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CITY AND COUNTY OF SAN FRANCISCO, ET AL.

12 SUPERIOR COURT OF THE STATE OF CALIFORNIA

13 COUNTY OF SAN FRANCISCO

14 UNLIMITED JURISDICTION

15 UNITED SF FREEDOM ALLIANCE,  
16 BHANU VIKRAM, CARSON R.  
17 SCHILLING, CHRISTA L. FESTA,  
18 CHRISTIANNE T. CROTTY, DENNIS M.  
CALLAHAN, JR., FAIHING CHEUNG,  
and JESSICA KWOK-BO LINDSEY,

19 Plaintiffs,

20 vs.

21 CITY AND COUNTY OF SAN  
22 FRANCISCO, a municipal corporation and  
administrative division of the State of  
23 California, et al., and Does 1 through 100,  
inclusive,

24 Defendants.

Case No. CGC-22-597428

**EXHIBITS A – B TO REQUEST FOR  
JUDICIAL NOTICE IN SUPPORT OF  
DEFENDANTS CITY AND COUNTY OF SAN  
FRANCISCO, ET AL.’S DEMURRER TO  
THE SECOND AMENDED COMPLAINT  
FOR VIOLATION OF CIVIL RIGHTS AND  
DECLARATORY AND INJUNCTIVE RELIEF**

Hearing Date: June 21, 2022  
Hearing Judge: Judge Richard B. Ulmer  
Time: 9:30 a.m.  
Place: Dept. 302

Date Action Filed: January 4, 2022  
Trial Date: None set

**EXHIBIT A**

**TO**

**REQUEST FOR JUDICIAL NOTICE IN SUPPORT OF DEFENDANTS CITY AND  
COUNTY OF SAN FRANCISCO, ET AL.'S DEMURRER TO SECOND AMENDED  
COMPLAINT FOR VIOLATION OF CIVIL RIGHTS AND DECLARATORY AND  
INJUNCTIVE RELIEF**

# COVID Data Tracker

Maps, charts, and data provided by CDC, updates daily by 8 pm ET

[COVID-19 Home >](#)

CDC recommends use of [COVID-19 Community Levels](#) to determine the impact of COVID-19 on communities and take action. [Community Transmission levels](#) are provided for healthcare facility use only.

## United States at a Glance

[Collapse](#) —

**United States**  
At a Glance

**Cases Total** **81,940,493**  
Case Trends

**Deaths Total** **995,747**  
Death Trends

**Current Hosp.** **14,720**  
Admission Trends

**82.7% of People 5+ with At Least**  
One Vaccination

Data Tracker Home

[Cases, Deaths, & Testing](#)

Case & Death Demographic  
Trends

Vaccination Distribution &  
Coverage

Vaccine Effectiveness &  
Breakthrough Surveillance

Health Equity

Pediatric

Pregnancy

People at Increased Risk

Wastewater Surveillance

## United States COVID-19 Cases, Deaths, and Laboratory Testing (NAATs) by State, Territory, and Jurisdiction

Maps, charts, and data provided by CDC, updated Mon-Sat by 8 pm ET<sup>†</sup>

[View Footnotes and Download Data](#)

TOTAL CASES  
**81,940,493**  
+98,354 New Cases

7 DAY CASE RATE PER  
100,000  
**165**

TOTAL DEATHS  
**995,747**  
+356 New Deaths

CDC | Data as of: Wednesday, May 11, 2022 1:15 PM ET. Posted: Wednesday, May 11, 2022 2:41 PM ET

### View:

- ☒ Cases  
☐ Deaths  
☐ Tests Performed  
☐ Percent Positive

### Time period:

- ☒ Last 7 Days  
☐ Since Jan 21, 2020

### Metric:

- ☐ Count  
☒ Rate per 100,000

This shows the number of COVID-19 cases for every 100,000 people over the last 7 days, allowing you to compare areas with different population sizes.

### US COVID-19 7-Day Case Rate per 100,000, by State/Territory

Health Care Settings

Social Impact & Prevention

Variants & Genomic Surveillance

Antibody Seroprevalence

Other COVID-19 Data

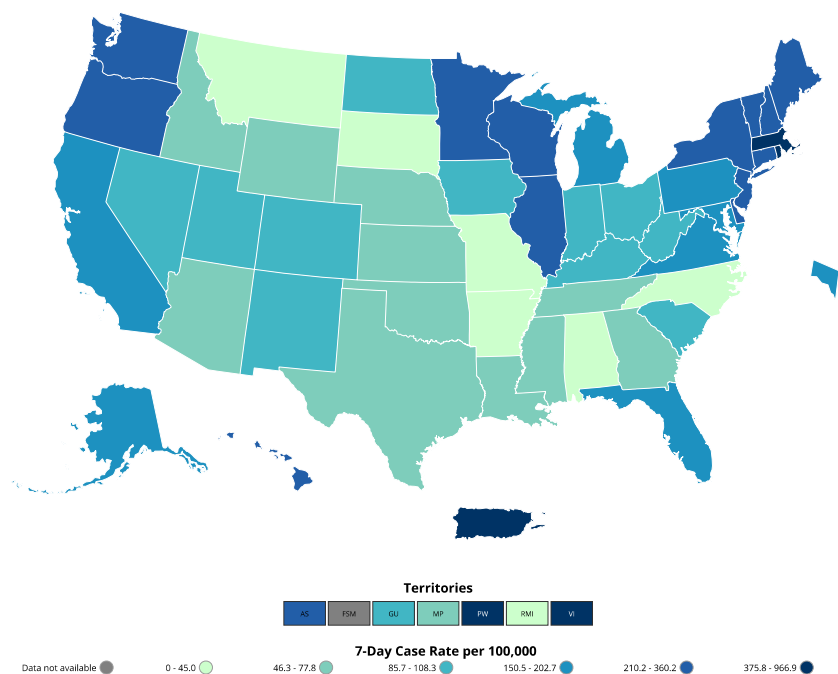
Communications Resources

COVID-19 Home

✉ Get Email Updates

Sign up to receive the COVID Data Tracker Weekly Review.

Email Address:



[View Historic Case and Death Data](#)

[Download Image](#)

### Data Downloads and Footnotes

Expand each accordion to view data table and download data

[What's this?](#)[Data Table for Cumulative Cases per 100k in Last 7 Days](#)[Footnotes](#)

## Wondering what all the data mean?

CDC's new [COVID Data Tracker Weekly Review](#) helps you stay up-to-date on the pandemic with weekly visualizations, analysis, and interpretations of key data and trends.

## How does COVID-19 Spread?

Learn [more](#)

## Information on US COVID-19 Cases Caused by Variants

Learn more [here](#)

## Do you need information on testing?

Find it [here](#)

[View and Download](#) COVID-19 Case Surveillance Public Use Data with  
[Geography](#)

### Cite COVID Data Tracker

Centers for Disease Control and Prevention. COVID Data Tracker. Atlanta, GA: US Department of Health and Human Services, CDC; 2022, May 12. <https://covid.cdc.gov/covid-data-tracker>

### COVID-19 Home >

All COVID-19 topics including prevention, travel, work, and school

#### HAVE QUESTIONS?



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**EXHIBIT B**

**TO**

**REQUEST FOR JUDICIAL NOTICE IN SUPPORT OF DEFENDANTS CITY AND  
COUNTY OF SAN FRANCISCO, ET AL.'S DEMURRER TO SECOND AMENDED  
COMPLAINT FOR VIOLATION OF CIVIL RIGHTS AND DECLARATORY AND  
INJUNCTIVE RELIEF**



## COVID-19

# Pfizer-BioNTech COVID-19 Vaccine (also known as COMIRNATY): Overview and Safety

Updated Apr. 27, 2022

### Recommended for People 5 Years and Older

[Stay up to date](#)

[Guidance for people who are immunocompromised](#)

## General Information

**Manufacturer:** Pfizer, Inc., and BioNTech

**Number of Shots:** 2 doses in the primary series, given 3–8 weeks apart.

People ages 5 years and older who are moderately or severely immunocompromised should get a third dose at least 4 weeks after their second dose.

**Booster Shot:** People ages 12 years and older who received a Pfizer-BioNTech primary series should get a booster. Some people can also choose to receive a second booster.

**Type of Vaccine:** [mRNA](#)

**How Given:** Shot in the muscle of the upper arm

**Does NOT Contain:** Eggs, preservatives, latex, metals

[See full list of ingredients](#)

**Name:** BNT162b2

**Brand name:** COMIRNATY

## Pfizer–BioNTech (COMIRNATY) Name Change

Pfizer-BioNTech (COMIRNATY) received U.S. Food and Drug Administration (FDA) approval on August 23, 2021, for individuals ages 16 years and older. Once vaccines are approved by the FDA, companies can market the vaccines under brand names. COMIRNATY is the brand name for the Pfizer-BioNTech COVID-19 vaccine. After FDA approval, the FDA-authorized Pfizer-BioNTech COVID-19 vaccine for individuals ages 16 years and older was marketed as COMIRNATY. **No change was made to the vaccine's formula** with the name change.

The Pfizer-BioNTech vaccine label remains for individuals ages 5–15 years since the vaccine is authorized but not yet approved for this age group.



## Safety Data Summary

- COVID-19 vaccines have undergone—and will continue to undergo—the most intensive safety monitoring in U.S. history. Evidence from the hundreds of millions of COVID-19 vaccines already administered in the United States, and the billions of vaccines administered globally, demonstrates that they are [safe](#) and [effective](#).
- [Side effects](#) that happen within 7 days of getting vaccinated are common but are mostly mild. Some people have side effects that affect their ability to do daily activities.
- Side effects throughout the body (such as fever, chills, tiredness, and headache) are more common after the second dose of the vaccine.
- [Severe allergic reactions](#) to vaccines are rare but can happen.
- There is a rare risk of [myocarditis](#) and [pericarditis](#) associated with mRNA COVID-19 vaccination, mostly among males ages 12 through 39 years. The rare risk may be further reduced with a longer interval between the first and second dose. Learn more about [the timing for your second dose](#).

Learn more about [vaccine safety monitoring](#) after a vaccine is authorized or approved for use.

## How Well the Vaccine Works

- Vaccines reduce the risk of COVID-19, including the risk of severe illness and death among people who are fully vaccinated.
- COVID-19 vaccines are effective, but studies have shown vaccine protection declines over time—especially with the Omicron variant. Learn more about getting a [booster](#) shot to enhance or restore protection against COVID-19.
- All FDA-approved or authorized COVID-19 vaccines provide substantial protection against COVID-19 hospitalization and death.
- CDC will continue to provide updates as we learn more.

Learn about demographic information for people ages [16 years and older](#) [who participated in the trials](#).

## Pfizer–BioNTech COVID–19 Vaccine Ingredients

All COVID-19 vaccine ingredients are safe. Nearly all of the ingredients in COVID-19 vaccines are ingredients found in many foods – fats, sugars, and salts. The Pfizer-BioNTech COVID-19 vaccine also contains a harmless piece of messenger RNA (mRNA). The COVID-19 mRNA [teaches](#) cells in the body how to create an [immune response](#) to the virus that causes COVID-19. This response helps protect you from getting sick with COVID-19 in the future. After the body produces an immune response, it discards all of the vaccine ingredients, just as it would discard any substance that cells no longer need. This process is a part of normal body functioning.

All COVID-19 vaccines are manufactured with as few ingredients as possible and with very small amounts of each ingredient. Each ingredient in the vaccine serves a specific purpose as seen in the table below.

Pfizer-BioNTech has updated the formulation of the Pfizer-BioNTech COVID-19 vaccine. The updated formulation has the same active ingredients as the previous formulation but uses different stabilizers (ingredients that help keep the vaccine molecules stable while the vaccine is manufactured, frozen, shipped, and stored). These changes allow for easier shipping and longer storage of vaccines at refrigerator temperatures. This will help improve access to vaccines for people who need them and will decrease waste.

The previous formulation for people ages 12 years and older is no longer being distributed, and once the doses of that formulation have been used, only the updated formulation will be available. Both formulations can be used interchangeably.

without any safety or effectiveness concerns. Check with your healthcare provider about which formulation they carry if you are concerned about any of the ingredients.

## Ingredients in the original Pfizer–BioNTech COVID–19 vaccine for people ages 12 years and older

The original Pfizer-BioNTech COVID-19 vaccine for people ages 12 years and older contains the following ingredients:

### Type of Ingredient

Type of Ingredient

### Ingredient

Ingredient

### Purpose

Purpose

### Type of Ingredient

Messenger ribonucleic acid (mRNA)

### Ingredient

- Nucleoside-modified mRNA encoding the viral spike (S) glycoprotein of SARS-CoV-2

### Purpose

Provides instructions the body uses to build a harmless piece of a protein from the virus that causes COVID-19. This protein causes an immune response that helps protect the body from getting sick with COVID-19 in the future.

### Type of Ingredient

Lipids (fats)

### Ingredient

- 2[[polyethylene glycol (PEG))-2000]-N,N-ditetradecylacetamide
- 1,2-distearoyl-sn-glycero-3-phosphocholine
- Cholesterol (plant derived)
- ((4-hydroxybutyl)azanediyl)bis(hexane-6,1-diyl)bis(2-hexyldecanoate)

### Purpose

Work together to help the mRNA enter cells.

**Type of Ingredient**

Salts and sugar

**Ingredient**

- Dibasic sodium phosphate dihydrate
- Monobasic potassium phosphate
- Potassium chloride (common food salt)
- Sodium chloride (basic table salt)
- Sucrose (basic table sugar)

**Purpose**

Work together to help keep the vaccine molecules stable while the vaccine is manufactured, frozen, shipped, and stored until it is ready to be given to a vaccine recipient.

**Messenger ribonucleic acid (mRNA):**

Nucleoside-modified mRNA encoding the viral spike (S) glycoprotein of SARS-CoV-2

**Purpose**

Provides instructions the body uses to build a harmless piece of a protein from the virus that causes COVID-19. This protein causes an immune response that helps protect the body from getting sick with COVID-19 in the future.

**Lipids (fats):**

- 2[(polyethylene glycol (PEG))-2000]-N,N-ditetradecylacetamide
- 1,2-distearoyl-sn-glycero-3-phosphocholine
- Cholesterol (plant derived)
- (4-hydroxybutyl)azanediyl)bis(hexane-6,1-diyl)bis(2-hexyldecanoate)

**Purpose**

Work together to help the mRNA enter cells.

**Salts and sugar:**

- Dibasic sodium phosphate dihydrate
- Monobasic potassium phosphate
- Potassium chloride (common food salt)
- Sodium chloride (basic table salt)
- Sucrose (basic table sugar)

**Purpose**

Work together to help keep the vaccine molecules stable while the vaccine is manufactured, frozen, shipped, and stored until it is ready to be given to a vaccine recipient.

## Ingredients in children's Pfizer-BioNTech COVID-19 vaccine and the updated formulation for people ages 12 years and older

The Pfizer-BioNTech COVID-19 vaccine for people ages 5 through 11 years old and the updated formulation of the Pfizer-

BioNTech COVID-19 vaccine for people ages 12 years and older contain the following ingredients. While the ingredients are the same for all ages, people ages 12 years and older receive a higher dosage than children ages 5 through 11 years old.

**Type of Ingredient**

Type of Ingredient

**Ingredient**

Ingredient

**Purpose**

Purpose

**Type of Ingredient**

Messenger ribonucleic acid (mRNA)

**Ingredient**

- Nucleoside-modified mRNA encoding the viral spike (S) glycoprotein of SARS-CoV-2

**Purpose**

Provides instructions the body uses to build a harmless piece of a protein from the virus that causes COVID-19. This protein causes an immune response that helps protect the body from getting sick with COVID-19 in the future.

**Type of Ingredient**

Lipids (fats)

**Ingredient**

- 2[(polyethylene glycol (PEG))-2000]-N,N-ditetradecylacetamide
- 1,2-distearoyl-sn-glycero-3-phosphocholine
- Cholesterol (plant derived)
- ((4-hydroxybutyl)azanediyl)bis(hexane-6,1-diyl)bis(2-hexyldecanoate)

**Purpose**

Work together to help the mRNA enter cells.

**Type of Ingredient**

Sugar and acid stabilizers

**Ingredient**

- Sucrose (table sugar)
- Tromethamine

### Tromethamine hydrochloride

#### Purpose

Work together to help keep the vaccine molecules stable while the vaccine is manufactured, frozen, shipped, and stored until it is ready to be given to a vaccine recipient.

#### Messenger ribonucleic acid (mRNA):

Nucleoside-modified mRNA encoding the viral spike (S) glycoprotein of SARS-CoV-2

#### Purpose

Provides instructions the body uses to build a harmless piece of a protein from the virus that causes COVID-19. This protein causes an immune response that helps protect the body from getting sick with COVID-19 in the future.

#### Lipids (fats):

- 2[(polyethylene glycol (PEG))-2000]-N,N-ditetradecylacetamide
- 1,2-distearoyl-sn-glycero-3-phosphocholine
- Cholesterol (plant derived)
- ((4-hydroxybutyl)azanediyl)bis(hexane-6,1-diyl)bis(2-hexyldecanoate)

#### Purpose

Work together to help the mRNA enter cells.

#### Sugar and acid stabilizers:

- Sucrose (table sugar)
- Tromethamine
- Tromethamine hydrochloride

#### Purpose

Work together to help keep the vaccine molecules stable while the vaccine is manufactured, frozen, shipped, and stored until it is ready to be given to a vaccine recipient.

## Ingredients that are NOT used in COVID-19 vaccines

The above table lists ALL ingredients in the Pfizer-BioNTech COVID-19 vaccine. There are NO ingredients in this vaccine beyond what is listed in the table. The Pfizer-BioNTech COVID-19 vaccine has:

- **No preservatives** like thimerosal or mercury or any other preservatives.
- **No antibiotics** like sulfonamide or any other antibiotics.
- **No medicines or therapeutics** like ivermectin or any other medications.
- **No tissues** like aborted fetal cells, gelatin, or any materials from any animal.
- **No food proteins** like eggs or egg products, gluten, peanuts, tree nuts, nut products, or any nut byproducts (COVID-19 vaccines are not manufactured in facilities that produce food products).
- **No metals** like iron, nickel, cobalt, titanium, rare earth alloys, or any manufactured products like microelectronics, electrodes, carbon nanotubes or other nanostructures, or nanowire semiconductors.
- **No latex.** The vial stoppers used to hold the vaccine also do not contain latex.

### Related Pages

- › [Possible Side Effects](#)
- › [Safety of COVID-19 Vaccines](#)
- › [Benefits of Getting Vaccinated](#)
- › [How Vaccines Work](#)
- › [mRNA Vaccines](#)



## For Healthcare Workers

[Pfizer-BioNTech COVID-19 Vaccine](#): General information, schedule, and administration overview.

## Resources

[Pfizer-BioNTech COVID-19 Vaccine for People 12 Years of Age and Older Fact Sheet for Recipients and Caregivers \[PDF – 6 pages\]](#) [↗](#)

[Pfizer-BioNTech COVID-19 Vaccine for People 5 through 11 Years of Age Fact Sheet for Recipients and Caregivers \[PDF – 6 pages\]](#) [↗](#)

Last Updated Apr. 27, 2022



## COVID-19

# Moderna COVID-19 Vaccine (also known as Spikevax): Overview and Safety

Updated May 5, 2022

### Recommended for People 18 Years and Older

[Stay up to date](#)

[Guidance for people who are immunocompromised](#)

## General Information

**Manufacturer:** ModernaTX, Inc.

**Number of Shots:** 2 doses in the primary series, given 4–8 weeks apart.

People ages 18 years and older who are moderately or severely immunocompromised should get a third dose at least 4 weeks after their second dose.

**Booster Shot:** People ages 18 years and older who received a Moderna primary series should get a booster. Some people can also choose to receive a second booster.

**Type of Vaccine:** [mRNA](#)

**How Given:** Shot in the muscle of the upper arm

**Does NOT Contain:** Eggs, preservatives, latex, metals

[See full list of ingredients below](#)

**Name:** mRNA-1273

**Brand name:** Spikevax

## Moderna (Spikevax) Name Change

Moderna (Spikevax) COVID-19 vaccine received U.S. Food and Drug Administration (FDA) approval on January 31, 2022, for individuals ages 18 years and older. Once vaccines are approved by the FDA, companies can market the vaccines under brand names. Spikevax is the brand name for the Moderna COVID-19 vaccine. The FDA-authorized Moderna COVID-19 vaccine for individuals ages 18 years and older will now be marketed as Spikevax. **No change has been made to the vaccine's formula** with the name change.

## Safety Data Summary



COVID-19 vaccines have undergone—and will continue to undergo—the most intensive safety monitoring in U.S. history. Evidence from the hundreds of millions of COVID-19 vaccines already administered in the United States, and the billions of vaccines administered globally, demonstrates that they are [safe](#) and [effective](#).

[Side effects](#) that happen within 7 days of getting vaccinated are common but are mostly mild. Some people have reactions that affect their ability to do daily activities.

Side effects throughout the body (such as fever, chills, tiredness, and headache) are more common after the second dose of the vaccine.

[Severe allergic reactions](#) to vaccines are rare but can happen.

There is a rare risk of [myocarditis](#) and [pericarditis](#) associated with mRNA COVID-19 vaccination, mostly among males ages 12 through 39 years. The rare risk may be further reduced with a longer interval between the first and second dose. Learn more about [the timing for your second dose](#).

Learn more about [vaccine safety monitoring](#) after a vaccine is authorized or approved for use.

## How Well the Vaccine Works

- Vaccines reduce the risk of COVID-19, including the risk of severe illness and death among people who are fully vaccinated.
- COVID-19 vaccines are effective, but studies have shown vaccine protection declines over time especially with the Omicron variant. Learn more about getting a [booster](#) shot to enhance or restore protection against COVID-19.
- All FDA-approved or authorized COVID-19 vaccines provide substantial protection against COVID-19 hospitalization and death.
- CDC will continue to provide updates as we learn more.

Learn about [demographic information for people who participated in the trials](#) [PDF – 54 pages] [↗](#).

## Moderna COVID-19 Vaccine Ingredients

All COVID-19 vaccine ingredients are safe. Nearly all the ingredients in COVID-19 vaccines are ingredients found in many foods—fats, sugars, and salts. The Moderna COVID-19 vaccine also contains a harmless piece of messenger RNA (mRNA). The COVID-19 mRNA teaches cells in the body how to create an effective [immune response](#) to the virus that causes COVID-19. 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 substance that cells no longer need. This process is a part of normal body functioning.

All COVID-19 vaccines are manufactured with as few ingredients as possible and with very small amounts of each ingredient. Each ingredient in the vaccine serves a specific purpose as seen in the table below.

In the past, there has been one formula for the Moderna COVID-19 vaccine. A full dose of this formula (0.5 mL) is used for the primary series, and a half dose (0.25 mL) is given as a booster. Now, Moderna makes a second formula for booster doses only. This formula is 0.5 mL like the primary dose vaccine. It also includes all of the same ingredients, but some of the ingredients are in different amounts.

## Full list of ingredients

The Moderna COVID-19 vaccine contains the following ingredients:

Type of Ingredient

Type of Ingredient



**Ingredient****Ingredient****Purpose****Purpose****Type of Ingredient**

Messenger ribonucleic acid (mRNA)

**Ingredient**

- Nucleoside-modified mRNA encoding the viral spike (S) glycoprotein of SARS-CoV-2

**Purpose**

Provides instructions the body uses to build a harmless piece of a protein from the virus that causes COVID-19. This protein causes an immune response that helps protect the body from getting sick with COVID-19 in the future.

**Type of Ingredient**

Lipids (fats)

**Ingredient**

- PEG2000-DMG: 1,2-dimyristoyl-rac-glycerol, methoxypolyethylene glycol
- 1,2-distearoyl-sn-glycero-3-phosphocholine
- BotaniChol® (non-animal origin cholesterol)
- SM-102: heptadecane-9-yl 8-((2-hydroxyethyl) (6-oxo-6-(undecyloxy) hexyl) amino) octanoate

**Purpose**

Work together to help the mRNA enter cells.

**Type of Ingredient**

Salt, sugar, acid stabilizers, and acid

**Ingredient**

- Sodium acetate
- Sucrose (basic table sugar)
- Tromethamine
- Tromethamine hydrochloride
- Acetic acid (the main ingredient in white household vinegar)

**Purpose**

Work together to help keep the vaccine molecules stable while the vaccine is manufactured, frozen, shipped, and stored until it is ready to be given to a vaccine recipient.

#### **Messenger ribonucleic acid (mRNA):**

Nucleoside-modified mRNA encoding the viral spike (S) glycoprotein of SARS-CoV-2

#### **Purpose**

Provides instructions the body uses to build a harmless piece of a protein from the virus that causes COVID-19. This protein causes an immune response that helps to protect the body from getting sick with COVID-19 in the future.

