



COVID-19 and Tobacco: Trends, Strategies, Resources and Impact

March 29, 2021



Our Vision

A World Free of Lung Disease



COVID-19 Action Initiative

The American Lung Association's \$25M initiative to end COVID-19 and defend against future respiratory virus pandemics.



COVID-19 Action Initiative

A 3-Year Investment to End COVID-19 and Prevent Future Pandemics

Research

To develop and deploy resources for innovative, life-saving research for detection and treatments.



Education

To reduce the spread of disease by increasing awareness and offering trusted resources.



Advocacy

To advocate for policies that will impact public health and support patients' access to healthcare.



Coalition

Convene public and private organizations to ensure preparedness in the face of respiratory viruses

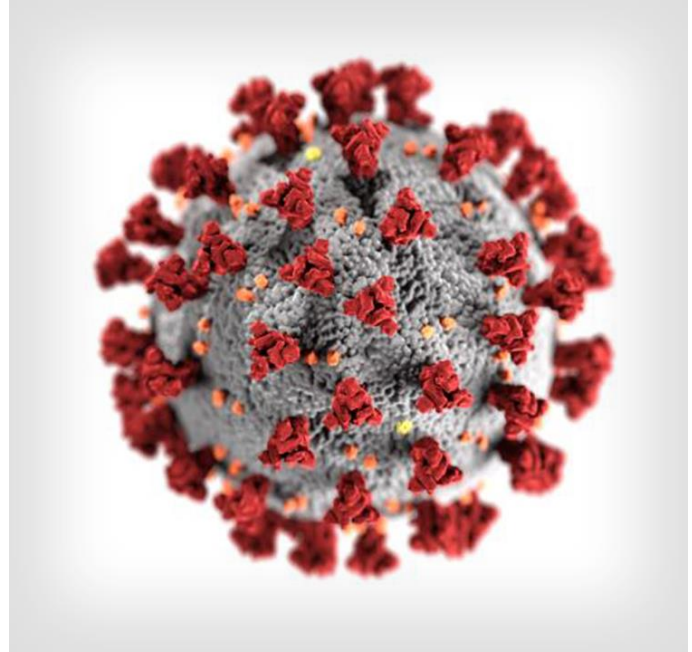




COVID-19 & Tobacco Trends

COVID-19 Basics

- ✓ COVID-19 is a new lung disease caused by SARS-CoV-2, a novel coronavirus first detected in 2019.
- ✓ Anyone can be infected by SARS-CoV-2, but some individuals are more likely to be in situations that might expose them to the virus.
- ✓ The majority of people recover from COVID-19 within a few weeks, but it can be life-threatening and pose ongoing symptoms long after diagnosis, even for people who are not high risk for severe illness.
- ✓ COVID-19 continues to spread across the United States.



Who is at Risk for Severe Symptoms?

- Risk increases with age with the greatest risk being to those over 85 years of age
- People who have serious chronic lung conditions like:
 - COPD
 - Current diagnosis of cancer
 - Current or former tobacco user
 - Immunocompromised from solid organ transplant
- Having other lung diseases, such as pulmonary fibrosis, cystic fibrosis or moderate-to-severe asthma *might* increase your risk of severe illness.



Racial/Ethnic Disparities and COVID-19

Addressing Health Inequity

Rate ratios compared to White, Non-Hispanic persons	American Indian or Alaska Native, Non-Hispanic persons	Asian, Non-Hispanic persons	Black or African American, Non-Hispanic persons	Hispanic or Latino persons
Cases ¹	1.7x	0.7x	1.1x	1.3x
Hospitalization ²	3.7x	1.0x	2.9x	3.1x
Death ³	2.4x	1.0x	1.9x	2.3x

Race and ethnicity are risk markers for other underlying conditions that affect health including socioeconomic status, access to health care, and exposure to the virus related to occupation, e.g., frontline, essential, and critical infrastructure workers.

<https://www.cdc.gov/coronavirus/2019-ncov/covid-data/investigations-discovery/hospitalization-death-by-race-ethnicity.html>. Accessed 13/21/21

The Role of Facial Coverings

N95s, surgical masks, cloth coverings, face shields

**Recommended
for frontline
workers**



Recommended for public use

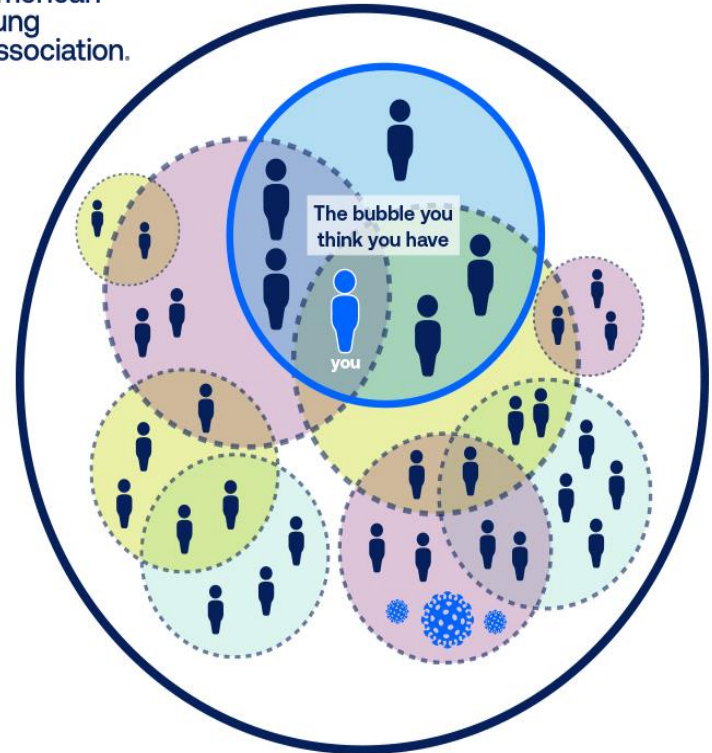


Not Recommended



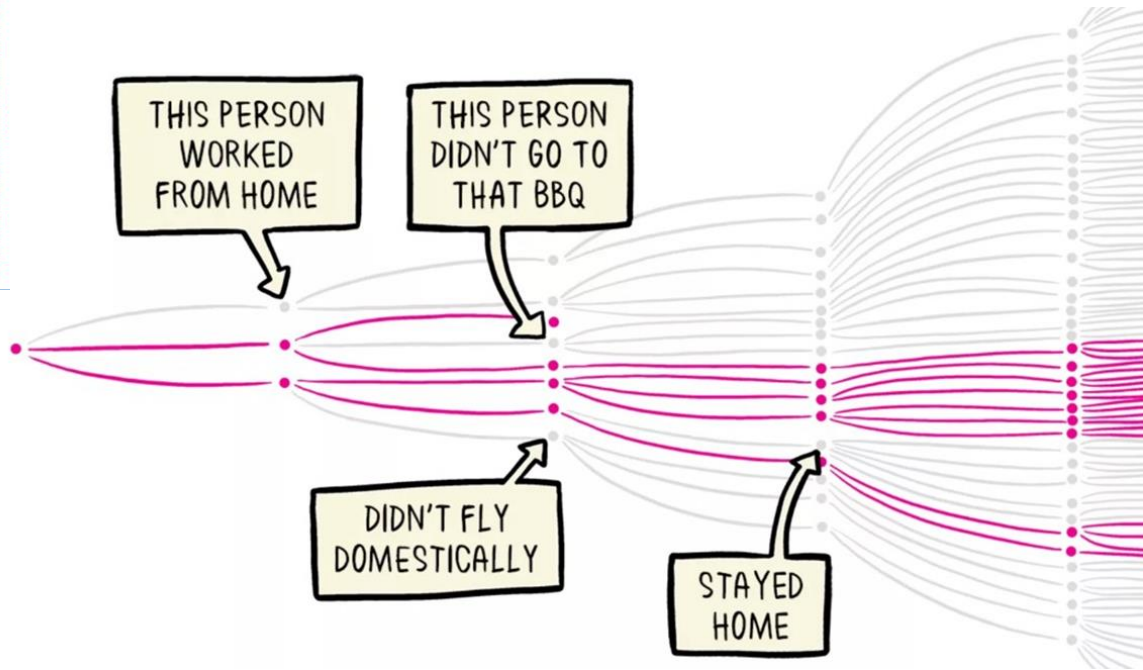
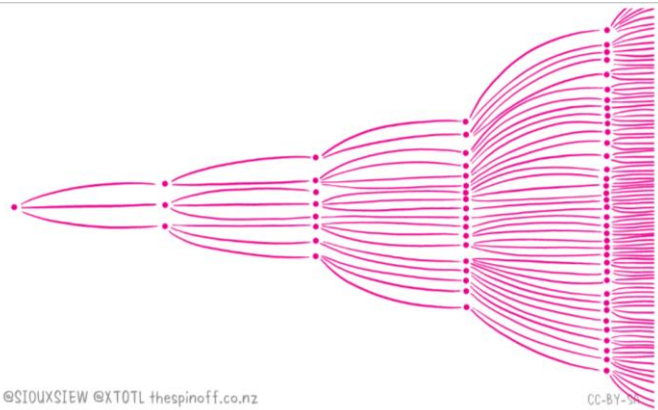
Social Distancing

- ✓ Viruses don't move around on their own. People move them from place to place.
- ✓ Individuals who are asymptomatic or not yet showing symptoms are shedding virus and infecting others.
- ✓ Maintaining physical distancing from others stops the spread of disease.

