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# COVID 19 – The Impact on Agriculture

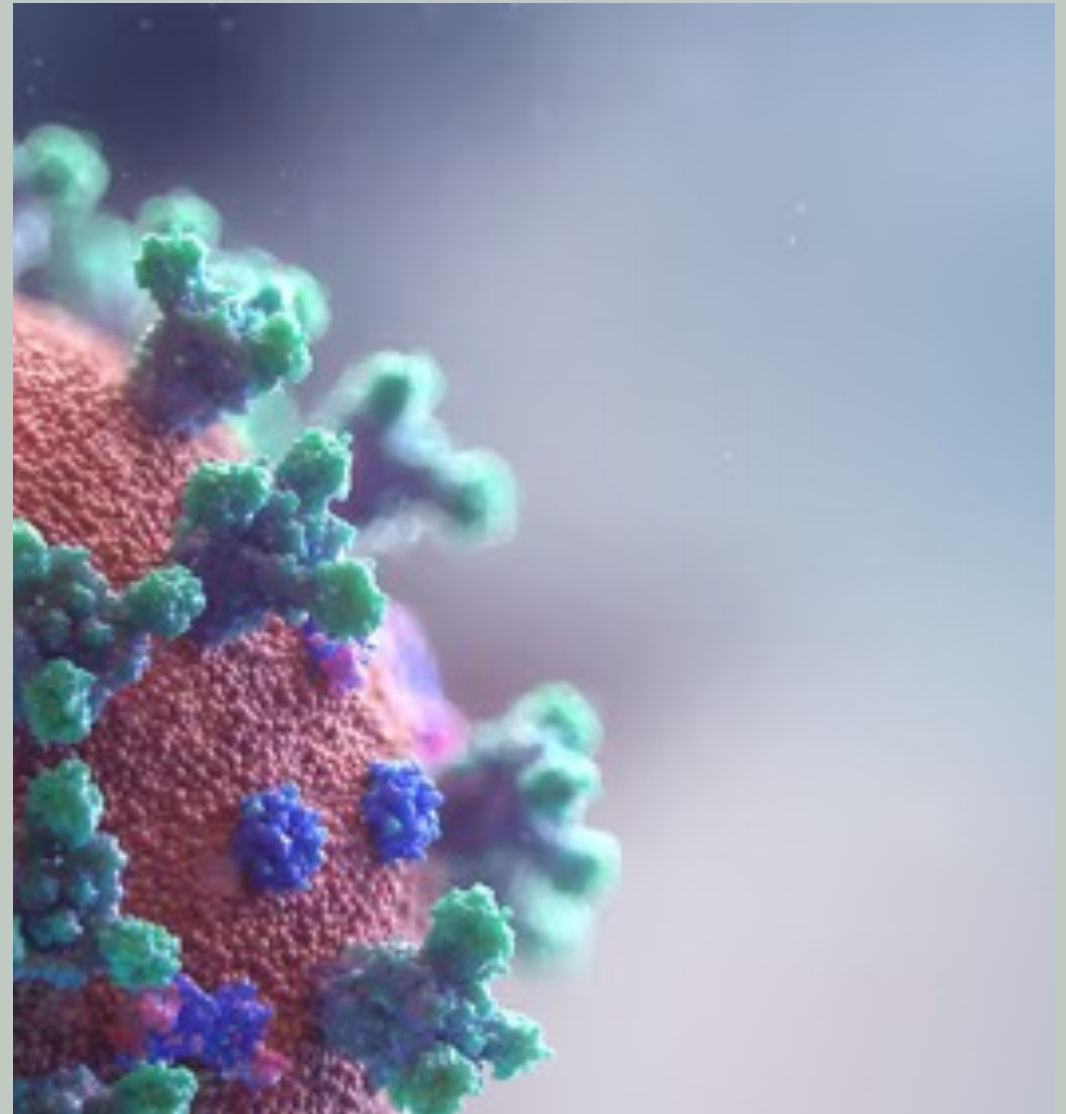
Agrability National Training Workshop

Madison, WI

March 16, 2022

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*AgriSafe Network*



# Keep informed!

Please note: The AgriSafe staff understands the CDC and all federal and state organizations are working hard to keep pace with issues surrounding COVID-19 and the variants.

The information here is current as of February, 2022. It is important for all of us to check for changes and updates in guidelines.

# Objectives:

At the end of this program, participants will be able to...

1. Gain an understanding of infectious disease , including the COVID-19 variants, and measures to reduce exposure risks among agricultural workers.
2. Recognize the efficacy of the COVID-19 vaccine in the prevention of coronavirus (SARS-CoV-2) infectious disease in the ag workplace.
3. Access resources for communities to understand COVID-19 prevention and mitigation.

# What we will talk about

## Protecting families and workers

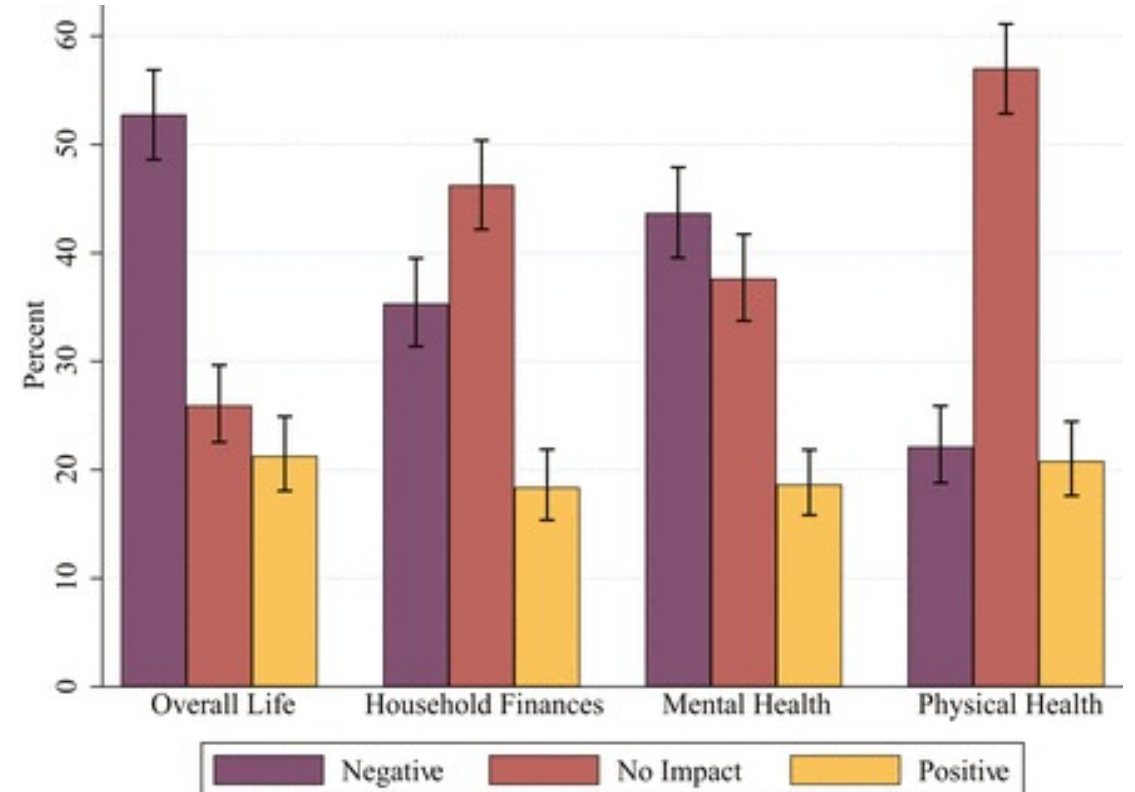
- ❖ What is happening in agricultural communities
- ❖ Vaccine
- ❖ Personal Protective Equipment (PPE)
- ❖ Supporting Sick Workers
- ❖ Cleaning, Disinfection, and Sanitation
- ❖ Resources





# Impact on Rural Communities- Among most vulnerable populations

- Effects of the pandemic have been severe
  - unemployment
  - mental health
  - economic outlook



- Impacts have been generally consistent across age, ethnicity, education, and sex

# American Farm Bureau – *January 2021*

## The survey of 2,000 rural adults was conducted by Morning Consult

- COVID-19 pandemic is having broad-ranging impacts among rural adults and farmers/farmworkers
- Two in three farmers/farmworkers (**66%**) say the pandemic has impacted their mental health
- Younger rural adults were more likely than older rural adults to say the pandemic has impacted their mental health
- Farmers and farmworkers were **10% more likely** than rural adults *as a whole* to have experienced feeling nervous, anxious or on edge during the pandemic (65% vs. 55%).
- Social isolation impact on farmers' mental health **increased 22%** since April 2019
- Three in five rural adults (**61%**) say the COVID-19 pandemic has impacted mental health in rural communities
- Half of rural adults (**52%**) aged 18-34 say they have thought more about their mental health during the COVID-19 pandemic, more than other age groups

