Aerosol Transmittable Disease (ATD) Program Referring Employer

DEPARTMENT OF PUBLIC HEALTH

OCCUPATIONAL SAFETY & HEALTH

ATD Standard Requirements: Cal-OSHA 5199

- Designed to protect workers with duties that increase potential exposure risk to Airborne Infectious Diseases (Example TB, Measles, Novel Influenza Etc.)
- California's first standard to safeguard workers from the spread of airborne disease.
- Applies to all employees who as a result of their normal job duties, maybe exposed to an Aerosol Transmissible Disease.

Training Objectives

- ATD Definitions
- ATD Program Overview
  - Screening Methods
  - Describe Source Case Control Measures
  - Medical Service Procedures For Employees
  - Vaccine Availability

Definitions

ATD

- A disease or pathogen for which droplet or airborne precautions are required.

The ATD Standard identifies three categories of ATD/pathogens:

- Airborne Infectious Diseases are transmitted by air through dissemination of airborne droplet nuclei, small particle aerosols, or dust particles containing disease agent for which isolation is recommended.
- ATD/Aerosol Transmissible Pathogen require droplet precautions are diseases that transmit by infectious particles or droplets coming into contact with the eyes, upper respiratory tract, or mucous membranes of the nose and mouth.
- Aerosol Transmissible Pathogens-Laboratory are pathogens that may be spread through laboratory-generated aerosols.
- **Note: Some diseases or pathogens, such as SARS and Coronavirus, appear on more than one list. For exposures to such pathogens, both airborne and droplet precautions may be used.**

Definitions

Airborne Transmission

Bacteria or viruses that travel on dust particles or small respiratory droplets when an infected person sneezes, coughs, laughs, or exhales.

Airborne particles are able to survive outside of the body and remain in the air for several hours.

Residents with airborne-transmitted infections are placed in a negative pressure isolation room and staff may only enter if wearing fit-tested respirator (e.g. N95, elastomeric respirator).

Per local and state department of public health guidance, COVID-19 cases may be isolated in a regular room when a negative pressure isolation room is not available.

Examples: *COVID-19, tuberculosis (TB), measles (rubeola)*

Droplet Transmission

Bacteria or viruses that travel via droplets when an infected person coughs, sneezes, or talks. These organisms can also land on and contaminate surfaces.

Droplets are large and can travel up to six feet, but do not stay suspended in the air.

Examples: *Influenza (flu), common cold viruses such as rhinovirus or coronavirus 229E (not to be confused with COVID-19)*

Definitions

- Exposure Incident-an event in which an employee has been exposed to an individual who is a case or suspected case of a reportable ATD.
- Respirator-A device which has been designed to protect the wearer from inhalation of harmful atmosphere, and has been approved by NIOSH.

Definitions

Referring Facility

- Employers whose employees have occupational exposure but do not provide diagnosis, treatment, transport, housing, isolation or management to patients with know or suspected ATD, may qualify as referring employees if they meet all of the following conditions.
  - Screen persons for ATD.
  - Refer any person identified as a case or suspected case of an ATD to an appropriate facility for care.
  - Do not intend to provide further medical services to ATD cases and suspected cased beyond first aid, initial treatment or screening and referral.
  - Do not provide transport, housing or airborne infection isolation to anyone identified as an ATD case or suspected case unless the transport provided is only non-medical transport in the course of referral.

Definitions

NON REFERRING FACILITY

- Facilities with airborne isolation rooms with a special ventilation system where patients can reside while they are infectious (SFGH, LHH, JHS).

ATD Program

Referring Employee ATD Exposure Control Plan

- Screening Procedures
- Source Control Measures
- Personal Protective Equipment (PPE)
- Referral Procedures
- Medical Services/Communication
- Training
- Record Keeping

Screening Procedures

Client Self Identification

- Visual alerts posted at clinic entrances instructing clients to inform healthcare personnel if they have ATD symptoms.
- Posted alerts (Cover Your Cough Signs) will instruct client to practice respiratory hygiene cough etiquette.
- Staff may identify client as having a potential ATD through observation.

Attention!

>>> Stop the Spread of Germs

If you have any RESPIRATORY ILLNESS symptoms, including cough, fever, chest congestion, please notify the receptionist upon arrival.

We ask that you:

>> Wear a mask

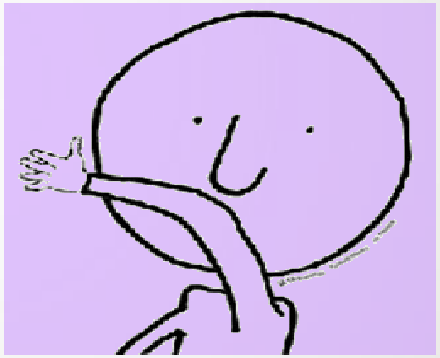
Ask receptionist for one if you have a cough

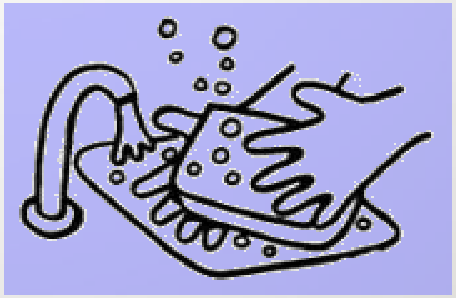
>> Cover your nose and mouth

Wear a mask or use tissues when sneezing or coughing

>> Keep your hands clean!

Use alcohol based hand gel or wash your hands after sneezing or coughing





Thank You for protecting our patients and healthcare workers!

Source Control Measures

Source Client

- Signage instructing the client to report to the nurse/receptionist if they have any ATD symptoms
- Client screening during medical evaluation
- