

AGC COVID-19 Training & Discussion

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- Introduction: COVID-19 situation in the respective country
- Transmission risks: How is it spread?
- Symptoms and severity
- Vulnerable groups
- COVID-19 in children
- Preventive measures
 - Different types of PPE
 - How to wear a mask
 - Hand hygiene
 - Disinfection
- Safety recommendations for mining sites
- Q & A

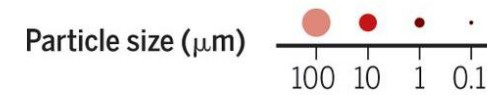
How is it spread



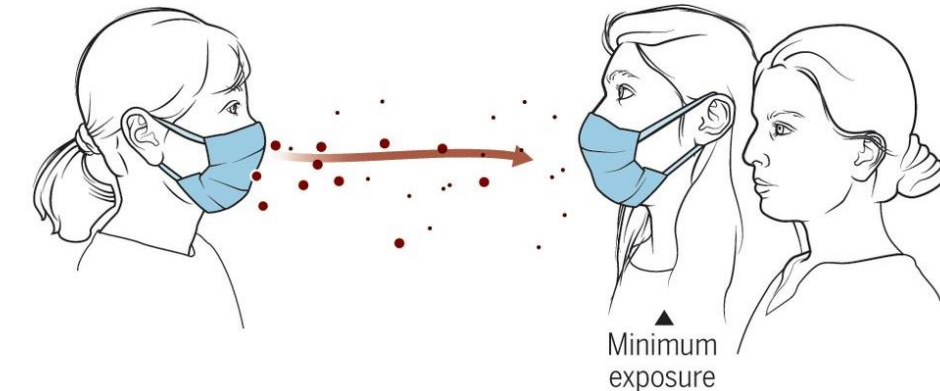
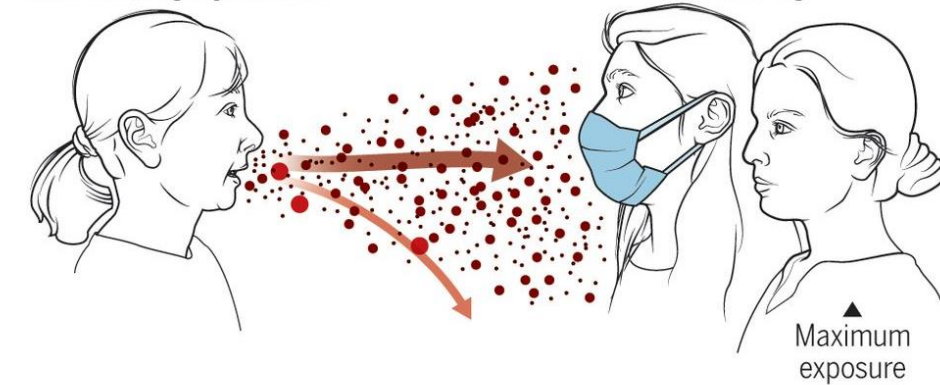
- COVID-19 is mainly transmitted from person to person. An infected person releases respiratory droplets while sneezing, coughing, talking or just breathing.
- People in close contact (less than 1-2 meters) can catch the virus if it enters their mouth, nose or eyes.
- Transmission risk is higher in poorly ventilated indoor spaces! Aerosols are suspended in the air and can travel longer

Masks reduce airborne transmission

Infectious aerosol particles can be released during breathing and speaking by asymptomatic infected individuals. No masking maximizes exposure, whereas universal masking results in the least exposure.



Infected, asymptomatic



How is it spread

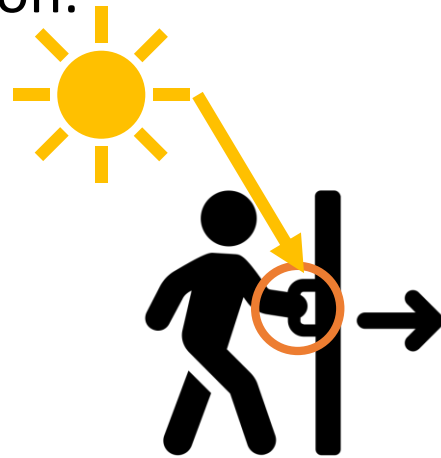


The virus can also be transmitted if a person touches a contaminated object (e.g., a hammer, a door handle an infected person has touched with unclean hands, or coughed or sneezed on), and then touches his face (eyes, mouth, nose).

