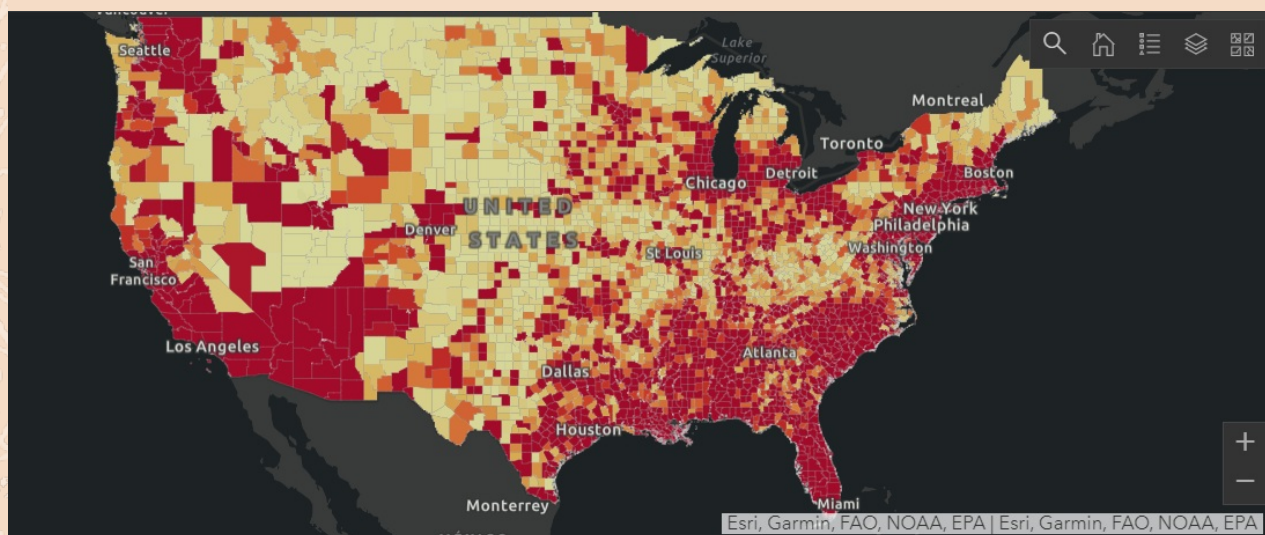


Women's Health Awareness Transforming Communities by Enhancing Women's Health



Issue X: August 4, 2020

The Coronavirus Has Mutated: Learn How to Protect Yourself and Your Family



The coronavirus continues to loom across the United States and is spreading like an uncontrolled wildfire. According to data provided from the [Johns Hopkins University Coronavirus Resource Center](#), new COVID-19 cases have reached 4.7 million, with more than 155,000 deaths. Many Southern states have surpassed the infection rates of New York, the initial hot spot for the U.S.

Potential Reason for Spread

What is the reason for this spike in coronavirus cases? Many states reopened too soon as the virus had not reached its peak in those states. Some states were slow in mandating the necessary requirement of wearing masks, and many Americans are not following public health recommendations that would help mitigate the spread of this deadly disease.

There may be important science-related pieces to this puzzle. Recent data provides evidence that the original coronavirus, scientifically known as D614, has mutated or changed to a G614 form of the virus. Scientists are still trying to understand what this mutation means; however, they have found that the D614, which is the original form of the virus, is virtually

gone across the globe, and has been replaced by the G614 form of the virus in almost every nation and region. Scientists speculate that this mutated form of the virus allows the virus to bind more easily to normal cells within the human body.

Increased Transmission from Person to Person

According to a recent study published in [Cell](#), the new mutation may allow easier transmission from person to person. Unlike the original version of the coronavirus, which multiplied in the lungs, the mutated form of the virus, appears to thrive and multiply within the upper respiratory track causing a higher viral load and transmissibility. Consequently, when individuals sneeze, cough, talk, or sing they emit more virus particles via respiratory droplets from the nose, throat, and sinuses. Researchers attribute ease of transmission to this change of location in the body where the virus multiplies.

Additionally, a [new study](#) published on July 30 finds that children may carry coronavirus at very high levels. Researchers found that children infected with COVID-19 have as much of the coronavirus in their upper respiratory tract (nose, throat, and sinuses) as infected adults. Surprisingly, children younger than 5 years of age may host 10 to 100 times greater amount of virus in their upper respiratory tract than children older than 5 years of age and adults. These findings suggest that children with mild to moderate symptoms have similar viral loads as adults and in some instances, higher viral loads than adults and may be more likely to transmit the coronavirus to other children and adults. This is important information to consider concerning transmissibility of the virus between individuals within the household and considerations on opening in-person classes.