# Impact on Agriculture

- Farm prices
- Supply shortages
- Sufficient workforce
- Physical and mental health
- Worker safety
- Travel
- Education
- Connecting with extended family and friends



# U of MN Center for Infectious Disease Research & Policy

## *February 11, 2022* report

- Delta surge: Rural counties with low COVID-19 vaccination rates had 2.4 times the risk of infection.
- Data collected and reported in *JAMA Network Open* by University of Cincinnati researchers, Johns Hopkins University and Centers for Disease Control and Prevention (CDC) data to investigating the link between rates of COVID-19 vaccination and Delta COVID-19 infections from Jul 1 to Aug 31:
  - Rural US counties with low COVID-19 vaccination rates had 2.4 times more infections per 100,000 people than urban counties amid the summer 2021 Delta surge - published Feb. 10, 2022.
  - Counties with vaccination rates lower than 30% saw infections increase from 190 per 100,000 residents during Jul 1 to 15 to 1,272 infections per 100,000 from Aug 16 to 31.
  - In comparison, during the same periods, COVID-19 infections in counties with vaccination rates higher than 50% rose from 71 per 100,000 residents to 531 per 100,000.
  - According to the CDC, COVID-19 vaccination rates in roughly 82% of the rural United States are lower than 30%.
- *(Colorado, Georgia, Texas, Virginia, and West Virginia were excluded from the study because their vaccination data were incomplete or unreliable.)*

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# What is the COVID-19 Vaccine?



## COVID-19 vaccine –

- contains a messenger RNA (mRNA) that transports a “message” or “instruction” to The RNA in our cells to manufacture protein antibodies that will identify & stick to the SARS COV-2 virus spike protein that signals immune cells to “attack” the virus.
- does not contain active virus
- full approval for use in the U.S.
- boosters are highly recommended

# Particle Size

A micron is one-millionth of a meter.

Viral particles are just 0.1 microns in size.

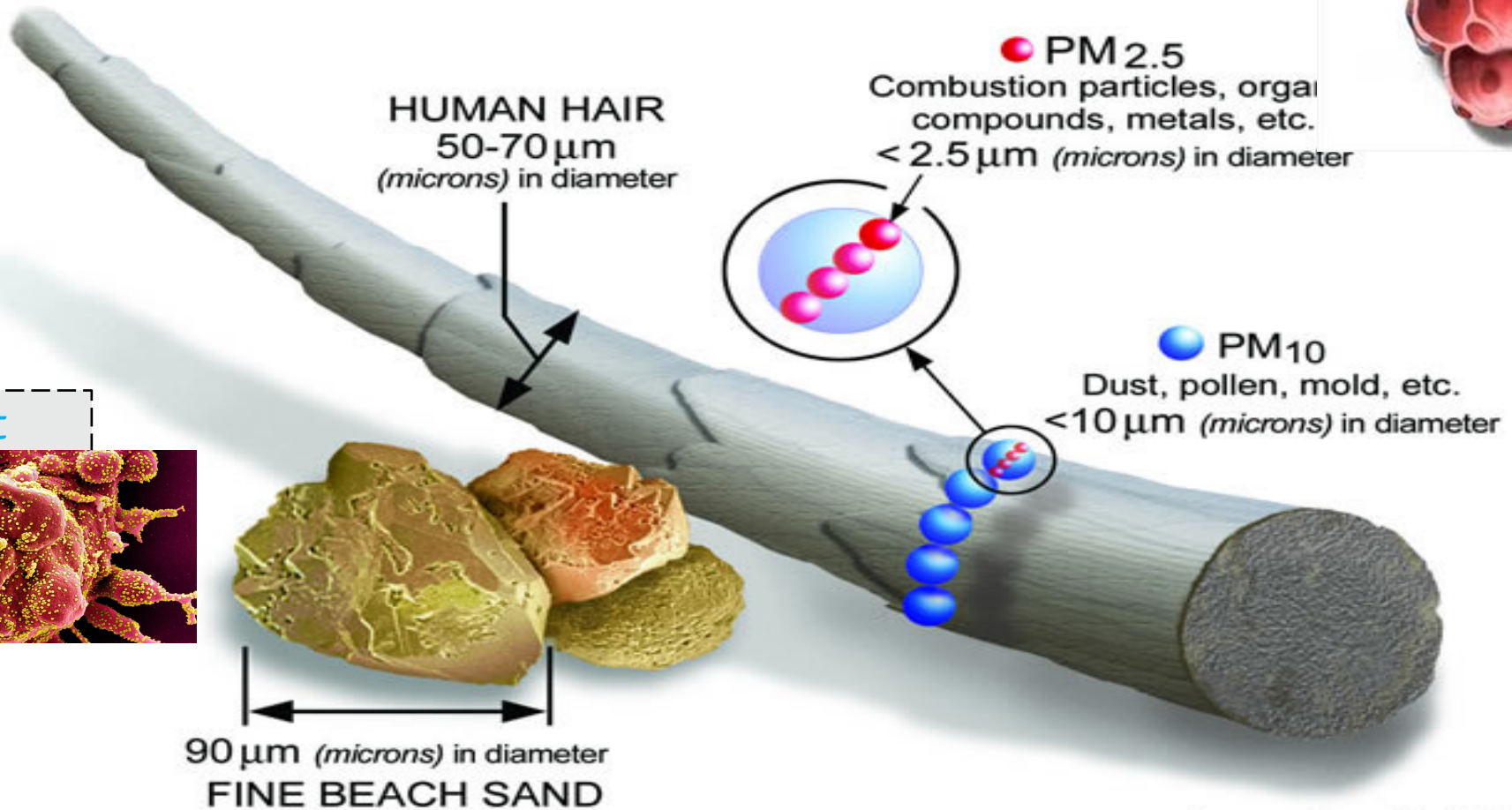
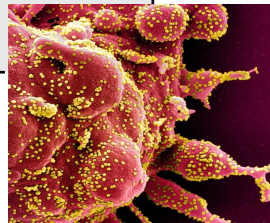