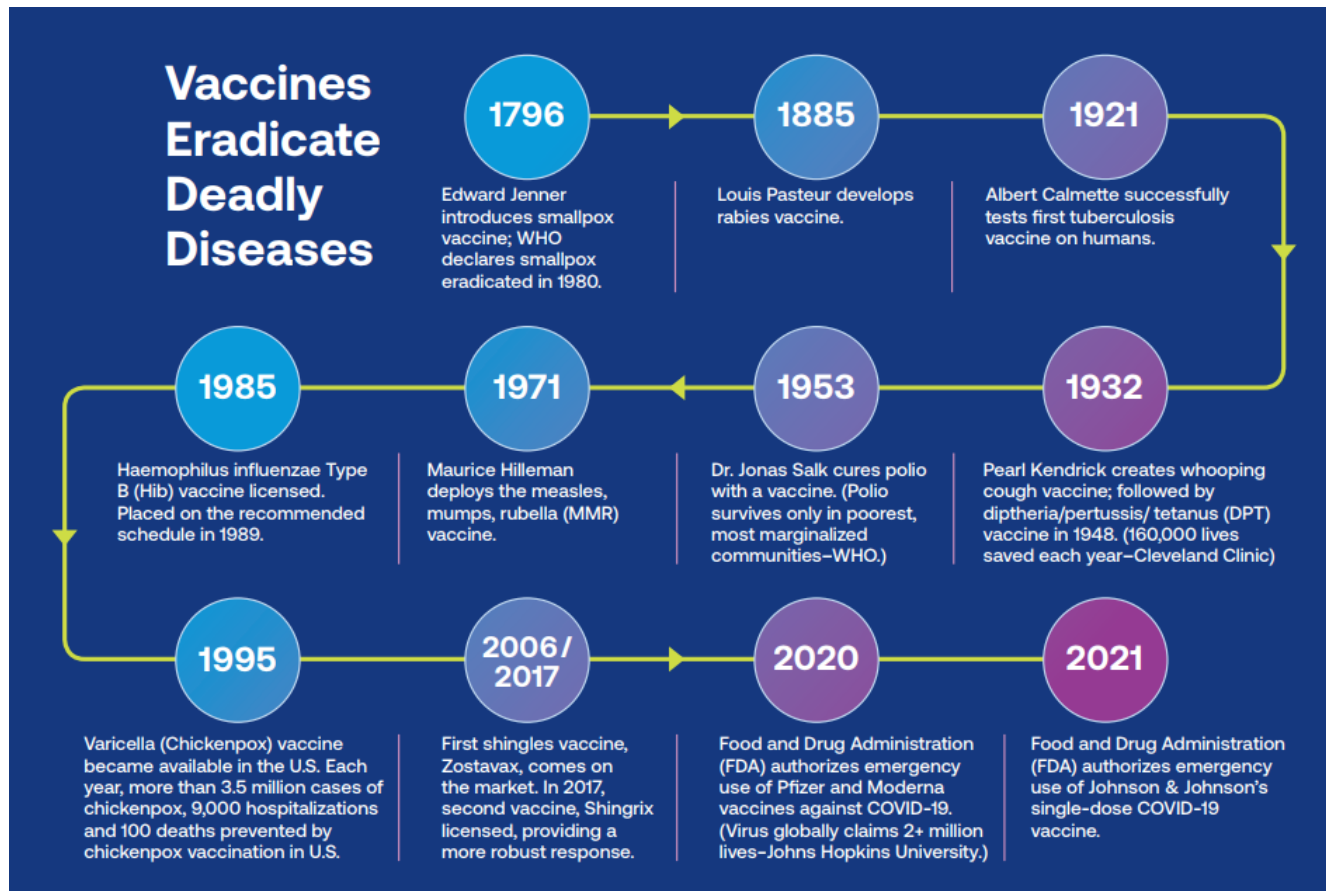


The bubble you **actually** you have

Social Distancing Works






Vaccines – A Public Health Success Story

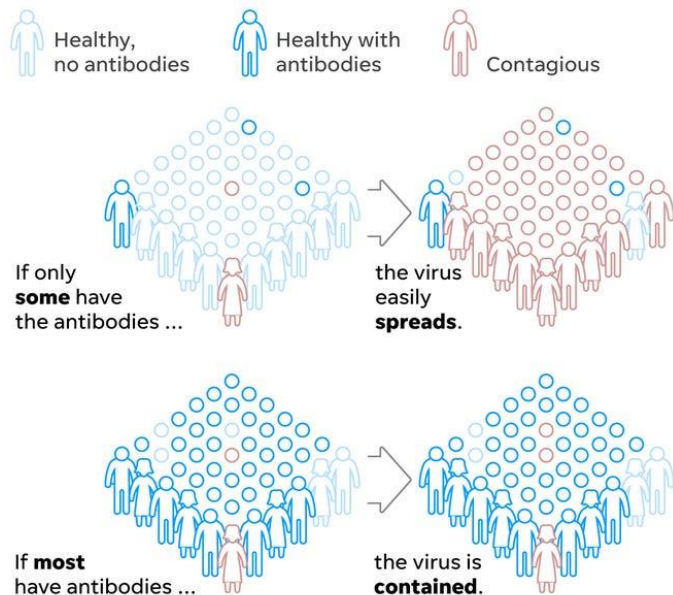


Three Types of Vaccines

- ✓ A vaccine stimulates your immune system so you produce the same antibodies you would make if exposed to the actual disease.
- ✓ Your body learns to recognize and fight an invasion of that particular germ.
- ✓ You develop immunity to the disease without having to get the disease first.

Types of vaccines	DNA and RNA	Subunit	Viral vector
			
How it works	This vaccine uses DNA or RNA molecules to teach the immune system to target key viral proteins.	This vaccine uses a piece of a virus' surface to focus your immune system on a single target.	This approach takes a harmless virus and uses it to deliver viral genes to build immunity.
Advantages	Easy and quick to design.	Focuses the immune response on the most important part of the virus for protection and cannot cause infection.	Live viruses tend to elicit stronger immune responses than dead viruses or subunit vaccines.
Disadvantages	Never been done before. There are no licensed DNA or RNA vaccines currently in use.	May not stimulate a strong response, other chemicals may need to be added to boost long-term immunity.	Important to pick a viral vector that is truly safe. An immune response to the viral vector could make the vaccine less effective.
Existing examples	<ul style="list-style-type: none"> • None 	<ul style="list-style-type: none"> • Pertussis • Hepatitis B • Human papillomavirus (HPV) 	<ul style="list-style-type: none"> • Ebola • Veterinary medicine
Group testing this approach for COVID-19	<ul style="list-style-type: none"> • Moderna (RNA) • Inovio (DNA) • Pfizer (RNA) 	<ul style="list-style-type: none"> • Novavax • AdaptVac 	<ul style="list-style-type: none"> • University of Oxford & AstraZeneca • CanSino Biologics • Johnson & Johnson

Herd Immunity



How interventions affect herd immunity

Social distancing and other interventions can reduce the rate of new infectious disease cases. That delays when herd immunity is reached but also reduces deaths.