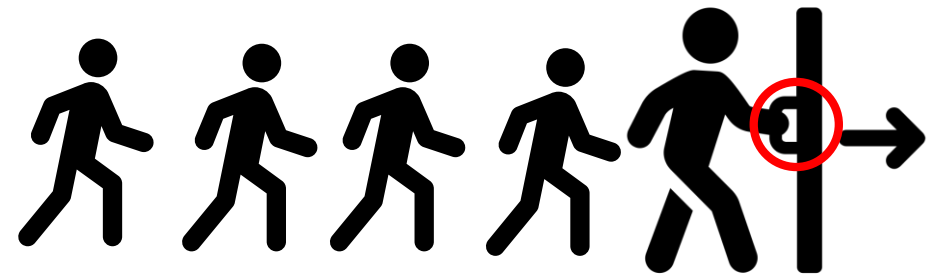
While sun exposure can inactivate the virus on surfaces, frequently touched objects without sun exposure (e.g., a door handle in a hospital or a public bus) are deemed to be a higher risk for COVID-19 transmission.



Created by Adrien Coquet
from Noun Project

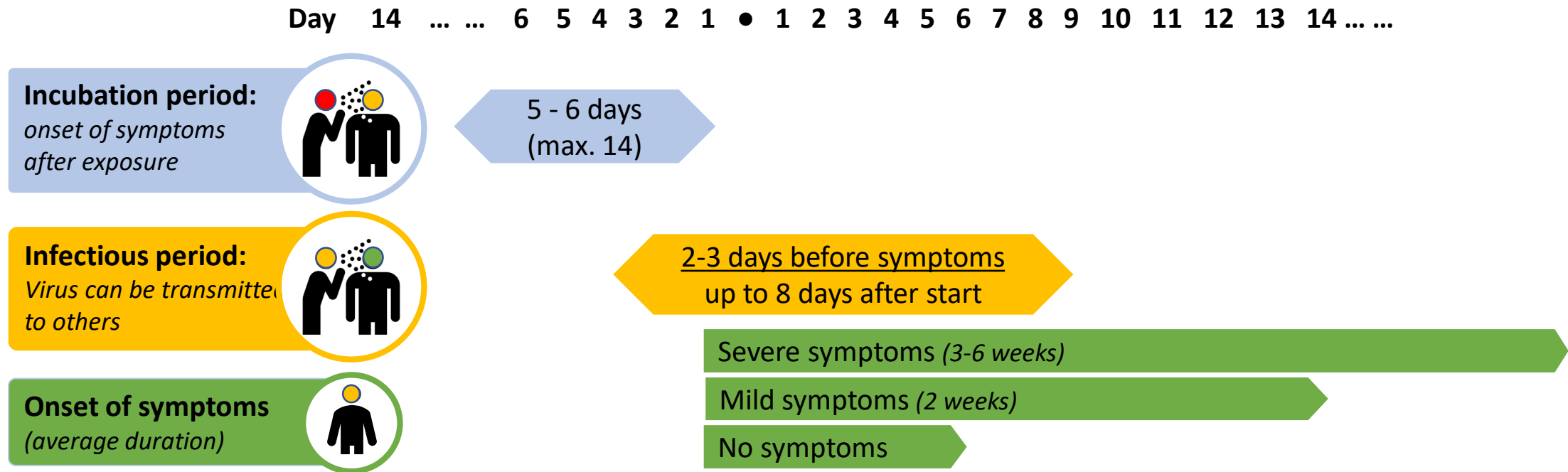


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How is it spread: incubation and infectious period



- An infected person usually develops symptoms 5-6 days after exposure, but it can be up to 14 days (therefore, 14 days of self-isolation is recommended).
- Some people do not develop any symptoms!
- Infected persons are most contagious (can infect others) 2-3 days before they notice any symptoms, and also for around 8 days after symptoms have started.
- People who never develop symptoms can also transmit the virus, though it is less likely.

Symptoms



- The coronavirus can affect different organs!
- Key symptoms are fever, cough and shortness of breath.
- Other frequently reported symptoms include: muscle pain, loss of taste or smell, sore throat and/or chills.
- Some more unspecific symptoms are diarrhea, nausea/vomiting, headache and nasal congestion.
- COVID-19 affects people differently. While some people never develop symptoms, the majority of people suffer from mild symptoms;
 - Around 15% develop a severe infection (e.g., with shortness of breath, pneumonia)
 - Around 5% develop a critical condition that can lead to death (such as respiratory failure of multiorgan dysfunction).