Image courtesy of the U.S. EPA





# Risks



COVID-19 is a respiratory illness caused by a virus called SARS-CoV-2.

➤ Workers who may be at higher risk for severe illness include:

- Older adults
- People (of any age) with certain underlying medical conditions (i.e., chronic kidney disease, obesity, diabetes, or serious heart conditions)
- Workers with altered abilities that impede standing, walking, deep breathing

Related variants of the virus pose on-going risks and potential need for continued prevention protocol.



# Danger Zone

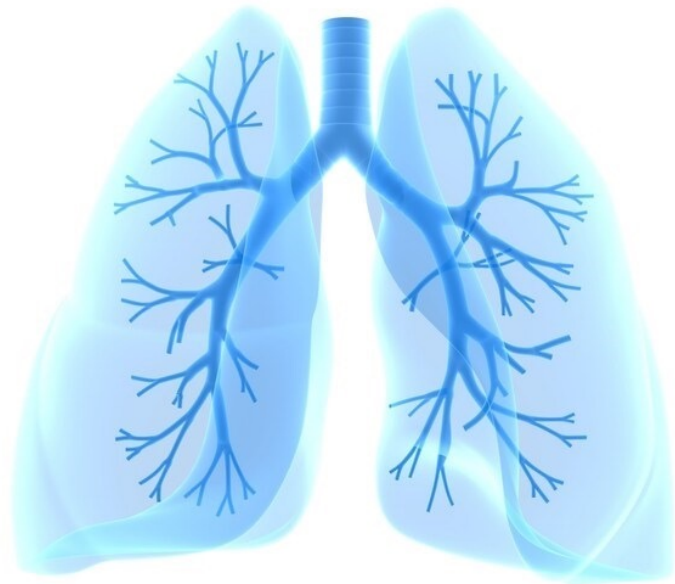
COVID-19 symptoms, such as cough and shortness of breath, can come on suddenly.

Severe illness may cause several complications that require medical intervention, including:

- Pneumonia
- Acute respiratory distress syndrome
- Cardiac disease
- Blood clots
- Kidney disease
- Organ failure



# Chronic Lung Disease?



Having a chronic lung disease means that :

- You can be more likely to get severely ill and have complications from COVID-19.
- It is more important than ever to follow all the guidelines to minimize risk of infection

- **Get Vaccinated!**
- Get tested & treated if needed
- Relaxation of mandates and guidelines does not mean the virus is gone
- **Lung health emergencies are still emergencies!**
- Keep taking prescription medications as directed