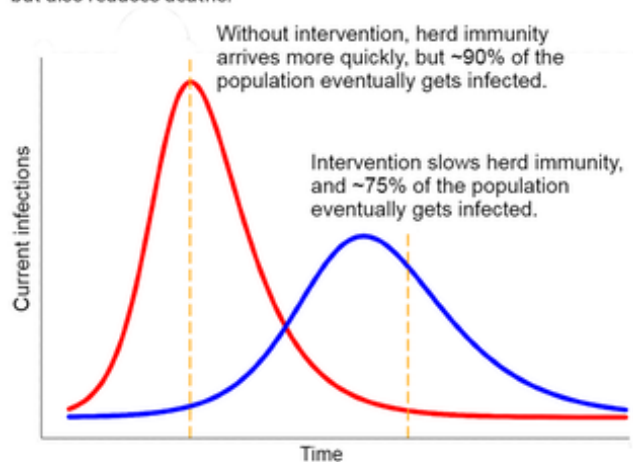


Chart: The Conversation, CC-BY-ND • Source: Joanna Wares

The virus does not magically disappear when the herd immunity threshold is reached. That is not when things stop — it is only when things slow down.

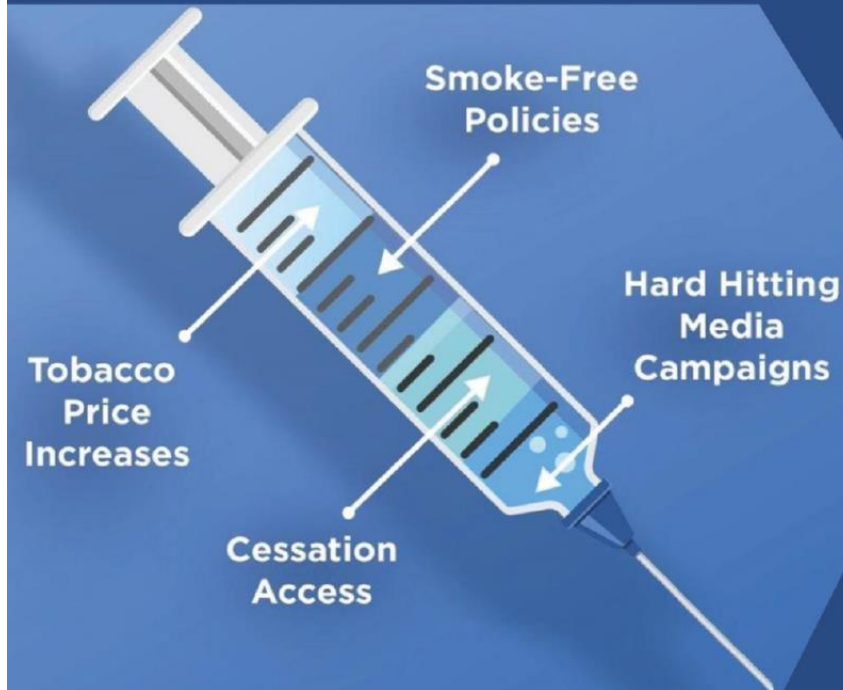
Quitting Smoking is Even More Important

- Smoking and vaping causes harm to the lungs, leaving lung tissue inflamed, fragile and more susceptible to infection
- Tobacco use harms the immune system, which is especially important in fighting viruses like COVID-19
- Quitting smoking and vaping is even more important now during the COVID-19 outbreak.



COVID-19 & Tobacco Strategies

We Know What Works



Vaccine Booster



Availability



Pricing and Promotion



Advertising and Display bans



Age of Sale



Retail Licensure

Source: King BA, Graffunder C. The Tobacco Control Vaccine: a population-based framework for preventing tobacco-related disease and death. *Tobacco Control* 2018;27:123-124. Kong AY, King B. *Tob Control*. 2020.

INDEPTH Training

Alternative to Suspension

INDEPTH informs teens about nicotine dependence and how they can end their addiction to all tobacco products, including e-cigarettes, as an alternative to suspension

*60% of student participants
reported that they were willing to quit e-cigarettes
after completing the program*

Take Action

Complete this training by visiting Lung.org/INDEPTH

Questions? Email INDEPTH@Lung.org

Not-On-Tobacco (N-O-T)

A cessation program created specific for teens, N-O-T is an evidence-based program that takes a holistic approach of behavior change that can then be applied and practiced in a teen's everyday life.

Approximately 90% percent of teens who participate in the program want to cut back or quit tobacco all together.

Take Action

Complete this training by visiting Lung.org/NOT

Questions? Email NOT@Lung.org

Quit, Don't Switch Healthcare Provider Training

- Ask, Advise, Refer to Quit, Don't Switch
- Brief tobacco intervention training
- Proven-effective cessation strategies
- 1-hour, on-demand
- CEUs available
- Available June 1 – Dec 31, 2020

Take Action

Complete this training by visiting

QuitDontSwitchTraining.Lung.org



Effective Quit Attempts

- All tobacco users can quit for good using approved quit smoking **medication** plus behavioral **counseling**
- There are seven Food and Drug Administration (FDA) – approved medications and three forms of counseling that are both safe and effective in helping smokers quit. FDA found these seven products to be safe and effective.