FEVER



COUGH



SHORTNESS OF
BREATH

People who are at higher risk to develop a severe infection with complications:

- Older adults (over 60 years)
- People with compromised immune system and/or serious underlying medical conditions, e.g.
 - Respiratory problems: asthma, silicosis (dust exposure!), COPD (smoking!)
 - Heart problems: high blood pressure, cardiovascular problems
 - Communicable diseases: HIV/AIDS, Tuberculosis, malaria
 - Other conditions: diabetes, obesity, kidney disease, chronic mercury intoxication (affects central organs such as kidneys, heart!)
- But people of any age can develop a mild or severe infection, including children!

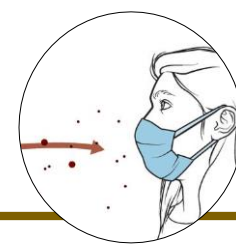
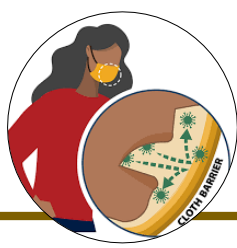
COVID-19 in children



- Contrary to initial assumptions, newborns, infants and children can get COVID-19!
- Around 11% of caseload in low-and-milled-income countries in persons younger than 20 years (limited data!)
- Most children seem to experience no or mild symptoms
- Poor health conditions (e.g., malnutrition, asthma, malaria) increases risk of severe COVID-19 (multisystem inflammatory syndrome: abdominal pain, diarrhea, vomiting and multi-organ involvement including acute kidney injury and myocardial dysfunction) and death
- Lack of evidence about the role of children in COVID-19 transmission
- During pregnancy, fetal transmission is possible but has not yet been confirmed

Source: UNICEF (2020): The Evolving Epidemiologic and Clinical Picture of SARS-CoV-2 and COVID-19 Disease in Children and Young People. Online: <https://www.unicef-irc.org/publications/1107-the-evolving-epidemiologic-and-clinical-picture-of-sars-cov-2-and-covid-19-disease.html>

PPE: preventing spread & exposure



Cotton mask/cloth mask:

- Prevents spread (traps droplets)
- Effectiveness of protection depends on design and appropriate use
 - Increases with high thread count, tightly woven cotton, multiple layers, snug fit
- For everybody when physical distancing is not possible
- Reusable, washable



Surgical mask/medical mask:

- Reduces exposure (protection) and spread (prevention)
- For health workers, vulnerable persons, and persons with COVID-19 diagnosis
- Disposable, single use



Face shield:

- Protects eyes, nose, mouth
- Does not replace masks (no tight fit!)



N95 (respirator):

- Offers better protection (filters 95% of very small particles) & prevents spread
- For health workers during high exposure procedures
- Disposable, single use



Gloves:

- If hand washing or disinfection not possible and high exposure to contaminated objects
- Not necessary, might increase risk of cross-contamination!

Importance of masks!



Two hair stylists with **COVID-19**
spent at least 15 minutes with 139 clients

EVERYONE WORE FACE COVERINGS  **NO CLIENTS ARE KNOWN TO BE INFECTED***



WEAR CLOTH FACE COVERINGS CONSISTENTLY AND CORRECTLY TO SLOW THE SPREAD OF COVID-19

*No clients reported symptoms; all 67 customers tested had negative tests

CDC.GOV

bit.ly/MMWR71420

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How to wear a mask



HOW TO WEAR A NON-MEDICAL FABRIC MASK SAFELY

Do's →



Clean your hands before touching the mask



Inspect the mask for damage or if dirty



Adjust the mask to your face without leaving gaps on the sides



Cover your mouth, nose, and chin



Avoid touching the mask



Clean your hands before removing the mask



Remove the mask by the straps behind the ears or head



Pull the mask away from your face



Store the mask in a clean plastic, resealable bag if it is not dirty or wet and you plan to re-use it



Remove the mask by the straps when taking it out of the bag



Wash the mask in soap or detergent, preferably with hot water, at least once a day



Clean your hands after removing the mask

A fabric mask can protect others around you. To protect yourself and prevent the spread of COVID-19, remember to keep at least 1 metre distance from others, clean your hands frequently and thoroughly, and avoid touching your face and mask.