- <https://www.lung.org/lung-health-diseases/lung-disease-lookup/covid-19>

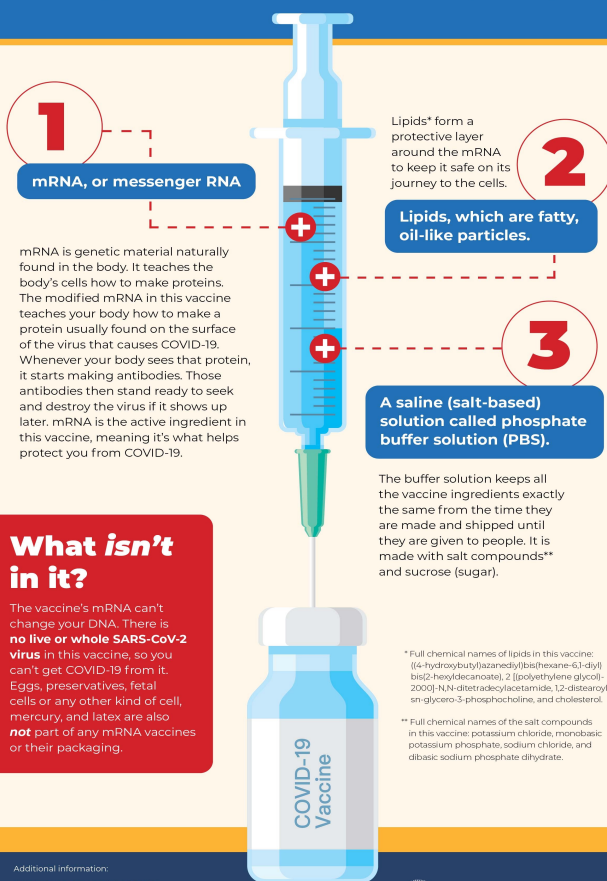


# What's in a COVID-19 Vaccine?

Manufacturer and Name:  
Pfizer, Inc., and BioNTech: BNT.62b2  
Type of vaccine: mRNA

Scientists have studied how to use mRNA to protect us from viruses for a long time. They used that knowledge to make COVID-19 vaccines using mRNA that are as safe and effective as possible. Learn more about what is—and isn't—part of these COVID-19 vaccines.

**Each ingredient in this vaccine has a specific job.**



## What *isn't* in it?

The vaccine's mRNA can't change your DNA. There is **no live or whole SARS-CoV-2 virus** in this vaccine, so you can't get COVID-19 from it. Eggs, preservatives, fetal cells or any other kind of cell, mercury, and latex are also **not** part of any mRNA vaccines or their packaging.

\* Full chemical names of lipids in this vaccine:  
[[4-hydroxybutyl]azanediyl]bis[hexane-6,1-diyl] bis[2-hexyldecanoate], 2-[[poly(ethylene glycol)-2000]-N,N'-diethyladecylacetamide, 1,2-distearoyl-sn-glycero-3-phosphocholine, and cholesterol.

\*\* Full chemical names of the salt compounds in this vaccine: potassium chloride, monobasic potassium phosphate, sodium chloride, and dibasic sodium phosphate dihydrate.

Additional information:

Vaccines for people with allergies.

Sources:

CDC. What's in Vaccines? Ingredients and Vaccine Safety.

CDC. Frequently Asked Questions about COVID-19 Vaccination.

National Institutes of Health  
covid19community.nih.gov

Exact vaccine ingredients vary by manufacturer.

Pfizer-BioNTech and Moderna COVID-19 vaccines contain messenger RNA (mRNA).

Johnson & Johnson/Janssen COVID-19 vaccine contains a harmless version of a virus unrelated to the virus that causes COVID-19.

These give instructions to cells in your body to create an immune response.

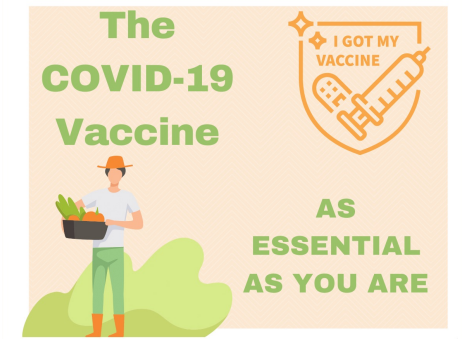
This response helps protect you from getting sick with COVID-19 in the future.

After the body produces an immune response, it discards all the vaccine ingredients just as it would discard any information that cells no longer need.

