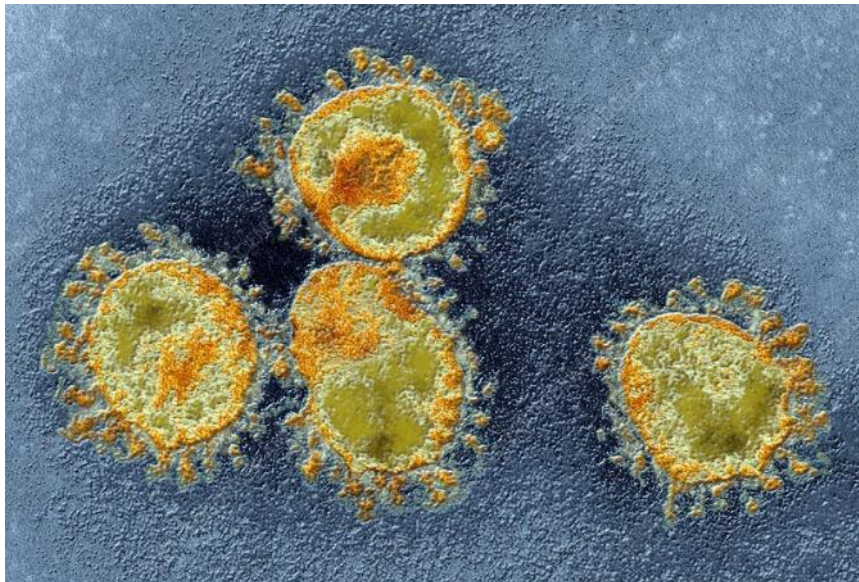


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# Human Coronavirus Types

## Common human coronaviruses (colds).

1. *229E* (alpha coronavirus)
2. *NL63* (alpha coronavirus)
3. *OC43* (beta coronavirus)
4. *HKU1* (beta coronavirus)



## Other human coronaviruses (the bad ones):

### 5. *MERS-CoV* (Middle East Respiratory Syndrome)

- 2494 cases/858 deaths mainly Arabian peninsula
- 34% case fatality rate
- Exported cases caused outbreak in S Korea

### 6. *SARS-CoV* (Severe Acute Respiratory Syndrome)

- 8098 cases/774 deaths
- 9.5% case fatality rate
- No cases since 2004

### 7. *SARS-CoV-2* (causes COVID-19)

- ~2% case fatality rate to date but still being determined

# Get your FLU Vaccine!!



CDC estimates that so far for just *this US flu season*:

- At least **29 million flu** illnesses
- 280,000 hospitalizations
- >16,000 deaths from flu including 105 pediatric deaths
- 5.9% of those sick enough to hospitalize die
- Typical years ~1 in 10000 of all flu cases die – CFR 0.01%

<https://www.cdc.gov/flu/weekly/index.htm>

COVID 19 (March 5, 2020)

- Globally **953,33 confirmed**-(2241 new)
- China 80 565 confirmed-143 new
  - 3015 deaths-31 new
- Outside of China 14 768 confirmed -2098 new
  - 85 Countries/territories/areas (5 new)
  - 267 deaths (53 new)

<https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200225-sitrep-36-covid-19.pdf>

# What about children and COVID 19?



**Q: Are children more susceptible to COVID-19 compared with the general population and how can infection be prevented?**

- **No**, there is no evidence that children are more susceptible.
  - Most confirmed cases of COVID-19 reported from China have occurred in adults.
  - Infections in children have been reported, including in very young children. From limited information published from past outbreaks of SARS-CoV and MERS-CoV outbreaks, infection among children was relatively uncommon.
- Children should engage in usual preventive actions to avoid infection.
  - Cleaning hands often using soap and water or alcohol-based hand sanitizer
  - Avoiding people who are sick
  - Staying up to date on vaccinations, including influenza vaccine