#### **Lipids (fats):**

- PEG2000-DMG: 1,2-dimyristoyl-rac-glycerol, methoxypolyethylene glycol
- 1,2-distearoyl-sn-glycero-3-phosphocholine
- BotaniChol® (non-animal origin cholesterol)
- SM-102: heptadecane-9-yl 8-((2-hydroxyethyl) (6-oxo-6-(undecyloxy) hexyl) amino) octanoate

#### **Purpose**

Work together to help the mRNA enter cells

#### **Salt, sugar, acid stabilizers, and acid:**

- Sodium acetate
- Sucrose (basic table sugar)
- Tromethamine
- Tromethamine hydrochloride
- Acetic acid (the main ingredient in white household vinegar)

#### **Purpose**

Work together to help keep the vaccine molecules stable while the vaccine is manufactured, frozen, shipped, and stored until it is ready to be given to a vaccine recipient.

## Ingredients that are NOT used in COVID-19 vaccines

The above table lists ALL ingredients in the Moderna COVID-19 vaccine. There are NO ingredients in this vaccine beyond what is listed in the table. The Moderna COVID-19 vaccine has

- **No preservatives** like thimerosal or mercury or any other preservatives.
- **No antibiotics** like sulfonamide or any other antibiotics.
- **No medicines or therapeutics** like ivermectin or any other medications.
- **No tissues** like aborted fetal cells, gelatin, or any materials from any animal.
- **No food proteins** like eggs or egg products, gluten, peanuts, tree nuts, nut products, or any nut byproducts (COVID-19 vaccines are not manufactured in facilities that produce food products).
- **No metals** like iron, nickel, cobalt, titanium, rare earth alloys, or any manufactured products like microelectronics, electrodes, carbon nanotubes or other nanostructures, or nanowire semiconductors.
- **No latex.** The vial stoppers used to hold the vaccine also do not contain latex.

## Related Pages

- › [Possible Side Effects](#)
- › [Safety of COVID-19 Vaccines](#)
- › [Benefits of Getting Vaccinated](#)
- › [How Vaccines Work](#)
- › [mRNA Vaccines](#)



## For Healthcare Workers

[Moderna COVID-19 Vaccine: General information, schedule and administration overview.](#)

## More Information

[Moderna's COVID-19 Vaccine Fact Sheet for Recipients and Caregivers \[PDF – 6 pages\]](#) [↗](#)

[MMWR: Allergic Reactions Including Anaphylaxis After Receipt of the First Dose of Moderna COVID-19 Vaccine — United States, December 21, 2020–January 10, 2021](#)

[Safety and Reactogenicity Data](#)

Last Updated May 5, 2022

# Janssen COVID-19 Vaccine

**May 5, 2022: The FDA Limits Use of Janssen COVID-19 Vaccine to Certain Individuals.** Read the [press release \(/news-events/press-announcements/coronavirus-covid-19-update-fda-limits-use-janssen-covid-19-vaccine-certain-individuals\)](#).

Fact Sheets and FAQs

Fact Sheet Translations

Información sobre las vacunas para el COVID-19 (<https://www.fda.gov/about-fda/fda-en-espanol/informacion-sobre-las-vacunas-para-el-covid-19>)

Janssen COVID-19 Vaccine is available under EUA to prevent COVID-19 in individuals 18 years of age and older for whom other FDA-authorized or approved COVID-19 vaccines are not accessible or clinically appropriate, and individuals 18 years of age and older who elect to receive the Janssen COVID-19 Vaccine because they would otherwise not receive a COVID-19 vaccine. For these individuals, the Janssen COVID-19 vaccine is authorized as:

- a single primary vaccination dose
- a single booster dose at least two months after completing primary vaccination with the vaccine
- a heterologous (or “mix and match”) single booster dose following completion of primary vaccination with a different available COVID-19 vaccine. The dosing interval for the heterologous booster dose is the same as that authorized for a booster dose of the vaccine used for primary vaccination. View [COVID-19 vaccine booster eligibility \(/emergency-preparedness-and-response/coronavirus-disease-2019-covid-19/do-i-qualify-covid-19-vaccine-booster-and-which-one\)](#).

On February 27, 2021, FDA issued an EUA for the Janssen COVID-19 Vaccine to prevent COVID-19 in individuals 18 years of age and older.

On May 5, 2022, the U.S. Food and Drug Administration limited the authorized use of the Janssen COVID-19 Vaccine to individuals 18 years of age and older for whom other authorized or approved COVID-19 vaccines are not accessible or clinically appropriate, and to individuals 18 years of age and older who elect to receive the Janssen COVID-19 Vaccine because they would otherwise not receive a COVID-19 vaccine.

---

## Emergency Use Authorization Status:

Authorized

### Name:

Janssen COVID-19 Vaccine

### Manufacturer:

Janssen Biotech Inc.,  
a Janssen Pharmaceutical Company of Johnson & Johnson

## Authorized Use

For the prevention of Coronavirus Disease 2019 (COVID-19) in individuals 18 years of age and older for whom other FDA-authorized or approved COVID-19 vaccines are not accessible or clinically appropriate, and in individuals 18 years of age and older who elect to receive the Janssen COVID-19 Vaccine because they would otherwise not receive a COVID-19 vaccine.

## Common Side Effects

The most commonly reported side effects were pain at the injection site, headache, fatigue, muscle aches and nausea. Most of these side effects occurred within 1-2 days following vaccination and were mild to moderate in severity and lasted 1-2 days. [Learn more \(/media/146305/download\)](/media/146305/download).