This process is a part of normal body functioning.

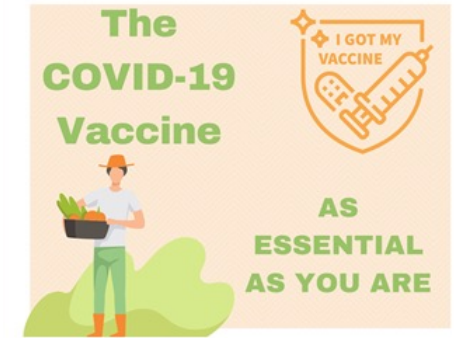
COVID-19 vaccines do NOT contain ingredients like preservatives, tissues (like aborted fetal cells), antibiotics, food proteins, medicines, latex, or metals.

# Vaccine: What You Need to Know



- [Everyone ages 5 and older](#) can get vaccinated against COVID-19.
- COVID-19 vaccines are [effective at helping protect against severe disease and death](#) from the virus that causes COVID-19, including known [variants](#) currently circulating.
- The [benefits of COVID-19 vaccination](#) outweigh the [known and potential risks](#), which are rare.
- As with other routine vaccines, [side effects](#) may occur after vaccination. These are normal and should go away within a few days.
- [People who are fully vaccinated](#) can resume many activities they did before the pandemic. However, people should wear a mask indoors in public if they are in an [area of substantial or high transmission](#).

# Vaccine: What You Need to Know



- If you received a Pfizer-BioNTech (ages 12 and older) or Moderna (ages 18 and older) mRNA COVID-19 vaccine primary series and have a moderately or severely compromised immune system, you should [receive an additional primary dose](#) of the same mRNA COVID-19 vaccine at least 28 days after the second dose.
- Everyone ages 16 years and older can get a [booster shot](#).
- Unlike many medications, COVID-19 vaccine dosage does not vary by patient weight but by age on the day of vaccination.
- People can get a COVID-19 vaccine and other vaccines, including flu vaccine, at the same time.

•[https://www.cdc.gov/coronavirus/2019ncov/vaccines/keythingstoknow.html?s\\_cid=10496:cdc%20covid%20guidelines:sem.ga:p:RG:GMgen:PTN:FY21](https://www.cdc.gov/coronavirus/2019ncov/vaccines/keythingstoknow.html?s_cid=10496:cdc%20covid%20guidelines:sem.ga:p:RG:GMgen:PTN:FY21)

# Which vaccine should I get?

## **IF YOU RECEIVED**

### **Pfizer-BioNTech**

#### **Who should get a booster:**

- Everyone 12 years and older

#### **When to get a booster:**

- At least 5 months after completing your primary COVID-19 vaccination series

#### **Which booster can you get:**

- Pfizer-BioNTech or Moderna (mRNA COVID-19 vaccines) are preferred in most\* situations
- Teens 12–17 years old may only get a Pfizer-BioNTech COVID-19 vaccine booster

## **IF YOU RECEIVED**

### **Moderna**

#### **Who should get a booster:**

- Adults 18 years and older

#### **When to get a booster:**

- At least 5 months after completing your primary COVID-19 vaccination series

#### **Which booster can you get:**

## **IF YOU RECEIVED**

### **Johnson & Johnson's Janssen\***

#### **Who should get a booster:**

- Adults 18 years and older

#### **When to get a booster:**

- At least 2 months after receiving your J&J/Janssen COVID-19 vaccination

#### **Which booster can you get:**

- Pfizer-BioNTech or Moderna (mRNA COVID-19 vaccines) are preferred in most\* situations



**You wouldn't put  
them at risk**

**Why risk yourself?  
#GetVaccinated**

# Keeping Track...

<https://covid.cdc.gov/covid-data-tracker/#datatracker-home>

[CDC COVID Data Tracker](#)





# Promote Hand Hygiene

- Encourage farmworkers to wash their hands often with soap and water for at least 20 seconds
- Provide access to permanent and/or temporary hand washing facilities
- If hands aren't visibly soiled or dirty, farmworkers can use hand sanitizer containing at least 60% alcohol, rubbing hands until they are dry
- Place sanitizing stations in multiple locations
- Provide workers with individual containers of hand sanitizer







# Managing sick workers

- Immediately separate workers who appear to have symptoms
- Have a procedure for safely transporting sick workers
- If a worker is in employer-furnished housing, consider providing a dedicated space for the worker to recover
- 
- Provide sick workers with information on when and how to access medical attention
- Provide sick workers with information on return-to-work policies and procedures
  - Resource: [When You Can be Around Others After You Had or Likely Had COVID-19- CDC](#)