# What about children and COVID 19?

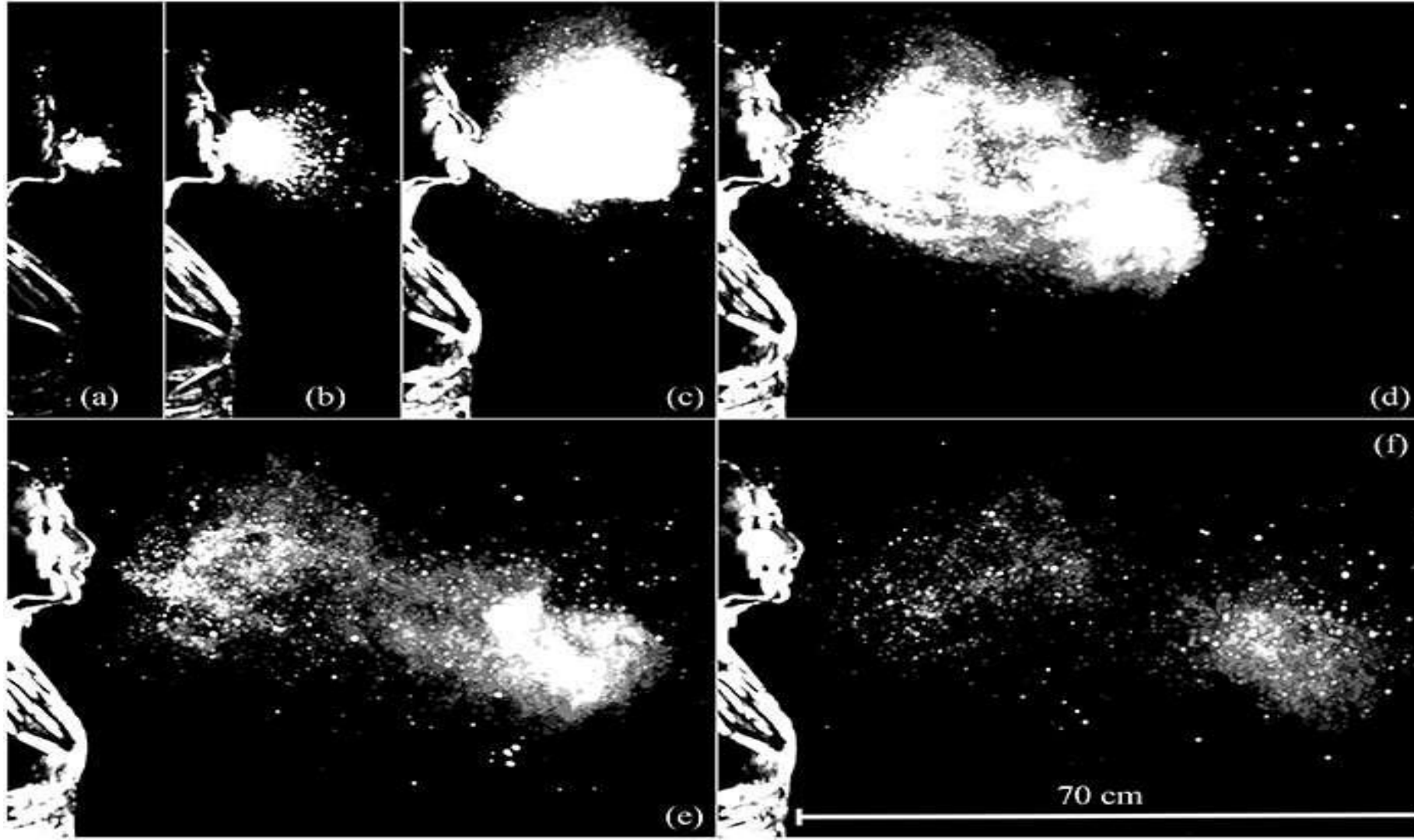


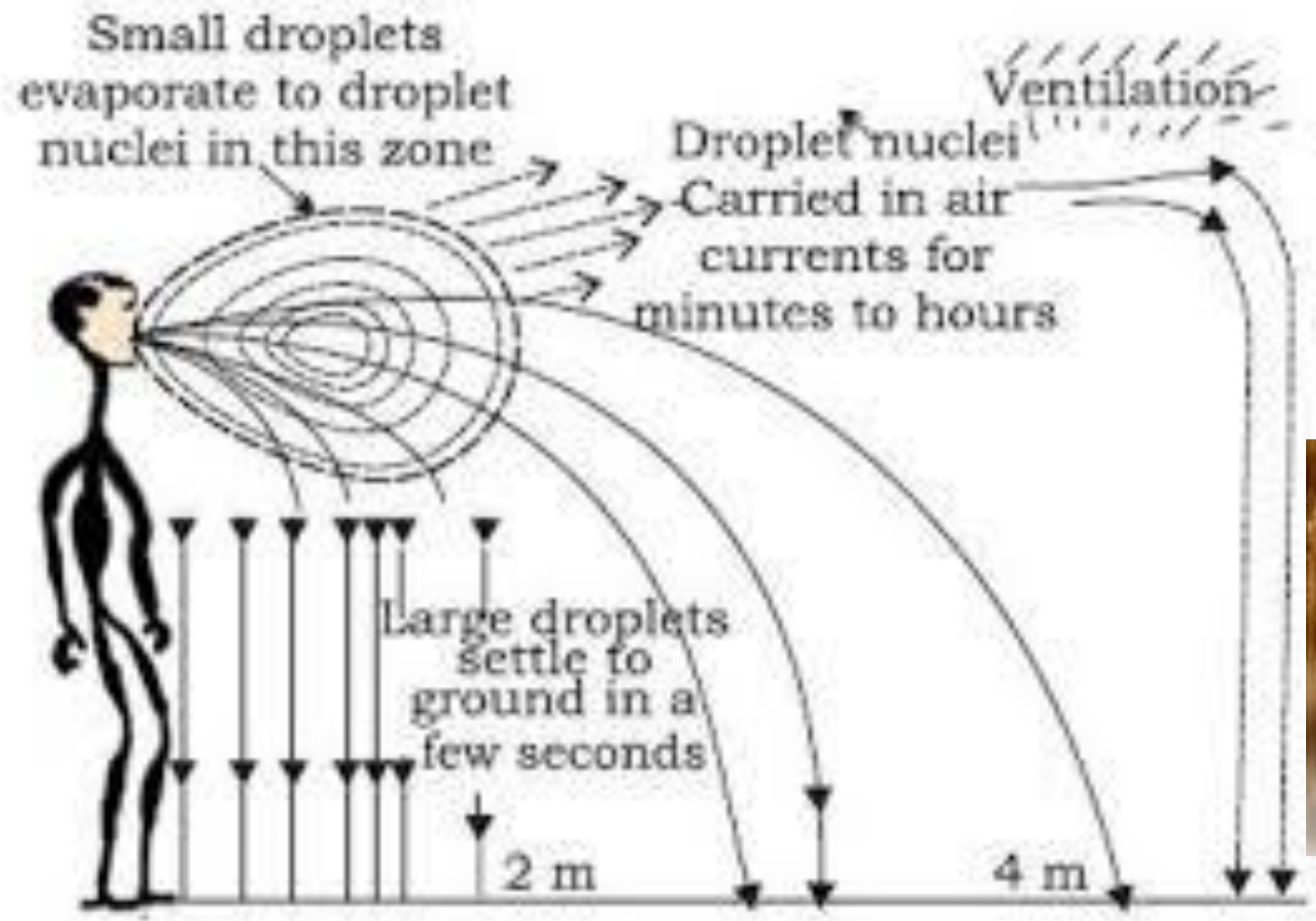
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## **Q: Does the clinical presentation of COVID-19 differ in children compared with adults?**

- Limited reports of children with COVID-19 in China have described cold-like symptoms, such as fever, runny nose, and cough. Gastrointestinal symptoms (vomiting and diarrhea) have been reported in at least one child with COVID-19.
- Early studies suggest that children with confirmed COVID-19 have generally presented with mild symptoms
  - Severe complications (e.g., acute respiratory distress syndrome, septic shock) appear uncommon.

# What can I do to protect myself and my family?





# What can I do to protect myself and my family?



**Clean**  
your  
**Hands** after coughing or sneezing.

Wash hands with soap and warm water

or

clean with alcohol-based hand cleaner.



# What can I do to protect myself and my family?



- **Stay home if you are sick**
  - Send domestic staff home
  - Keep children at home
- **Have at home:**
  - Hand Sanitizers
  - Thermometers for self-monitoring
  - OTC cold and flu medications as appropriate
  - A space where you can self quarantine
    - Food for 14 days
  - Disinfect workspaces and common areas

# Should I wear a mask?



## Surgical Masks

- Meant to protect the environment from the wearer (Surgeon's breath on the patient)
- Does a good job of trapping large droplets...not so good with small droplets
- Gets wet with use and loses integrity
- People touch the masks which defeats the purpose



