Hand Hygiene

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PUBLIC HEALTH ACADEMY

Word Bank

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

	a condition characterized by episodes of frequent liquid stools (poop)
	a way of cleaning one's hands that substantially reduces potential pathogens
	the science of protecting and improving the health of people and communities
	occurs when bacteria can no longer be killed by antibiotics that were once effective
	tiny microbes such as viruses and bacteria, which can cause disease
	an infection of the lungs caused by viruses, bacteria, or fungi
	a type of coronavirus that causes the respiratory disease COVID-19
	a disinfectant/storage system that provided a clean water source

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

Think About It

1. When do you generally wash your hands?

2. What barriers might people have that prevent them from washing their hands?

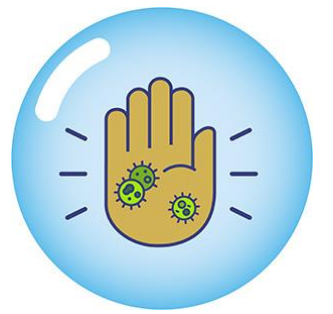3. How has COVID-19 changed your **hand hygiene** behaviors?

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)
  - Provided 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

Think About It

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

Think About It

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

❓	Define	Define the problem
🔍	Research	Do background research
✔	Requirements	Specify requirements
🧠	Brainstorm	Develop solutions
🔧	Build	Build a prototype
📋	Test	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

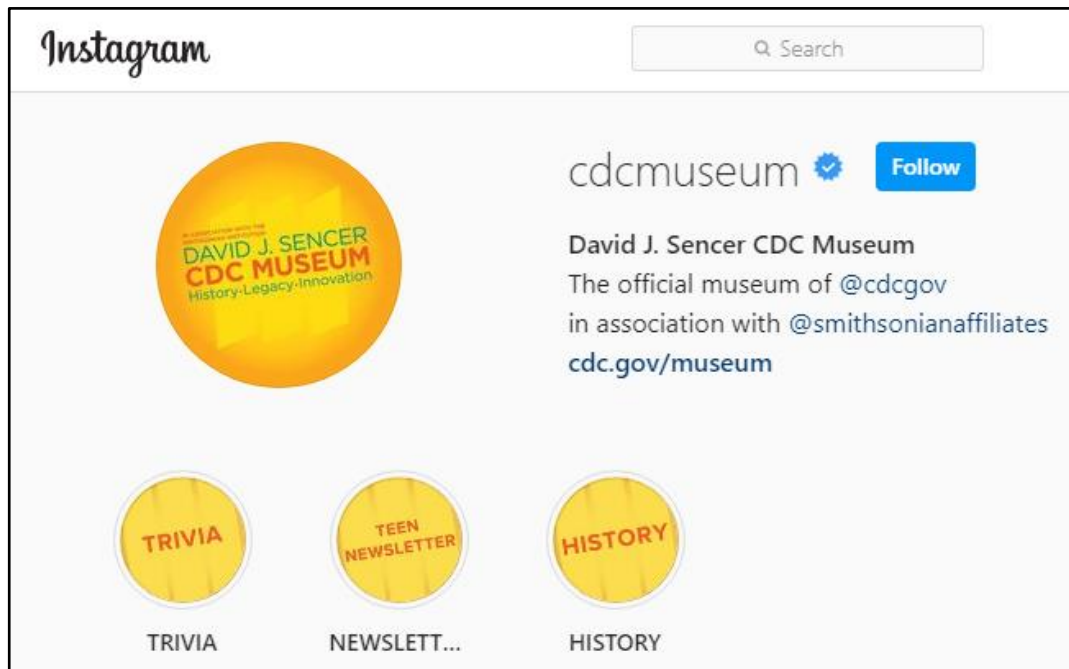Give it a Try

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?