Airborne Transmission

Recent data suggest that because the SARS-CoV-2 (COVID-19) respiratory droplets are lighter, the spread is more by airborne transmission than by contact on surfaces. Airborne transmission means that the coronavirus droplets are lingering in the air for longer periods of time. This allows the coronavirus to travel further than the original CDC-recommended 6 feet social distancing. A [recent article](#) in the Journal of American Medical Association Network, indicates that speaking and coughing produces a mixture of both droplets and aerosols. These secretions can travel together up to 27 feet which allows the mutated coronavirus to remain suspended in the air for hours. Investigators also suggest that the virus can now be recovered from air samples in hospitals, and that poor ventilation prolongs the amount of time that aerosols remain airborne.

Here are some tips to decrease airborne transmission of the coronavirus in your homes, cars, workplaces, schools and churches.

[Increase ventilation with outside air](#)

- In your home, open or crack your windows and

[Improving natural ventilation](#)

- Consider using indoor fans in combination with open doors or windows to

screen doors to allow outside air to come in and inside air to go out.

- You can operate a window air conditioner that has an outdoor air intake or vent.
- Use your bathroom fan while bathroom is in use, and continuously if possible.
- Crack your windows while riding in your car and do not use the recirculate air option especially while riding with others.

further increase ventilation.

- For additional ventilation, multiple fans can be used, pushing air out of one window and drawing it in from another.
- To reduce risks of airborne transmission, direct the airflow of the fan so that it does not blow directly from one person to another.

Use HVAC system and consider upgrading filters

- Replace air filters when necessary.
- Run the system fan for longer times, or continuously, as HVAC systems filter the air only when the fan is running.
- Many systems can be set to run the fan even when no heating or cooling is taking place.
- Check to be sure the filter is correctly in place and consider upgrading the filter to a higher efficiency filter or the highest-rated filter that your system fan and filter slot can accommodate.

Use a portable air cleaner if you have one

- Air purifiers can help reduce airborne contaminants including viruses in a home or confined space. However, by itself, a portable air cleaner is not enough to protect people from COVID-19.
- When used along with other best practices recommended by the [CDC](#), operating an air cleaner can be part of a plan to protect yourself and your family.
- Place the air cleaner in the room you spend the most time in or where vulnerable people spend the most time.

Due to ventilation concerns, people should be cautious about dine-in restaurants. Other recommended options include use of outdoor venues or outdoor seating and take-out or curbside service. Until community spread of COVID-19 is reduced to a 5% positive rate, it is recommended that you still practice adequate social distancing. The [CDC](#) provides considerations for bars and restaurants that are resuming operations during the pandemic. Watch this [YouTube video](#) to learn more about the CDC recommendations for bars and restaurants.

The Environmental Protection Agency (EPA) recommends that proper

ventilation should be increased with outdoor air. If outdoor seating is available, use that option to decrease potential exposure. The EPA suggest reconfiguring building spaces and furnishings to reduce airborne transmission of COVID-19 for shared public spaces. The EPA shares other [additional protection measures](#) that should be considered for public indoor spaces.

Until the medical community, public health officials, and the at-large community work together to decrease the spread of this pandemic in the U.S., it is vital that people continue to protect themselves from this evolving virus by practicing the recommended [CDC](#) and [EPA guidance](#).

FAST FACTS!!!

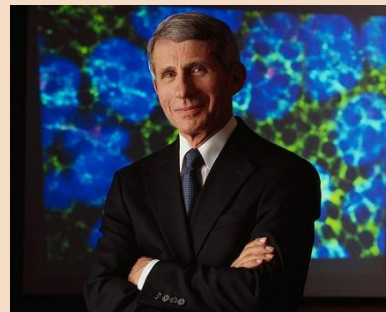


BEWARE!! Dangerous hand sanitizers are beginning to flood the U.S. market. There has been a rise of lethal hand sanitizers that use methanol instead of the preferred ethanol or isopropyl alcohol coming into the U.S. Methanol can cause methanol poisoning which could be lethal. [The Food and Drug](#)

[Administration \(FDA\)](#) is adding companies to a list urging consumers to not use certain hand sanitizer products. ***Make sure you read the active ingredients label before purchasing.***

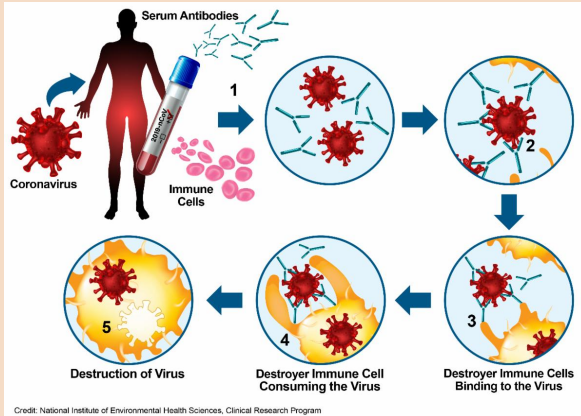
[Click Here to Learn More Information](#)