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## N-95

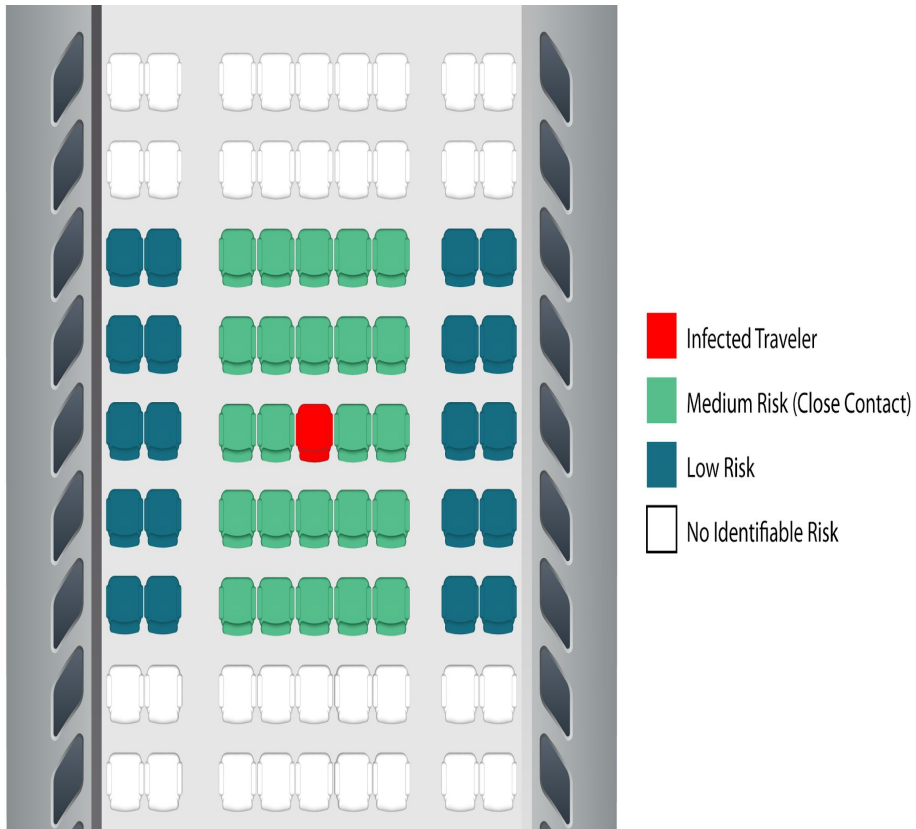
- Filters 95% of very small (0.3 micron) particles
- Fits tighter to the face (fit testing required)
  - Meant to help protect the wearer from inhaling infectious droplets in the environment
- Long term wear is difficult
- Despite these masks (and other protective equipment) over 500 health care workers in Wuhan have reportedly contracted COVID-19

# What about masks?

- BOTTOM LINE: CDC does not recommend the routine use of masks in the community.
- Prevent the spread illness by:
  - Hand washing/use hand sanitizers
  - Don't touch your face
  - Cover your cough
  - **STAY HOME WHEN SICK!!!!**



# Is it safe to travel by plane?



- Despite “conventional wisdom” to the contrary:
  - Modern airliners HEPA filter air to level of an operating room.
  - Much of the air that comes through the vents is fresh outdoor air that is heated.
  - Limited transmission of viruses.
  - **Open up those air vents and let the filtered air flow over you.**