# Managing sick workers

- If a worker is confirmed to have COVID-19, owners/operators should consider ways to inform anyone at the work site, who has been in sustained, close contact (within 6 feet)
- Clean and disinfect the work area, equipment, common areas used, and any tools handled by the symptomatic worker
- If possible, protect the infected worker's confidentiality and not identify them ( required by the Americans with Disabilities Act -ADA)



# Return to work after worker exposure



- Employers should follow CDC's Critical Infrastructure Guidance for workers who have had a COVID-19 exposure but remain free of symptoms
- When workers who have had COVID-19 (including those workers who have tested positive for COVID-19 but remained free of symptoms) return to onsite operations, employers should follow the [COVID-19 Quarantine and Isolation | CDC](#)
- The COVID-19 pandemic is constantly changing, so employers of critical infrastructure workers will need to continue to reassess COVID-19 transmission levels in their area

# Face coverings in agricultural operations

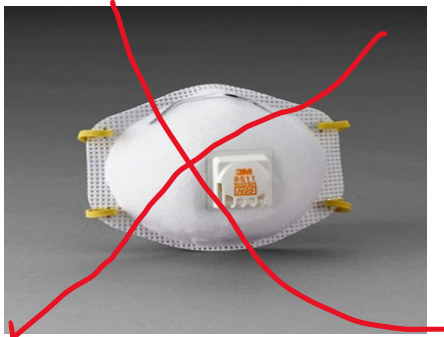
- CDC recommends wearing appropriate face coverings as a protective measure in addition to social distancing
- Face coverings that are not NIOSH approved N95 coverings are intended to protect other people—not the wearer
- Cloth face coverings are not appropriate substitutes for PPE



# Face coverings in agricultural operations – will my regular ppe work?

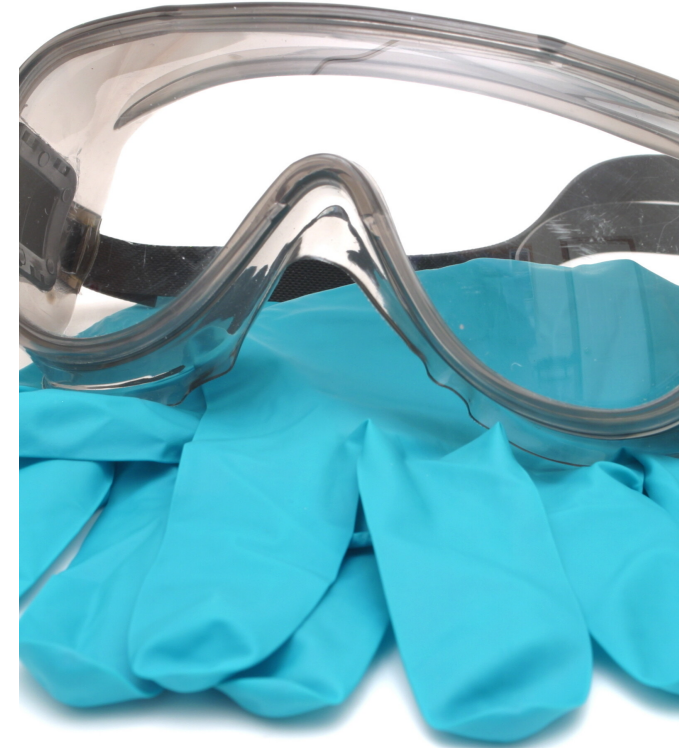
To determine appropriate respiratory protection:

- ✓ Know the activity
- ✓ Understand the exposure
- ✓ Determine appropriate respirator



# ppe

- Farmworkers may need PPE when cleaning and disinfecting
- Anyone involved in cleaning and disinfecting workspaces should wear gloves selected based on information provided in the manufacturer's Safety Data Sheet