Phase 3 for clinical trials for COVID-19 vaccine. A Phase 3 clinical trial designed to evaluate if an investigational vaccine can prevent symptomatic COVID-19 in adults has begun. The vaccine, known as mRNA-1273, was co-developed by the National Institutes of Health, National Institute of Allergy and Infectious Diseases (NIAID) and Moderna, Inc.,



a biotechnology company based in Cambridge, Massachusetts. The trial will be conducted at U.S. clinical research sites and is expected to enroll approximately 30,000 adult volunteers who do not have COVID-19. **As African Americans, Latinos, Native Americans, and the elderly are the most affected populations, not only acquiring but dying from this disease, it is important that these groups participate in this clinical trial to assist scientist in determining if this vaccine will provide effective immunity for these vulnerable populations. Adults who are interested in joining this study can visit www.coronaviruspreventionnetwork.org or visit ClinicalTrials.gov and search identifier NCT04470427 to find a study center to volunteer. ClinicalTrials.gov includes a complete listing of study locations.**

[Click Here for More Information](#)



Do you remember the WHA health message about COVID-19 antibodies? A recent study suggests that immune T cells (destroyer immune cells) may offer lasting protection against COVID-19. Our memory T cells may protect us against the virus by remembering past encounters with other [human coronaviruses](#). This may explain

why some people are able to fend off the virus and are less susceptible to becoming severely ill with COVID-19.

[Click Here For More Information](#)

We're Better Together

You Are Not Alone

Help is available if you or someone you care about is in a crisis and feels overwhelmed with emotions like sadness, depression, or anxiety.

For support or help, contact the [Disaster Distress Helpline](#) at **800-985-5990**, **Text TalkWithUs to 66746**. **TTY 1-800-846-8517**. Or contact the [National Suicide Prevention Lifeline](#) at **800-273-8255**.

Call 911 if you or others you know want to harm themselves.

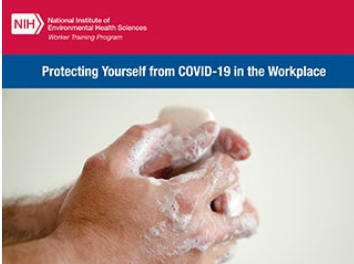
A New COVID-19 Crisis: Domestic Violence

In the mist of the COVID-19 pandemic, domestic violence is on the rise. If you or someone you know is experiencing domestic violence and needs support, call 1-800-799-7233 or 1-800-787-3224 for TTY. **If you're unable to speak safely, there is an online chat. You can visit: <https://thehotline.org> or text **LOVEIS** to **22522**.**

If you are in a domestic violence crisis, go to a safe place and call 911.

Information for Front-Line Workers

Training is available for essential and front-line workers to protect



themselves. The National Institute of Environmental Health Sciences (NIEHS) [has a training website](#) for essential and front-line workers to learn how to protect themselves from exposure to COVID-19.

Do you work in the restaurant industry? Educate yourself about implementing best practices to reduce the transmission of COVID-19 in restaurants. Click here for [Reopening Guidance for the Restaurant Industry](#).

Testing Sites for COVID-19 in Durham, Raleigh and across the Triangle

If you need to be tested for COVID-19, please see the COVID-19 testing sites below. Call ahead as appointments may be required.

Community testing events may provide COVID-19 testing at no cost. [Click here for more information](#).

Attention Durham County residents: The Durham County Department of Public Health has developed a unique tool to serve as a resource in locating COVID-19 testing facilities near you.

[Click Here for More Information](#)

DURHAM COUNTY COVID-19 TESTING SITES

- [Avance Care in Durham](#)
- [Duke Primary Care Croasdaile in Durham](#)
- [Duke Regional Hospital in Durham](#)
- [Duke University Hospital in Durham](#)

ORANGE COUNTY COVID-19 TESTING SITES

- [IndyCare Health in Hillsborough](#)
- [UNC Hospitals in Chapel Hill and in Hillsborough](#)

CHATHAM COUNTY COVID-19 TESTING SITES

- [Avance Care - South Chapel Hill in Chapel Hill](#)

WAKE COUNTY COVID-19 TESTING SITES

- [Avance Care: curbside COVID-19 testing at all 15 locations, which include:](#)
 - Apex, Cary, West Cary, Central Raleigh, North Raleigh, Northeast Raleigh, Northwest Raleigh, Garner, Holly Springs, Knightdale, Morrisville, and Wake Forest
- [Advance Community Health in Raleigh](#)
- [FastMed Urgent Care Walk-in Clinic in Apex, Garner \(N.C. 42\) and Raleigh \(Creedmoor Road\)](#)
- [Duke Primary Care in Apex](#)
- [Duke Raleigh Hospital in Raleigh](#)
- [Duke Urgent Care at Brier Creek and Harps Mill in Raleigh](#)

JOHNSTON COUNTY COVID-19 TESTING SITES

- [Avance Care in Clayton](#)

- [PM Pediatrics Urgent Care in Morrisville](#)
- [UNC Rex Hospital in Raleigh](#)
- [WakeMed and WakeMed Key Community Care](#)

This communication was developed by the Office of Human Research Compliance, Clinical Research Branch, National Institute of Environmental Health Sciences.

For additional information or if you have any questions, please contact
whad@niehs.nih.gov or 919-541-3852

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