Comprehensive Tobacco Cessation Benefit:

Seven FDA-Approved Medications:

- NRT Gum (OTC)
- NRT Patch (OTC)
- NRT Lozenge (OTC)
- NRT Inhaler
- NRT Nasal Spray
- Bupropion
- Varenicline

Three Forms of Counseling:

- Individual
- Group
- Phone

Tobacco Cessation and Health Systems Change

Technical Assistance



Take Action:

Visit Lung.org/cessationTA

Email CessationTA@Lung.org

Join our listserv Support@CessationTA.Lung.org

Protecting Tobacco Control Programs

- Maintaining state tobacco control programs is key to ensuring the maximum number of people quit smoking
- But the funding environment is about to get much more challenging
- And we've already seen some states divert tobacco prevention and cessation funding to other purposes.



COVID-19 & Tobacco Resources

COVID-19 & Tobacco Resources



American
Lung
Association.

COVID-19 & Tobacco

Adults of any age that smoke are at increased risk of severe illness* from COVID-19.



Being a current or former cigarette smoker increases the risk for severe illness from COVID-19.¹

- Cigarette smoking compromises the immune system, is linked to lung inflammation and puts people at greater risk for pulmonary infection.²
- Smoking harms the airway lining cells that contain cilia³, which are our essential defenders against viruses like SARS-CoV-2.
- People who smoke have more ACE2 receptors in their lungs. The virus that causes COVID-19 uses these receptors as a 'doorway' to get into lung cells, thus allowing for more severe illness from the virus.⁴



Both smoking and COVID-19 disproportionately impact racial, ethnic, and sexual minority groups.^{5,6}

- Communities that bear a disproportionate burden of COVID-19 hospitalizations and deaths include:
 - American Indians and Alaska Natives
 - Black Americans
 - Hispanics or Latinx Americans
- Current cigarette smoking is highest among:
 - Non-Hispanic American Indians and Alaska Natives
 - People of multiple races
 - LGB Americans

This pandemic is exacerbating the consequences of racial and socioeconomic disparities in health and healthcare in America – creating a crisis within a crisis.

There are persistent inequities in resource allocation, access to healthcare and other health stressors that communities of color experience.⁹

*Severe illness from COVID-19 is defined as hospitalization, admission to the ICU, intubation or mechanical ventilation, or death.

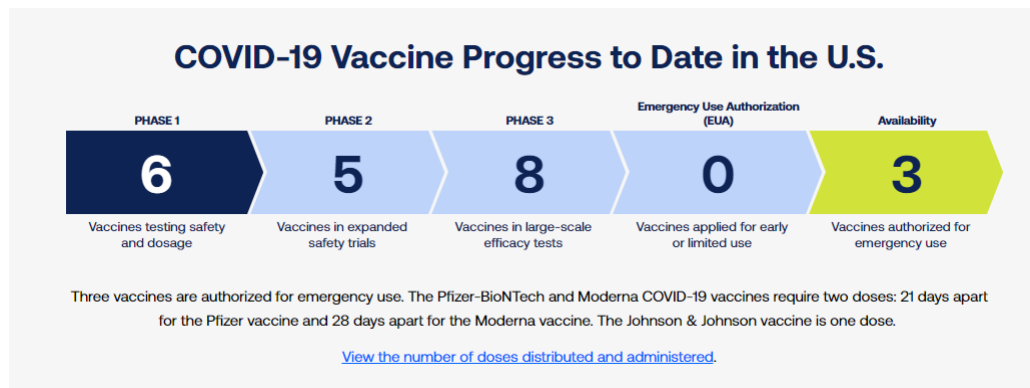
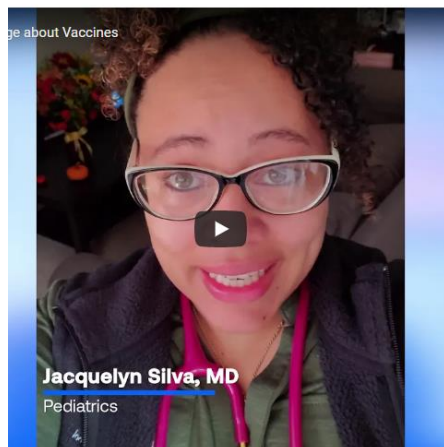
1-800-LUNGUSA | Lung.org



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COVID-19 Vaccine Tracker

Lung.org/vaccine-tracker



Initial Vaccine Recipient Prioritization

The CDC recommends that healthcare personnel and residents of long-term care facilities be the first to get vaccinated once a COVID-19 vaccine is approved. The next expected groups include essential workers, adults with high-risk medical conditions and older adults.

Phase 1A:	Phase 1B:	Phase 1C:
Healthcare Personnel Residents of Long-term Care Facilities	Frontline Essential Workers Adults 75+	People 16-64 with High-Risk Medical Conditions Adults 65-74 Other Essential Workers

People Vaccinated	At Least One Dose	Fully Vaccinated
Total	81,415,769	44,141,228
% of Total Population	24.5%	13.3%
Population ≥ 18 Years of Age	81,210,318	44,081,287
% of Population ≥ 18 Years of Age	31.5%	17.1%
Population ≥ 65 Years of Age	37,617,778	22,882,148
% of Population ≥ 65 Years of Age	68.8%	41.8%

Read more about how these data are reported.

Where Can I Get Vaccinated?


Michigan.gov

FAQ ALTERNATE LANGUAGES HOME MDHHS Q SEARCH

Coronavirus

MI SAFE START CONTAIN COVID RESOURCES PRESS RELEASES DONATE VIDEO UPDATES

CORONAVIRUS / RESOURCES / COVID-19 VACCINE / VACCINE LOCATIONS



HOW TO GET THE SAFE, EFFECTIVE VACCINE

Vaccination is our path back to normal life and a strong economy.

