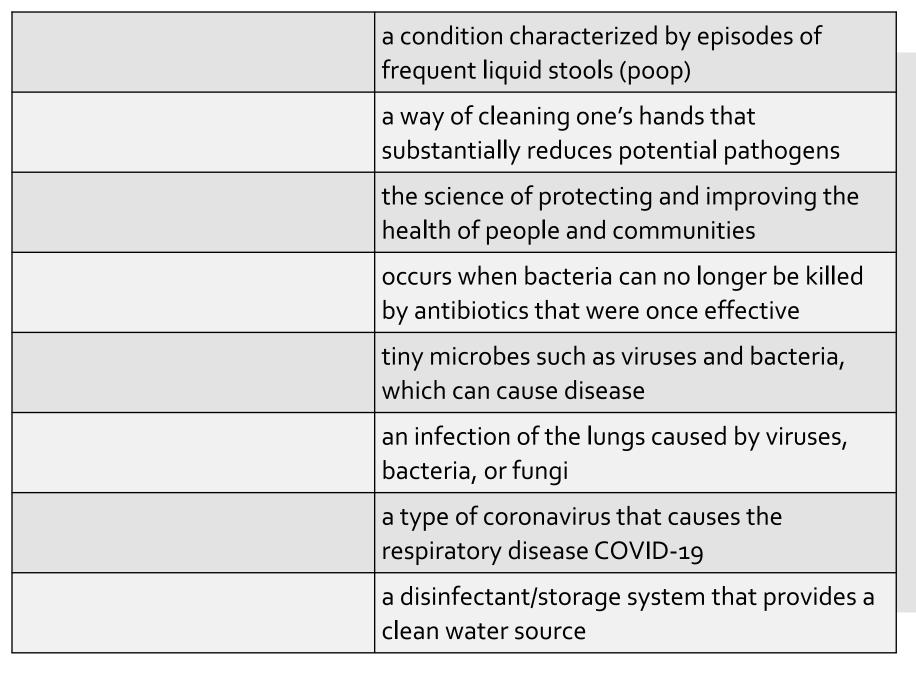
# Hand Hygiene DAVID J. SENCER CDC MUSEUM PUBLIC HEALTH ACADEMY





Word Bank antibiotic resistance diarrhea germs hand hygiene pneumonia public health Safe Water System SARS-CoV-2









### Understanding Hand Hygiene

- Handwashing after contacting hazardous materials is an important habit to maintain your health
- Feces (poop) from people or animals contains **germs** that can cause **diarrheal** or respiratory infections
- Touching raw meats, contaminated objects, or people who are infected with a disease can make you sick









- When do you generally wash your hands?
- 2. What barriers might people have that prevent them from washing their hands?
- 3. How has COVID-19 changed your hand hygiene behaviors?





# Hand Hygiene and CDC

- About 1.8 million children under age 5 die annually from diarrheal diseases and pneumonia
- Handwashing could prevent in young children...
  - 1 out of 3 diarrheal diseases
  - 1 out of 5 respiratory infections
- Estimated global handwashing after using the toilet is only 19%
- Handwashing education and access to soap in schools can improve attendance and child development
- If handwashing isn't possible, alcohol-based hand sanitizers with at least 60% alcohol can be used to get rid of most **germs**





# Hand Hygiene and CDC

#### When to Wash Your Hands

- Before, during, and after preparing and eating food
- Before and after caring for someone who is sick with vomiting or diarrhea
- After using the toilet or cleaning up a child who has used the toilet or a diaper
- Before and after treating a cut or wound
- After blowing your nose, coughing, or sneezing
- After touching an animal, animal feed, animal waste, or treats
- After touching garbage
- Before and after touching your eyes, nose, mouth, or face mask due to COVID-19
- After interacting with high-touch surfaces like doors, tables, and checkouts due to COVID-19





# Hand Hygiene and CDC

- CDC Safe Water System (SWS)
  - Provides a source of clean water as well as storage
  - Used for drinking and sanitation
  - Distributed to places without access to clean water
  - Used heavily during outbreaks, natural disasters, and other emergencies to improve sanitation and reduce disease













- 1. What effects can proper hand hygiene have on the health of a community?
- 2. Why do you think handwashing is so important during food preparation?
- 3. How can education play a role in improving rates of childhood illness?





# From the Expert



https://youtu.be/eZw4Ga3jg3E







- 1. CDC recommends you wash your hands for at least 20 seconds. How does this make a difference in its effectiveness?
- 2. Why is art an important part of public health? Can you think of any examples of art pieces or graphics you have seen that have public health messages?
- 3. How can **antibiotic resistance** that develops in one person ultimately end up affecting an entire community?





#### Call to Action!

- 1. Develop an effective handwashing process.
- 2. Create hand hygiene art.
- 3. Share your findings.

Why do you think participation is important?

### Give it a Try





# Use the Engineering Design Process

Operation Operation	Define the problem
Research	Do background research
Requirements	Specify requirements
Brainstorm	Develop solutions
× Build	Build a prototype
<b>Test</b>	Test and redesign
Share	Communicate results





### 1. Develop an Effective Handwashing Process

- Cover the area to protect from paint drips
- Use paint on gloved hands with your eyes closed to simulate washing your hands
- Examine your paint coverage to determine how effective your normal handwashing method is
- Develop a more effective handwashing method that cleans your entire hands
- Try the WHO handwashing method

### Give it a Try





### 2. Create Hand Hygiene Art

- Review the art exhibition *Watching Hands:*Artists Respond to Keeping Well on the David J. Sencer CDC Museum website
- Create your own piece of handwashing art in response to this question:

How can art communicate and interpret the practice of one of the most simple and effective disease prevention strategies – handwashing?

### Give it a Try





### 3. Share Your Findings

- Instagram @CDCmuseum



# Give it a Try





# Questions?