## Fact Sheets (English) and FAQs

Information	Last Updated
<a href="/media/146304/download">Fact Sheet for Healthcare Providers Administering Vaccine (/media/146304/download)</a>	May 5, 2022
<a href="/media/146305/download">Fact Sheet for Recipients and Caregivers (/media/146305/download)</a>	May 5, 2022
<a href="/emergency-preparedness-and-response/coronavirus-disease-2019-covid-19/janssen-covid-19-vaccine-frequently-asked-questions">Frequently Asked Questions on the Janssen COVID-19 Vaccine (/emergency-preparedness-and-response/coronavirus-disease-2019-covid-19/janssen-covid-19-vaccine-frequently-asked-questions)</a>	February 16, 2022

## Regulatory Information

Information	Date
<a href="/media/158318/download">Decision Memorandum (/media/158318/download)</a>	May 5, 2022
<a href="https://www.fda.gov/media/146303/download">Letter of Authorization (https://www.fda.gov/media/146303/download)</a> (Reissued)	May 5, 2022
<a href="/media/157554/download">Concurrence Letter (/media/157554/download)</a>	April 7, 2022
<a href="/media/156787/download">Concurrence Letter (/media/156787/download)</a>	March 4, 2022
<a href="/media/155862/download">Letter Granting EUA Amendment (/media/155862/download)</a>	January 31, 2022
<a href="https://www.fda.gov/media/155391/download">Letter Granting EUA Amendment (https://www.fda.gov/media/155391/download)</a>	January 11, 2022
<a href="/media/155467/download">Addendum to Jan 7, 2022 Review Memorandum (/media/155467/download)</a>	January 7, 2022
<a href="/media/155466/download">Review Memorandum (/media/155466/download)</a>	January 7, 2022
<a href="/media/155547/download">Decision Memorandum Addendum (/media/155547/download)</a>	January 6, 2021
<a href="/media/155236/download">Decision Memorandum Addendum (/media/155236/download)</a>	December 30, 2021
<a href="/media/155671/download">Addendum to Dec. 22, 2021 Review Memorandum (/media/155671/download)</a>	December 22, 2021
<a href="/media/155670/download">Review Memorandum (/media/155670/download)</a>	December 22, 2021
<a href="/media/154870/download">Letter Granting EUA Amendment (/media/154870/download)</a>	December 14, 2021
<a href="/media/146303/download">Letter of Authorization (/media/146303/download)</a> (Reissued)	November 19, 2021
<a href="/media/154359/download">Decision Memorandum Addendum (/media/154359/download)</a>	November 18, 2021

Information	Date
<a href="#">FDA Decision Memorandum Addendum (/media/153944/download)</a>	November 5, 2021
<a href="#">Concurrence Letter (/media/153931/download)</a>	November 5, 2021
<a href="#">Memorandum to the File (/media/153439/download)</a>	October 20, 2021
<a href="#">Decision Memorandum (/media/153441/download)</a>	October 20, 2021
<a href="#">Advisory Committee Meeting Information (/advisory-committees/advisory-committee-calendar/vaccines-and-related-biological-products-advisory-committee-october-14-15-2021-meeting-announcement)</a>	October 15, 2021
<a href="#">FDA Decision Memorandum Addendum (/media/152567/download)</a>	September 29, 2021
<a href="#">Concurrence Letter (/media/152547/download)</a>	September 29, 2021
<a href="#">FDA Decision Memorandum Addendum (/media/152170/download)</a>	September 14, 2021
<a href="#">Concurrence Letter (/media/152171/download)</a>	September 14, 2021
<a href="#">FDA Decision Memorandum Addendum (/media/152100/download)</a>	September 8, 2021
<a href="#">Concurrence Letter (https://www.fda.gov/media/152046/download)</a>	September 8, 2021
<a href="#">Letter Granting EUA Amendment (/media/151868/download)</a>	August 30, 2021
<a href="#">Concurrence Letter (/media/151141/download)</a> (shelf life extension to 6 months)	July 28, 2021
<a href="#">FDA Decision Memorandum Addendum (/media/150745/download)</a>	July 13, 2021
<a href="#">Concurrence Letter (/media/150743/download)</a>	July 13, 2021
<a href="#">Letter Granting EUA Amendment (/media/150723/download)</a>	July 12, 2021
<a href="#">Concurrence Letter (/media/150136/download)</a> (Reissued)	July 2, 2021
<a href="#">Concurrence Letter (/media/150163/download)</a> (Reissued)	July 2, 2021
<a href="#">Concurrence Letter (/media/150567/download)</a>	July 2, 2021
<a href="#">FDA Decision Memorandum Addendum (/media/150571/download)</a>	July 1, 2021
<a href="#">FDA Decision Memorandum Addendum (/media/150139/download)</a>	June 15, 2021
<a href="#">FDA Decision Memorandum (/media/150081/download)</a>	June 11, 2021
<a href="#">Concurrence Letter (/media/150064/download)</a> (concurring with the extension of the shelf-life of Janssen COVID-19 Vaccine stored at 2-8°C, from 3 months to 4.5 months)	June 10, 2021
<a href="#">Letter Granting EUA Amendment (/media/147865/download)</a>	April 23, 2021
<a href="#">Letter Granting EUA Amendment (/media/147194/download)</a>	March 29, 2021
<a href="#">FDA Decision Memorandum (/media/146338/download)</a>	February 27, 2021
<a href="#">Advisory Committee Meeting Information (/advisory-committees/advisory-committee-calendar/vaccines-and-related-biological-products-advisory-committee-february-26-2021-meeting-announcement)</a>	February 26, 2021