[FIND A SITE IN YOUR COUNTY](#)

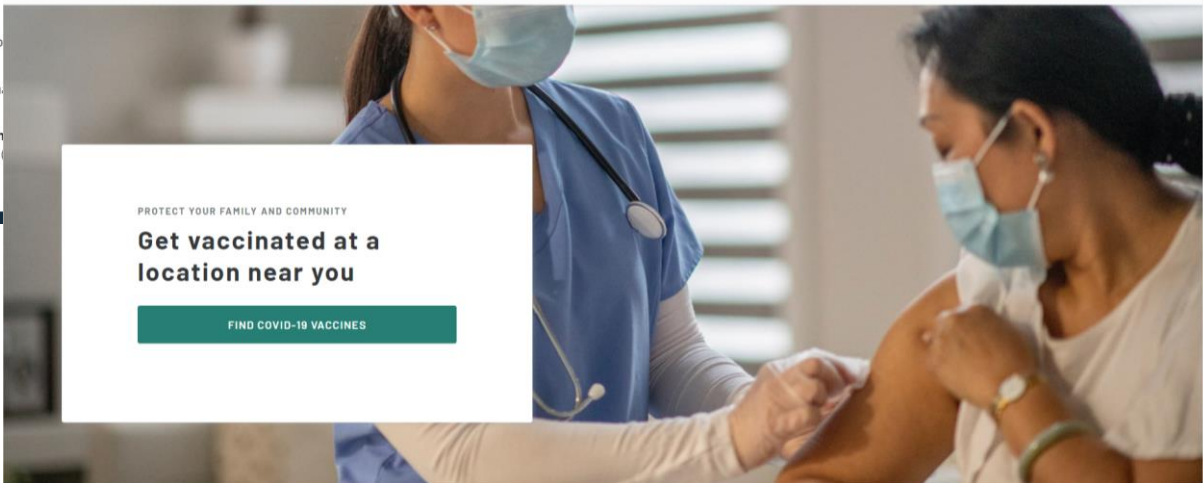
If you are eligible to receive a vaccine:

- Check the [website](#) of your local health department or [go to the map of local health departments](#); or
- Check [additional vaccination sites](#), such as local pharmacies (Northern MI) or [Snyder Drugs](#) (U.P. residents); or
- Residents who don't have access to the internet or who are unable to follow the process can call the COVID-19 Hotline at 888-535-6136 and Sunday 8 a.m. to 1 p.m.

COVID-19 vaccines are limited and **appointments are required** at most locations. Check with your local health department first to confirm you can get a vaccine →

VaccineFinder

[Home](#) Find Vaccines [COVID-19 VACCINE FAQ](#)



PROTECT YOUR FAMILY AND COMMUNITY

Get vaccinated at a location near you

[FIND COVID-19 VACCINES](#)

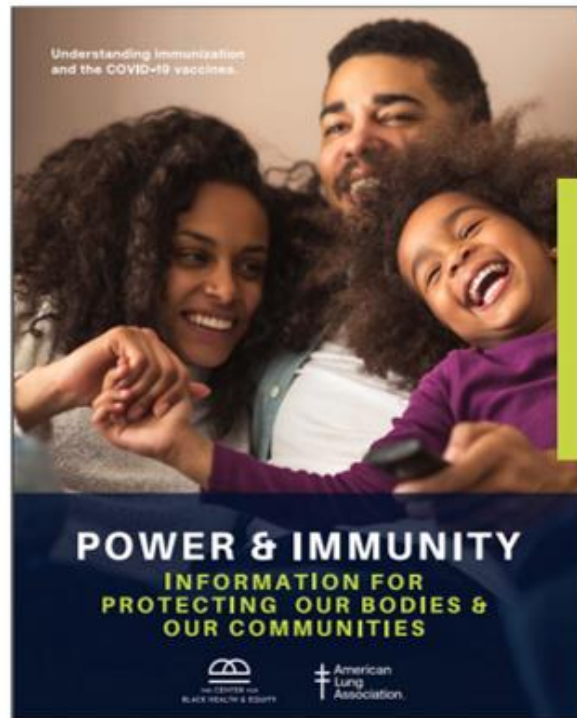
Vaccine Education Toolkit

Our Objectives

- Increase awareness about the efficacy of vaccines
- Increase awareness about how vaccines work
- Inspire action to learn more about vaccinations and move toward COVID-19 vaccine acceptance

Our Approach

- Validate people's **feelings of uncertainty** by acknowledging the elephants in the room (racism, historical medical injustice, current-day politics, accelerated development of the vaccine).
- Actively **avoid persuasion**. Focus message on how to obtain the **best, most simplified information** for making the decision.



WARP SPEED VACCINE

Before the COVID-19 vaccines, the fastest vaccine ever developed was for mumps and took 4 years. This has given many pause about the rapid production of the COVID-19 vaccines. Fortunately, the methods for the vaccines' speedy development was scientific and ethical. Here is how the vaccines were "fast-tracked":

Strong Head Start

It's important to understand that since COVID-19 is a member of the coronavirus family, scientists benefited from existing data and years of vaccine research that began with SARS (2002) and MERS (2012). These viruses laid the groundwork so that scientists didn't have to start from scratch to develop a vaccine. Additionally, researchers advanced mRNA technology which had already been studied for decades. This technology does not involve a live virus and is easier to manufacture.

