In countries or areas where there is intense community transmission of the virus and in settings where physical distancing cannot be achieved, WHO and UNICEF advise decision makers to apply the following criteria for use of masks in schools when developing national policies:

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

- Children between 6 and 11 years, the decision depends on several factors, such as the intensity of transmission in the area where the child lives, local norms that influence social interactions, the child's capacity to comply with the appropriate use of masks and availability of appropriate adult supervision,...

- Children & adolescents 12 years or older should follow the national mask guidelines for adults..

- Using Hand Sanitizers to prevent the spread of germs, including COVID-19, if soap & water are not readily available, **using a hand sanitizer with at least 60% alcohol.**

- Do not Choose hand sanitizers labeled as "alcohol-free."

- **Wear gloves** when cleaning and when caring for someone who is sick.
- Wearing gloves when using a shopping cart or using an ATM) will not necessarily protect you from COVID-19 and may still lead to spread of germs.
- The best way to protect yourself from germs when running errands and after going out is to **regularly wash your hands with soap & water for 20 seconds** or use hand sanitizer with at least 60% alcohol. More guaranteed than wearing a gloves.

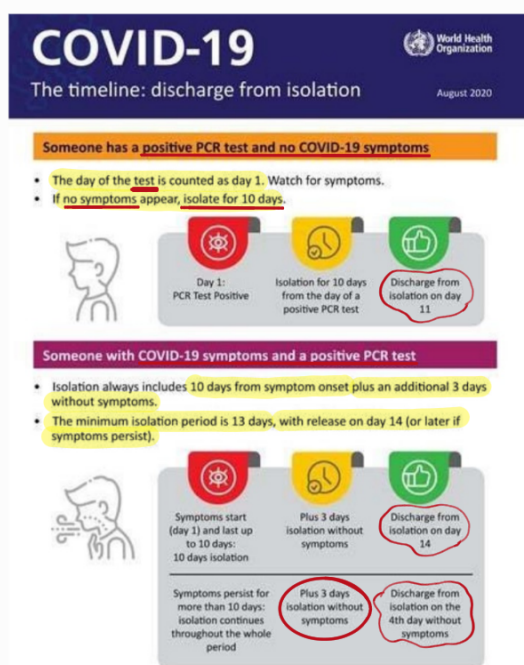
Social distancing(physical distancing): keeping a safe space between yourself and other people who are not from your household.

- To practice social or physical distancing, stay **at least 6 feet** (about **2 arm lengths**) from other people.
- Social distancing should be practiced in combination with other everyday preventive actions.

- What is the difference between isolation and quarantine?

- Both are methods of preventing the spread of COVID-19.
- **Quarantine** is used for anyone who is a contact of someone infected with the SARS-CoV-2 virus, which causes COVID-19, whether the infected person has symptoms or not. It means that you remain separated from others because you have been exposed to the virus and you may be infected and can take place in a designated facility or at home.
- For COVID-19, it means staying in the facility or at home for 14 days.

- **Isolation** is used for people with COVID-19 symptoms or who have tested positive. It means being separated from other people, ideally in a medically facility where you can receive clinical care. If isolation in a medical facility is not possible and you are not in a high risk group of developing severe disease, isolation can take place at home.
- **If you have symptoms, you should remain in isolation for at least 10 days plus an additional 3 days without symptoms. If you are infected and do not develop symptoms, you should remain in isolation for 10 days from the time you test positive.**



- What types of COVID-19 vaccines are being developed? How would they work?

These vaccines are all designed to teach the body's immune system to safely recognize & block the virus that causes COVID-19.

- Types of potential vaccines for COVID-19:

1. Inactivated or weakened virus vaccines, doesn't cause disease, but still generates an immune response.

2. Protein-based vaccines, use harmless fragments of proteins or protein shells that mimic the COVID-19 virus to safely generate an immune response.

3. Viral vector vaccines, use a safe virus that cannot cause disease but serves as a platform to produce coronavirus proteins to generate an immune response.

4. RNA and DNA vaccines, (**artificial RNA**) a cutting-edge approach that uses genetically engineered RNA or DNA to generate a protein that safely prompts an immune response.

- Will COVID-19 vaccines provide long-term protection?

Clinical trials has showed that vaccinated people become immune for an acceptable period.

- Because COVID vaccines have only been developed in the past months, it's too early to know the duration of protection of COVID-19 vaccines.

- Available data suggest that most people who recover from COVID-19 develop an immune response that provides at least some period of protection against reinfection.

- What are the benefits of getting vaccinated?

- protection against the disease, as a result of developing an immune response, thus reduced risk of developing the illness and its consequences.

- This immunity helps you fight the virus if exposed.

- Protect people around you.