HOW TO WEAR A NON-MEDICAL FABRIC MASK SAFELY

Don'ts →



Do not use a mask that looks damaged



Do not wear a loose mask



Do not wear the mask under the nose



Do not remove the mask where there are people within 1 metre



Do not use a mask that is difficult to breathe through



Do not wear a dirty or wet mask



Do not share your mask with others

A fabric mask can protect others around you. To protect yourself and prevent the spread of COVID-19, remember to keep at least 1 metre distance from others, clean your hands frequently and thoroughly, and avoid touching your face and mask.

Hand hygiene



HOW TO HAND WASH



HOW TO USE HAND RUB



Wash your hands:

- When arriving at work
- Before & after going on a break
- Before & after handling shared tools and other shared objects
- After using washroom
- Before & after using mask and other PPE



DIY hand washing station



What is missing?

Soap!

Photo: AGC Indonesia team

Disinfection



- Agents killing the coronavirus:
 - Bleach: sodium hypochlorite (5.25%): 1: 100 (10 ml bleach to 990 ml water)
 - Hydrogen peroxide (0.5%)
 - Quaternary Ammonium Compounds (QUATs): Alkyl dimethyl ammonium chlorides
- Ensure that disinfectant has a Drug Identification Number (DIN) on its label
- If objects are dirty, first clean it (remove dirt), then disinfect (kills viruses & bacteria)
- General cleaning and disinfecting of surfaces should occur at least once a day.
- Clean and disinfect highly touched surfaces at least twice a day and when visibly dirty (e.g., door knobs, light switches, cupboard handles, grab bars, hand rails, tables, phones, bathrooms, keyboards).
- Remove items that cannot be easily cleaned (e.g., newspapers, magazines, books, toys).

Recommendations for mining sites

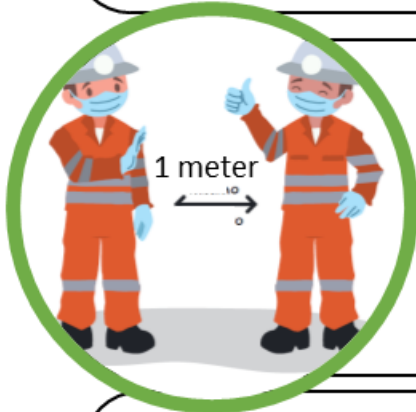


If you do not feel well, stay at home!

Stay home and avoid close contact with others if you do not feel well. If you have typical COVID-19 symptoms and contact cannot be avoided, wear a medical mask. See a doctor, esp. if you have fever or difficulty breathing.



Ask people arriving at the center, show awareness posters & explain preventive measures



Protect yourself - Keep your distance!

Stay at least 1 meter (2 arms length) apart. Organize work conditions to avoid close contact with other miners. Outdoor settings are considered lower risk compared to indoor settings with limited ventilation.

Markers & one-way system



Protect others - Wear a mask!

If physical distancing is not possible, wear a cloth mask at the mining and in public to protect others. Cover your face when you have to sneeze or cough (e.g., with your bent elbow). Do not spit!



Mandatory!

Recommendations for mining sites



Avoid touching your face!

Do not touch your mouth, nose or eyes with your unclean hands. Your hands might be contaminated with the coronavirus after touching a contaminated object. Avoid touching frequently handled objects. Do not share personal items.



Wash your hands!

Wash your hands frequently with soap and water for 20 seconds, especially before touching your face and putting on a mask and after touching shared objects or sneezing. Alternatively, use hand sanitizer with a minimum of 60% alcohol



Have hand washing stations/disinfectants



Keep it clean!