Global Cooperation

The speedy development of the COVID-19 vaccines was accomplished through worldwide cooperation and data-sharing between international researchers, scientists and government agencies. Chinese researchers shared the needed viral genome sequence with 20 institutions in January of 2020, and the World Health Organization combined the work of 300 scientists and to make important assessments about the virus. Plus, because scientists utilized mRNA technology, they were able to start testing within months.

Unprecedented Investment

Developing a vaccine under normal circumstances requires researchers to spend time raising millions of dollars. That's why the U.S. Congress, through its Operation Warp Speed initiative and the CARES Act dedicated \$10 billion to the rapid development of COVID-19 vaccines. The European Commission similarly pledged \$8 billion for COVID-19 vaccine research. These financial commitments took years off of the usual process.

Working In Parallel

Vaccine development is usually done in a step-by-step order. To expedite the COVID-19 vaccine, many processes were done simultaneously instead. Manufacturing of potential vaccines began before they were proven to work so that they could be sent out soon after approval. Likewise, instead of waiting for the final vaccine, The Advisory Committee on Immunization Practices held early meetings to prioritize the distribution of the vaccine before it was even developed.

Efficient Clinical Trial Processes

While experts agree that rigorous safety testing, patient enrollment and clinical trial phases were not "fast-tracked," the paperwork for regulatory approvals was accelerated. The Food & Drug Administration shortened its approval timeline from 10 months to 3 weeks and offered emergency use authorization. And because of the large number of testing sites and increased volunteer interest, trial participation quickly reached tens of thousands. Phase 2 and 3 of clinical trials were combined (a common practice), and that helped to ethically speed the process along.

www.operationwarp.org



INSIDE THE TOOLKIT VACCINE DEVELOPMENT

- Clear explanation of how vaccine was developed
- Co-branded and easily shareable

HOW THE BODY FIGHTS DISEASE

Whenever a person is exposed to or infected with germs such as a coronavirus, their body will make use of germ-fighting tools like white blood cells to fight the infection. After exposure, the person's immune system remembers how to protect the body against that particular disease should it encounter it again.

HOW VACCINES WORK

There are several kinds of vaccines. Some contain the same germs that cause disease; however, the germs have been weakened or deadened. Others contain either a harmless part of the germ or its genetic material (such as the synthetic messenger RNA used for some COVID-19 vaccines).

A vaccine stimulates your immune system so that you produce the same antibodies you would make if you were exposed to the real disease. It helps your body learn to recognize and fight an invasion of a particular germ. Thus, you get to develop immunity to that disease without having to get the disease first.

FAMILIAR VACCINES

You and your family may already be comfortable with many of the vaccines commonly accepted in the U.S. Vaccines are a vital part of preventing disease and maintaining a healthy population.

- Seasonal Flu
- Hepatitis A & B
- Human papillomavirus (HPV)
- Rabies
- Polio
- Measles, Mumps & Rubella (MMR)
- Tuberculosis (TB)
- Tetanus
- Whooping Cough
- Pneumonia
- Meningitis
- Smallpox
- Chickenpox

Source:
<https://www.cdc.gov/coronavirus/> | <https://www.cdc.gov/vaccines/imz/npd/vac-basics.html>

INSIDE THE TOOLKIT SIMPLE FACTS

- Clear and simple lessons in how viruses and vaccines work
- Simple explanation of clinical trials work
- Information for making a decision

Key Talking Points

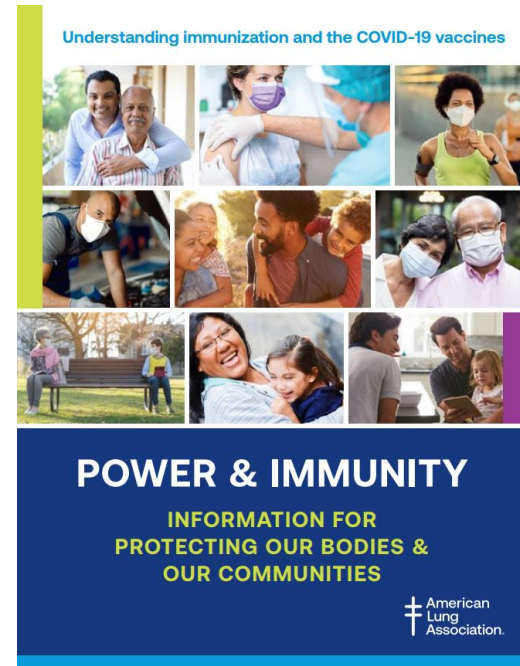
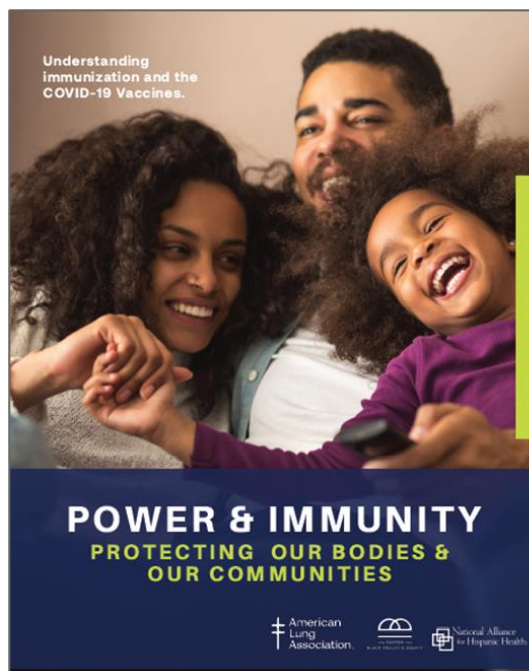
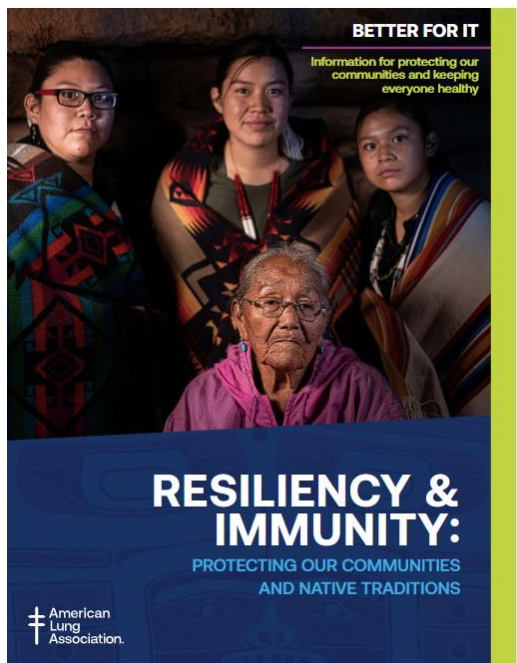
- Skepticism is a protective measure, and you should honor it with thorough investigation of the data.
- You have a right to ask questions.
- The information you need is available and knowable.
- Vaccines help support health equity.
- CTA: Investigate, learn more, share the toolkit



