



# LET'S BE CLEAN OF COVID 19



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*"My Heart  
to Greater  
Loyalty..."*

The Oklahoma State University STEMist interns are not certified medical professionals. All information provided in these handouts are derived directly from the Centers for Disease Control and Prevention, are mandated and approved by Oklahoma State University to its employees and students, and/or is referenced directly from trusted sources.

Visit with a trusted parent or guardian for any further questions about COVID 19. Visit credible sources such as the Centers for Disease Control and Prevention for more information regarding the coronavirus pandemic.

# Let's Be Clean of COVID 19

## OVERVIEW

The recent outbreak of COVID 19 has uprooted life as we knew it. Take a look at the way our lives have transformed in Oklahoma, the United States and the rest of the world in just a few short months. Though these adjustments have been grueling to get used to, our civic duty to protect others and ourselves is of utmost importance. Today, we will discuss the coronavirus, how it works, and how we, as civic protectors, can help to bring the global pandemic to an end. Get ready to learn about viral structures, and armor up as we ward off the bad virus with soap, water, and hand sanitizer shields.

Viruses and bacteria are two kinds of germs that have been around our entire lives. They are often the culprits of the common colds and illnesses we experience year after year. We are able to be proactive and vaccinate for many illnesses such as the flu and smallpox, and we can even take antibiotics to heal bacterial infections. However, the novel coronavirus operates in a manner that has never been studied until now. This is an upper respiratory tract illness that has not previously been seen in humans. The common cold is a mild form of an upper respiratory tract illness sourced from a type of human coronavirus. However, [the COVID 19 outbreak is from a novel strain of coronavirus that has not previously been seen or researched.](#) According to the [CDC](#), symptoms of COVID 19 are, "Fever or chills, cough, shortness of breath or difficulty breathing, fatigue, muscle or body aches, headache, new loss of taste or smell, sore throat, congestion or runny nose, nausea or vomiting, and/ or diarrhea."



# Let's Be Clean of COVID 19

## EXPLANATION

Though the idea of being infected by the coronavirus is frightening, it is important that you know these steps and practice them habitually. Make these practices a habit to promote proper hygiene and ultimate protections.

The CDC recommends that you [wash your hands](#) for at least 20 seconds before eating or preparing food, before touching your face, after using the restroom, after leaving a public place, after blowing your nose, coughing or sneezing, after handling your face covering and gloves, after changing a diaper, after caring for someone who is sick, or after touching animals or pets.

Close contact is discouraged. If someone within your household is sick, the CDC recommends that you [stay at least six feet away](#) from the sick individual. In public places or other high traffic areas, the CDC recommends that you keep at least six feet distance from people that do not live in your direct household.

The CDC also recommends that people above the age of two without implications to prevent breathing should wear a [cloth face covering](#) when around others. Be sure to join us tomorrow to learn more and see how you can make your very own cloth face covering!

Along with regular cleaning and sanitation, the CDC recommends that you should cover your mouth and nose when coughing or sneezing, and be sure to wash your hands or sanitize your hands with a sanitation solution that is at least 60% alcohol.

It is important to monitor your health daily. The CDC states that you should be [alert for symptoms](#), take your temperature if you experience any symptoms, and follow CDC guidelines if you are sick.



4-H STEM



# ACTIVITY

## MATERIALS NEEDED

Empty soap airplane bottle	2/3 cup of rubbing alcohol
Small mixing bowl	1/3 cup aloe vera gel
Spoon	5-10 drops of your favorite essential oil
Funnel	(use antibacterial oils if possible)



## STEPS

Today, we will learn to be defensive players in the battle against the coronavirus. We will make our own hand sanitizer and soap to use as proactive measures to protect ourselves and our loved ones from this pandemic. Talk with a parent or guardian about the coronavirus as we learn more about COVID-19.

Let's begin by making our own hand sanitizer to use on the go. Hand sanitizer is an effective way to kill germs on your hands quickly. Washing your hands for at least 20 seconds is more preferable than using hand sanitizer because it removes those harmful germs from your hands, hand sanitizer is still an effective way to reduce germ life on your body. Let's make our very own vial of hand sanitizer for quick defense on the go!

Step 1: Measure out 2/3 cup of rubbing alcohol and then empty it into your small mixing bowl.

Step 2: Measure out 1/3 cup of aloe vera gel and then empty it into your small mixing bowl.

Step 3: Stir the rubbing alcohol and aloe vera gel until they are mixed well.

Step 4: Add 5-10 drops of your favorite essential oil (eucalyptus, peppermint, lemongrass).

Step 5: Stir the contents of your solution until they are mixed well.

Step 6: Place your funnel into the top of your opened airplane bottle. Slowly pour the contents of your solution into the funnel until your bottle is filled.

Step 7: Firmly secure the cap on your bottle and carry it with you to use whenever you are unable to wash your hands with soap and water.



# ACTIVITY

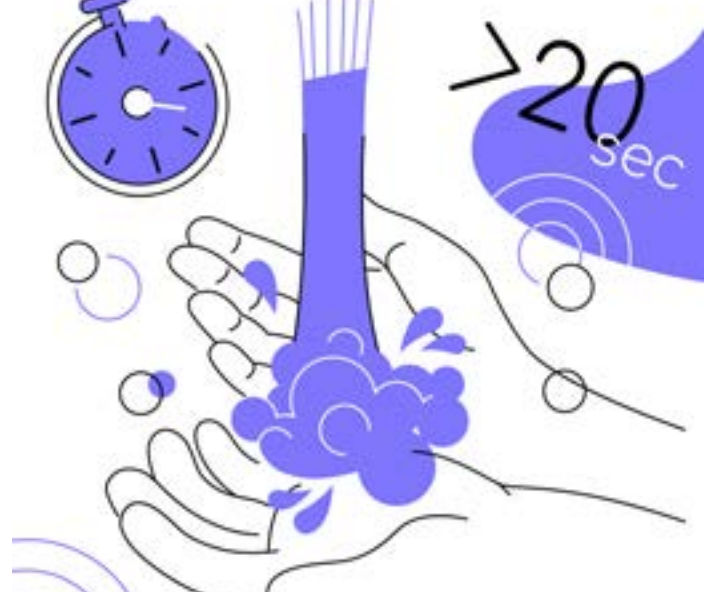
## MATERIALS NEEDED

Foam Soap Dispenser (preferably glass)

Funnel,

1/4 cup Castile Soap

10-15 drops of your favorite essential oil (use antibacterial oils if possible)



## STEPS

Hand sanitizer is an effective way to clean your hands, but washing your hands for at least 20 seconds is the superior way to clean your hands of all the germs and grime. In this activity, we will be making our own hand soap to effectively cleanse our hands.

Step 1: Measure out 1/4 cup of castile oil and then empty it into your foaming soap dispenser.

Step 2: Add 10-15 drops of your favorite essential oil (eucalyptus, peppermint, lemongrass, or lavender).

Step 3: Slowly fill the rest of the foaming soap dispenser with water.

Step 4: Place your foaming hand soap dispenser near the sink in your kitchen, bathroom, or mudroom and use warm running water to wash your hands for at least 20 seconds.



# RESOURCES AND SUPPLEMENTARY MATERIALS

[BrainPop Coronavirus Video](#)

[CDC Key Times to Wash Your Hands Youtube Video](#)

[Do It Yourself Bleach Sanitizer Solution Youtube Video](#)

[How To Make Your Own Hand Sanitizer Youtube Video](#)

[Humans vs. Viruses Ted- Ed- Cell vs. Virus: A Battle for Health](#)

[Humans vs. Viruses Ted- Ed- What is a Coronavirus?](#)