Information	Date
<b>Media Materials and Webcasts</b>	
Information	Date
<a href="/news-events/press-announcements/coronavirus-covid-19-update-fda-limits-use-janssen-covid-19-vaccine-certain-individuals">Press Release (/news-events/press-announcements/coronavirus-covid-19-update-fda-limits-use-janssen-covid-19-vaccine-certain-individuals)</a>	May 5, 2022
<a href="/news-events/press-announcements/coronavirus-covid-19-update-fda-takes-additional-actions-use-booster-dose-covid-19-vaccines">Press Release (/news-events/press-announcements/coronavirus-covid-19-update-fda-takes-additional-actions-use-booster-dose-covid-19-vaccines)</a>	October 20, 2021
<a href="https://youtu.be/rou7tf4vaUU">Media Call (https://youtu.be/rou7tf4vaUU)</a> <a href="http://www.fda.gov/about-fda/website-policies/website-disclaimer">↗ (http://www.fda.gov/about-fda/website-policies/website-disclaimer)</a>	October 20, 2021
<a href="https://youtu.be/c-H40GrvWz4">Advisory Committee Meeting Webcast (https://youtu.be/c-H40GrvWz4)</a> <a href="http://www.fda.gov/about-fda/website-policies/website-disclaimer">↗ (http://www.fda.gov/about-fda/website-policies/website-disclaimer)</a>	October 15, 2021
<a href="/news-events/press-announcements/fda-and-cdc-lift-recommended-pause-johnson-johnson-janssen-covid-19-vaccine-use-following-thorough">Press Release (/news-events/press-announcements/fda-and-cdc-lift-recommended-pause-johnson-johnson-janssen-covid-19-vaccine-use-following-thorough)</a>	April 23, 2021
<a href="https://youtu.be/Nf_OuB1rBi0">Joint FDA and CDC Press Conference (https://youtu.be/Nf_OuB1rBi0)</a> <a href="http://www.fda.gov/about-fda/website-policies/website-disclaimer">↗ (http://www.fda.gov/about-fda/website-policies/website-disclaimer)</a>	April 23, 2021
<a href="/news-events/press-announcements/joint-cdc-and-fda-statement-johnson-johnson-covid-19-vaccine">Joint CDC and FDA Statement (/news-events/press-announcements/joint-cdc-and-fda-statement-johnson-johnson-covid-19-vaccine)</a>	April 13, 2021
<a href="https://youtu.be/_ELXnGYgsJY">Joint FDA and CDC Media Call (https://youtu.be/_ELXnGYgsJY)</a> <a href="http://www.fda.gov/about-fda/website-policies/website-disclaimer">↗ (http://www.fda.gov/about-fda/website-policies/website-disclaimer)</a>	April 13, 2021
<a href="https://youtu.be/m_eSKpm19zk">Media Call (https://youtu.be/m_eSKpm19zk)</a> <a href="http://www.fda.gov/about-fda/website-policies/website-disclaimer">↗ (http://www.fda.gov/about-fda/website-policies/website-disclaimer)</a>	February 27, 2021
<a href="/news-events/press-announcements/fda-issues-emergency-use-authorization-third-covid-19-vaccine">Press Release (/news-events/press-announcements/fda-issues-emergency-use-authorization-third-covid-19-vaccine)</a>	February 27, 2021
<a href="https://youtu.be/Qd7mICD-rEA">Advisory Committee Meeting Webcast (https://youtu.be/Qd7mICD-rEA)</a> <a href="http://www.fda.gov/about-fda/website-policies/website-disclaimer">↗ (http://www.fda.gov/about-fda/website-policies/website-disclaimer)</a>	February 26, 2021

## Translations of the Fact Sheet for Recipients and Caregivers

<a href="/media/146685/download">接受者和护理者须知 (/media/146685/download)</a> (May 5, 2022)	中文 (Chinese, Simplified)
<a href="/media/146839/download">환자와 의료진을 위한 정보지 (/media/146839/download)</a> (May 5, 2022)	한국어 (Korean)
<a href="/media/146762/download">HOJA INFORMATIVA PARA RECEPTORES Y PROVEEDORES DE CUIDADO (/media/146762/download)</a> (May 5, 2022)	Español (Spanish)

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[FACT SHEET PARA SA MGA TATANGGAP AT MGA TAGAPAG-ALAGA \(/media/146797/download\)](#)  
(May 5, 2022)

Tagalog (Tagalog)

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[TỜ THÔNG TIN CHO NGƯỜI NHẬN VÀ NHỮNG NGƯỜI CHĂM SÓC \(/media/146742/download\)](#)  
(May 5, 2022)

Tiếng Việt (Vietnamese)