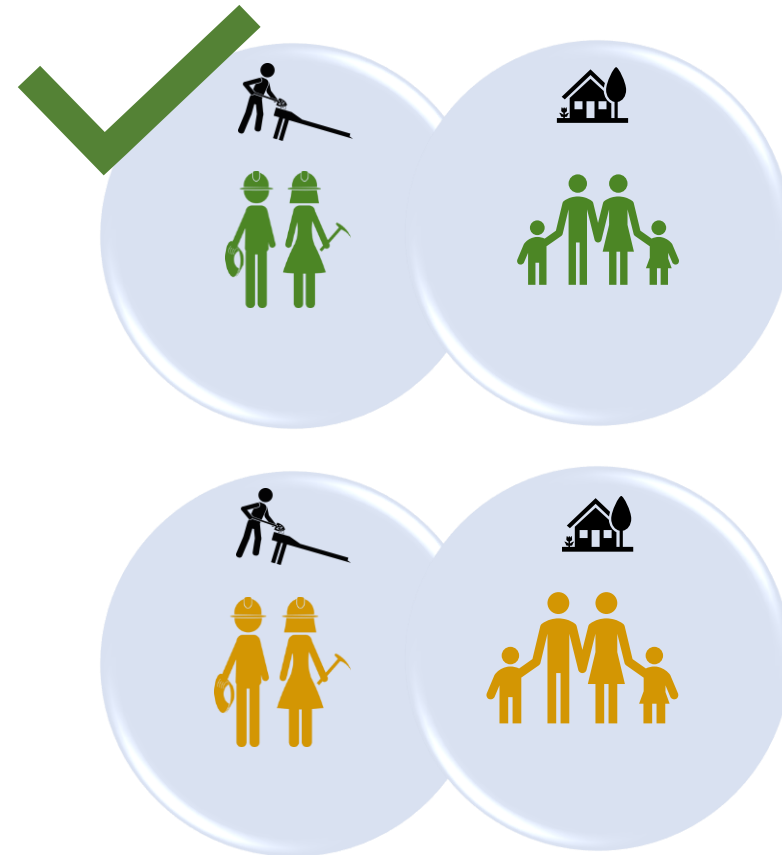
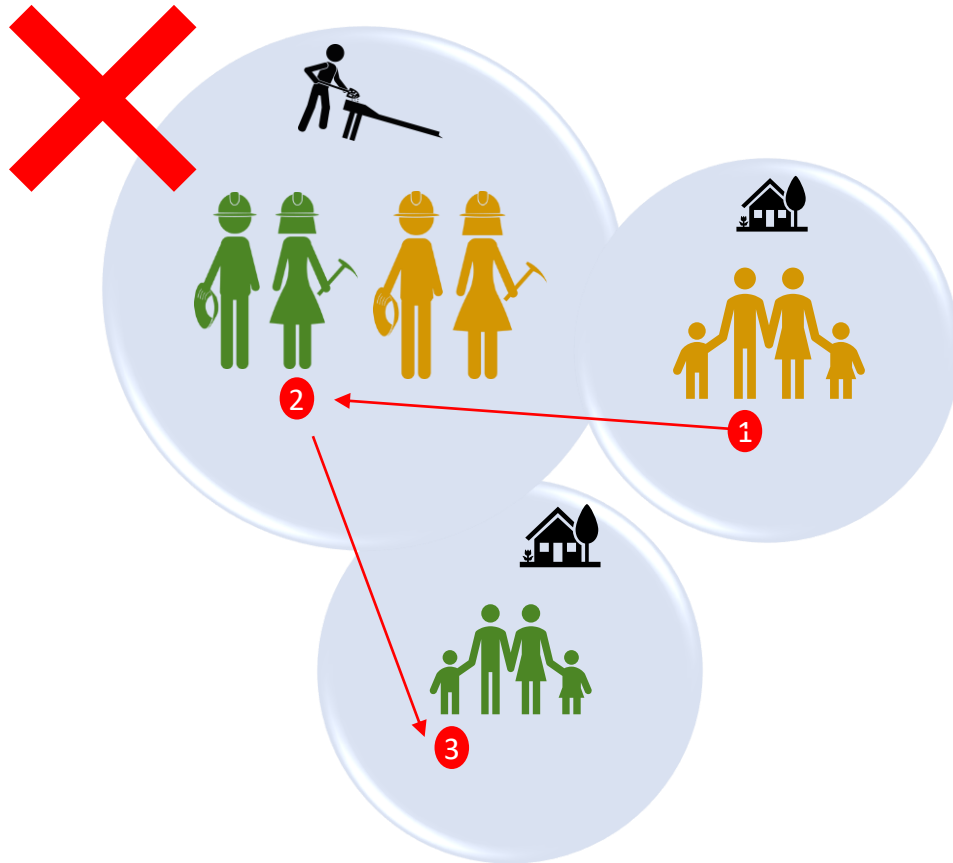
Disinfect frequently touched surfaces such as digging tools or generator switches. The virus can survive on objects for several days, esp. indoors and underground. Direct sunlight seems to be able to inactivate the coronavirus on objects.

Develop cleaning protocol for the facility

Recommendations for mining sites

Create safe bubbles

Same people sharing a household should also work together at a mine site to minimize contact to others.





Questions?

- Practicality of suggested measures?
- Common myths and misconceptions among miners?
- Fears?
- Covid-19 impacts?