- All viruses have the capacity to change over time, developing mutations while replication, these mutations sometimes don't affect on the pathogenesis or the transmission of the virus. However, **mutations accumulation of Covid-19 throughout it's spreading will lead to change some basic characteristics.**

- What does it mean to say a virus mutates or changes?

- When a virus replicates or makes copies of itself, it sometimes changes a little bit. These changes are called "mutations."

- A virus with one or several new mutations is referred to as a **"variant"** of the original virus. Till now, there are 3 variants (Brazilian, South African, British). Each one has differences in their main characteristics.

- **The more viruses circulate, the more they may change.** These changes can result in a virus variant that is better adapted to its environment compared to the original virus.

- This process of changing and selection of successful variants is called **"virus evolution."**

- Some mutations can lead to changes in a virus's characteristics, such as altered transmission (for example, it may spread more easily) or severity (for example, it may cause more severe disease).

- Some viruses change quickly & others more slowly. **SARS-CoV-2** (which causes COVID19), **tends to change more slowly** than others such as HIV or influenza viruses.

- This could be explained by the virus's internal **"proofreading mechanism"** which can correct "mistakes" when it makes copies of itself.

- Variants of the virus that causes COVID-19 that circulate globally:

1. The United Kingdom (UK) identified a variant called B.1.1.7 with a large number of mutations in the fall of 2020. This variant spreads more easily & quickly than other variants.

- In January 2021, experts in UK reported that this variant may be associated with an increased risk of death compared to other variant viruses. It has since been detected in many countries around the world.

2. In South Africa, another variant called B.1.351 emerged independently of B.1.1.7. Detected in early October 2020, B.1.351 shares some mutations with B.1.1.7.

3. In Brazil, a variant called P.1 emerged & was first identified in **travelers** from Brazil, who were tested during routine screening at an airport in Japan, in early January. This variant contains a set of additional mutations that may affect its ability to be recognized by antibodies.

- **Should I be concerned about SARS-CoV-2 changing?**

- All viruses, including SARS-CoV-2, change over time. So far, hundreds of variations of this virus have been identified worldwide.

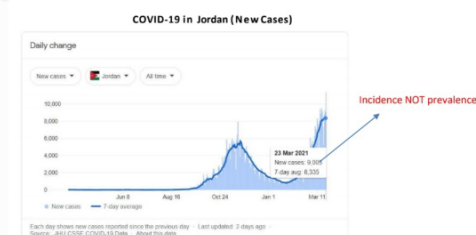
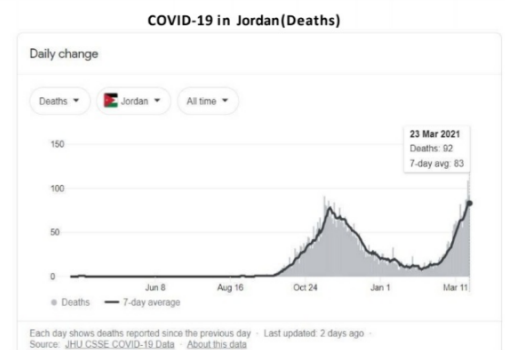
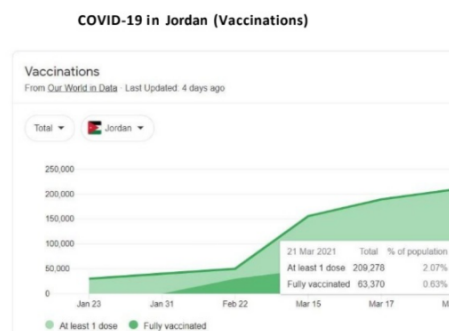
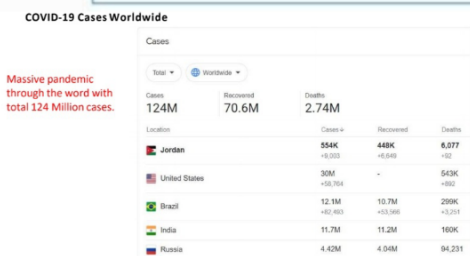
- **Most changes have little to no impact on the virus' properties.**

Depending on **where** the changes are located in the virus's **genetic material**, they may affect the virus's properties.

Top tips for navigating the infodemic

World Health Organization

- 1. Assess the source:**
Who shared the information with you and where did they get it from? Even if it is friends or family, you still need to vet their source.
- 2. Go beyond headlines:**
Headlines may be intentionally sensational or provocative.
- 3. Identify the author:**
Search the author's name online to see if they are real or credible.
- 4. Check the date:**
Is it up to date and relevant to current events? Has a headline, image or statistic been used out of context?
- 5. Examine the supporting evidence:**
Credible stories back up their claims with facts.
- 6. Check your biases:**
Think about whether your own biases could affect your judgment on what is or is not trustworthy.
- 7. Turn to fact-checkers:**
Consult trusted fact-checking organizations, such as the International Fact-Checking Network and global news outlets focused on debunking misinformation.