[Lung.org/vaccine-toolkit](https://lung.org/vaccine-toolkit)

COVID-19 Vaccine Toolkit & Guide

NEW: Resiliency and Immunity: *Protecting Our Communities and Native Traditions*



Download the guides, along with shareable resources for your community, at Lung.org/vaccine-toolkit.

EDUCATIONAL MATERIALS

Always available. Always free.

Online, telephonic and printed materials are available to help you:

- Keep your lungs healthy
- Manage your lung disease
- Quit smoking
- Prepare for lung emergencies
- Support your loved ones



FREE Health Programs and Initiatives

Lung Cancer Mentor Program

The American Lung Association partnered with [Inerman Angels](#) to match mentors, also known as Mentor Angels, with those facing lung cancer. Patients can sign up to seek support from someone who has been in your shoes OR you can sign up to become a mentor and offer support to another person facing lung cancer. For more information, visit [Lung.org](#).



Smokefree Housing Initiative



[Secondhand smoke exposure](#) poses serious health threats to children and adults. For residents of multi-unit housing (e.g., apartment buildings and condominiums), secondhand smoke can be a major concern. It can migrate from other units and common areas and travel through doorways, cracks in walls, electrical lines, plumbing, and ventilation systems.

Public and private multi-unit housing properties across the country have moved to solve this problem by making their housing, including individual units, smokefree.

The U.S. Department of Housing and Urban Development (HUD)'s rule that made all public housing smokefree will protect approximately two million residents, including 760,000 children, from exposure to secondhand smoke. The American Lung Association was a [strong supporter](#) of HUD's smokefree housing rule and pushed for its passage for over a decade.

We have created a variety of tools and resources to assist multi-unit housing properties, including public housing, with going smokefree.

[Participate in our free Steps for Success program](#)



STAY CONNECTED AND INFORMED

Visit the NEW **Lung.org/covid-19**



Follow us on **Facebook, Twitter, LinkedIn, YouTube and Instagram** and share timely resources to your network



Catch up on our **Each Breath Blog:**

- From the Frontlines: An Update from Navajo Nation
- From the Frontlines: Confronting Fear
- Testing for COVID-19: A Look Forward



Questions?

LUNG HELPLINE

Talk for free with our lung health experts such as respiratory therapists, nurses, and tobacco cessation counselors about asthma, COVID-19 or any other lung health questions.



Lung HelpLine
1-800-LUNG-USA

Bilingual Spanish speaking staff along with a live language interpretation service for over 250 languages.

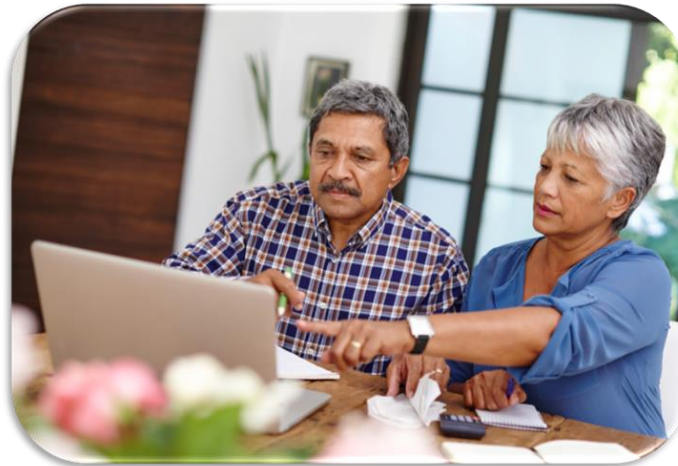
JOIN AN ONLINE SUPPORT COMMUNITY

We offer free online support communities to help you in your lung health journey. Join one of our many support groups to connect with others.

List of Communities:

- Lung Cancer Survivor
- Living with COPD
- Living with Lung Disease
- Living with Pulmonary Fibrosis
- Caring for Pulmonary Fibrosis
- Quit Now: Freedom From Smoking
- Living with Asthma
- Living with PAH (pulmonary arterial hypertension)

Online communities offer peer-to-peer support so you can connect with people also facing lung disease and other lung health issues.





Question & Answer



Thank you!



Lung.org
1-800-LUNG-USA