# PPE

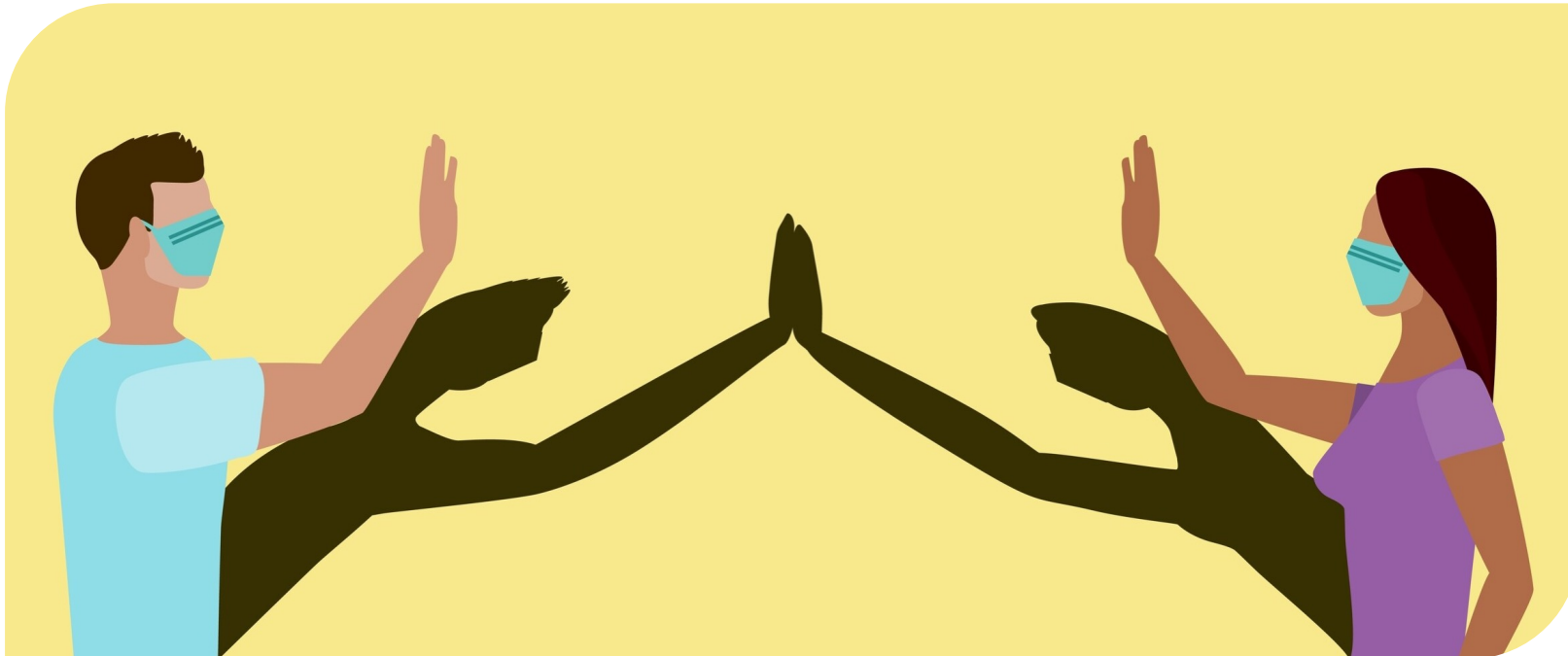
## Provide appropriate PPE training

- The following points should be included in training:
  - When to use PPE and what PPE is necessary
  - How to properly put on and remove PPE
  - How to properly dispose of PPE, or if reusable, how to properly clean, and as appropriate, decontaminate PPE
  - Reminder to change PPE if it becomes torn, wet, dirty, or otherwise damaged
  - Safety glasses can also be an important part of PPE in addition to goggles.



# Control the spread

- Assess and identify opportunities to limit close contact with others if feasible.
- Establish social distancing policies and practices.
- Engage farmworkers in this assessment process.







# COVID19 Prevention Training

Conduct COVID-19 training that is:

1. Easy to understand
2. In preferred language
3. At appropriate literacy levels – pictograms may be appropriate

# Social Media Toolkit Resource



<https://www.agrisafe.org/covid-19-social-media-toolkit/>





# Resources

- <https://www.agrisafe.org/covid-19-social-media-toolkit/>
- <http://www.agrability.org/covid-19/>
- <https://extension.illinois.edu/news-releases/covid-creates-shortage-ppe-pesticide-applicators>
- <http://www.ncfh.org/covid-resources-for-service-providers.html>
- <https://www.lung.org/lung-health-diseases/lung-disease-lookup/covid-19>
- <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/booster-shot.html>
- <https://mhanational.org/life-doesnt-feel-real-anymore-dissociation-time-covid-19>



# Thank You from the AgriSafe team!



<https://www.agrisafe.org/>