FACT: Vitamin and mineral supplements cannot cure COVID-19

Micronutrients, such as vitamins D and C and zinc, are critical for a well-functioning immune system and play a vital role in promoting health and nutritional well-being.

There is currently no guidance on the use of micronutrient supplements as a treatment of COVID-19.

WHO is coordinating efforts to develop and evaluate medicines to treat COVID-19.




World Health Organization #Coronavirus #COVID19 22 September 2020

FACT: Corticosteroids (dexamethasone and hydrocortisone) are recommended for severe and critically ill COVID-19 patients under medical supervision.

A review of 8 randomized studies with more than 7,000 patients found that the systemic treatment (intravenous or oral) reduced mortality for this group.

In contrast, WHO does NOT advise the use of corticosteroids for patients with non-severe COVID-19, because they may increase the risk of complications or adverse effects.




World Health Organization #Coronavirus #COVID19 1 November 2020

FACT: Thermal scanners CANNOT detect COVID-19

Thermal scanners are effective in detecting people who have a fever (i.e. have a higher than normal body temperature). They cannot detect people who are infected with COVID-19.

There are many causes of fever. Call your healthcare provider if you need assistance or seek immediate medical care if you have fever and live in an area with malaria or dengue.




World Health Organization #COVID19 #Coronavirus 17 May 2020

FACT: Hydroxychloroquine does NOT reduce mortality of hospitalised COVID-19 patients

Studies of hydroxychloroquine among seriously ill hospitalized patients were stopped in the WHO Solidarity Trial because data didn't show that it reduces mortality of hospitalised COVID-19 patients.

WHO is coordinating efforts to develop and evaluate medicines to treat COVID-19.




World Health Organization #Coronavirus #COVID19 16 November 2020

FACT: Water or swimming does not transmit the COVID-19 virus

The COVID-19 virus does not transmit through water while swimming. However, the virus spreads between people when someone has close contact with an infected person.

WHAT YOU CAN DO:
Avoid crowds and maintain at least a 1-metre distance from others, even when you are swimming or at swimming areas.
Wear a mask when you're not in the water and you can't stay distant. Clean your hands frequently, cover a cough or sneeze with a tissue or bent elbow, and stay home if you're unwell.



World Health Organization #Coronavirus #COVID19 16 October 2020

FACT: Do not under any circumstance spray or introduce bleach or any other disinfectant into your body. These substances can be poisonous if ingested and cause irritation and damage to your skin and eyes.

FACT: Bleach and disinfectant should be used carefully to disinfect surfaces only.

FACT: Remember to keep chlorine (bleach) and other disinfectants out of the reach of children.

FACT: Spraying or introducing bleach or another disinfectant into your body WILL NOT protect you against COVID-19 and can be dangerous




World Health Organization #COVID19 #Coronavirus 17 April 2020

FACT: The prolonged use of medical masks* when properly worn, DOES NOT cause CO2 intoxication nor oxygen deficiency

The prolonged use of medical masks can be uncomfortable. However, it does not lead to CO2 intoxication nor oxygen deficiency.

While wearing a medical mask, make sure it fits properly and that it is tight enough to allow you to breathe normally. Do not re-use a disposable mask and always change it as soon as it gets damp.

* Medical masks (also known as surgical masks) are flat or pleated; they are affixed to the head with straps or have ear loops.




World Health Organization #Coronavirus #COVID19 1 June 2020

FACT: You can catch COVID-19, no matter how sunny or hot the weather is. Countries with hot weather have reported cases of COVID-19.

FACT: Exposing yourself to the sun or to temperatures higher than 25C degrees DOES NOT prevent nor cure COVID-19

To protect yourself, make sure you clean your hands frequently and thoroughly and avoid touching your eyes, mouth and nose.




World Health Organization #Coronavirus #COVID19 27 April 2020

FACT: COVID-19 can be transmitted in any climate, including areas with hot and humid weather.

FACT: COVID-19 can be transmitted in areas with hot and humid climates

The best way to protect yourself against COVID-19 is by maintaining physical distance of at least 1 metre from others and frequently cleaning your hands. By doing this you eliminate viruses that may be on your hands and avoid infection that could occur by then touching your eyes, mouth, and nose.




World Health Organization #Coronavirus #COVID19 27 April 2020

FACT: Most people who get COVID-19 recover from it

Most people who get COVID-19 have mild or moderate symptoms and can recover thanks to supportive care. If you have a cough, fever and difficulty breathing seek medical care early – call your health facility by telephone first.