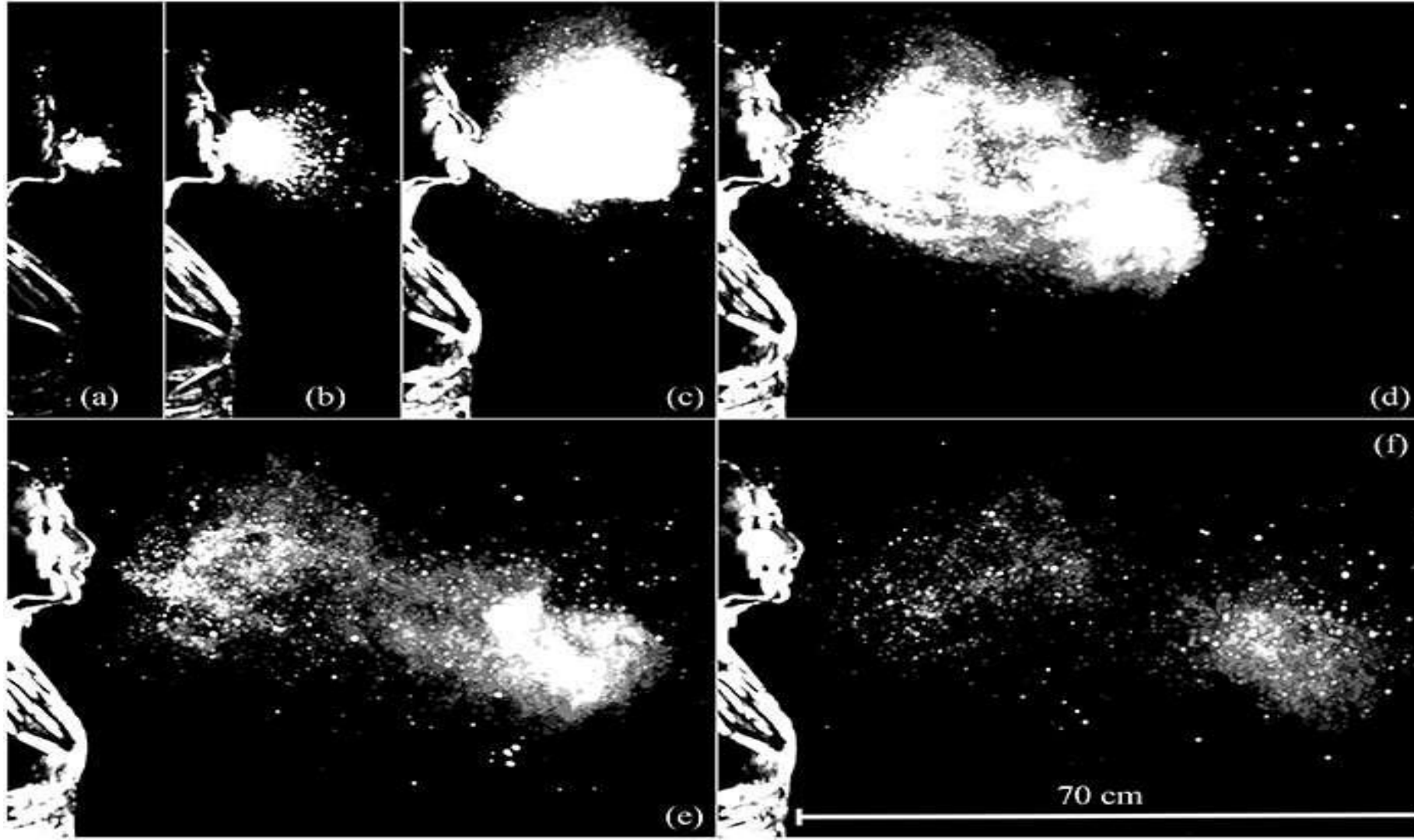


# How should I talk to my kids about COVID 19?



- Be honest but don't overshare
  - Meet them where they are at developmentally
  - Ask them, "What have you heard?"
  - Talk in a calm state; soothing voice
  - Discuss prevention-handwashing, elbow coughing, etc.
  - **Review and model basic hygiene and healthy lifestyle practices!**
- Resources
    - National Association of School Psychologists
      - [https://www.nasponline.org/resources-and-publications/resources-and-podcasts/school-climate-safety-and-crisis/health-crisis-resources/talking-to-children-about-covid-19-\(coronavirus\)-a-parent-resource](https://www.nasponline.org/resources-and-publications/resources-and-podcasts/school-climate-safety-and-crisis/health-crisis-resources/talking-to-children-about-covid-19-(coronavirus)-a-parent-resource)
    - Brain Pop Jr.
      - <https://www.brainpop.com/health/diseasesinjuriesandconditions/coronavirus/>

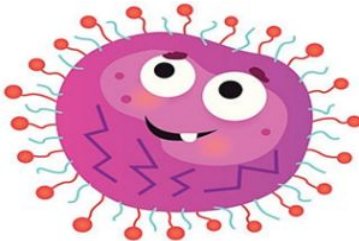
# What can I do to protect myself and my family?



# Thanks for your attention



COLD VIRUS



VIRUS INFLUENZA

DNA VIRUS

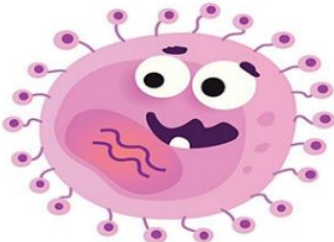


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QUESTIONS?