If you have fever and live in an area with malaria or dengue seek medical care immediately.



World Health Organization #Coronavirus #COVID19 22 May 2020

FACT: The most common symptoms of COVID-19 are dry cough, tiredness and fever. Some people may develop more severe forms of the disease, such as pneumonia. The best way to confirm if you have the virus producing COVID-19 disease is with a laboratory test. You cannot confirm it with this breathing exercise, which can even be dangerous.

FACT: Being able to hold your breath for 10 seconds or more without coughing or feeling discomfort DOES NOT mean you are free from the coronavirus disease (COVID-19) or any other lung disease.



World Health Organization #Coronavirus #COVID19 27 April 2020

FACT: Cold weather and snow CANNOT kill the new coronavirus

There is no reason to believe that cold weather can kill the new coronavirus or other diseases.

The normal human body temperature remains around 36.5°C and 37°C, regardless of the external temperature or weather.

The most effective way to protect yourself against the new coronavirus is by frequently cleaning your hands with alcohol-based hand rub or washing them with soap and water.



World Health Organization #Coronavirus #COVID19 27 April 2020

FACT: Taking a hot bath does not prevent the new coronavirus disease

Taking a hot bath will not prevent you from catching COVID-19. Your normal body temperature remains around 36.5°C to 37°C, regardless of the temperature of your bath or shower. Actually, taking a hot bath with extremely hot water can be harmful, as it can burn you.

The best way to protect yourself against COVID-19 is by frequently cleaning your hands. By doing this you eliminate viruses that may be on your hands and avoid infection that could occur by then touching your eyes, mouth, and nose.




World Health Organization #Coronavirus #COVID19 27 April 2020

FACT: The new coronavirus CANNOT be transmitted through mosquito bites

To date there has been no information nor evidence to suggest that the new coronavirus could be transmitted by mosquitoes.

The new coronavirus is a respiratory virus which spreads primarily through droplets generated when an infected person coughs or sneezes, or through droplets of saliva or discharge from the nose.

To protect yourself, clean your hands frequently with an alcohol-based hand rub or wash them with soap and water. Also, avoid close contact with anyone who is coughing and sneezing.




World Health Organization #Coronavirus #COVID19 27 April 2020

Are hand dryers effective in killing the new coronavirus?

No. Hand dryers are not effective in killing the 2019-nCoV.


To protect yourself against the new coronavirus, you should frequently clean your hands with an alcohol-based hand rub or wash them with soap and water. Once your hands are cleaned, you should dry them thoroughly by using paper towels or a warm air dryer.



World Health Organization #2019nCoV 16 June 2020

Can eating garlic help prevent infection with the new coronavirus?

Garlic is a healthy food that may have some antimicrobial properties. However, there is no evidence from the current outbreak that eating garlic has protected people from the new coronavirus (2019-nCoV).




World Health Organization #2019nCoV 16 June 2020

Can shoes spread the COVID-19 virus?

The likelihood of COVID-19 being spread on shoes and infecting individuals is very low.

As a precautionary measure, particularly in homes where infants and small children crawl or play on floors, consider leaving your shoes at the entrance of your home. This will help prevent contact with dirt or any waste that could be carried on the soles of shoes.



World Health Organization #Coronavirus #COVID19 16 June 2020

Can regularly rinsing your nose with saline help prevent infection with the new coronavirus?

No. There is no evidence that regularly rinsing the nose with saline has protected people from infection with the new coronavirus.

There is some limited evidence that regularly rinsing the nose with saline can help people recover more quickly from the common cold. However, regularly rinsing the nose has not been shown to prevent respiratory infections.



World Health Organization #2019nCoV 16 June 2020

Can people wear masks while exercising?

People should NOT wear masks when exercising as masks may reduce the ability to breathe comfortably.

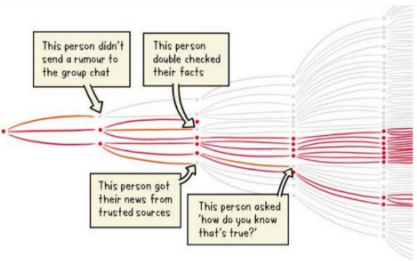
Sweat can make the mask become wet more quickly which makes it difficult to breathe and promotes the growth of microorganisms.

The important preventive measure during exercise is to maintain physical distance of at least one meter from others.



World Health Organization #Coronavirus #COVID19 16 June 2020

Let's flatten the infodemic curve



This person didn't send a rumour to the group chat.

This person double checked their facts.

This person got their news from trusted sources.

This person asked 'how do you know that's true?'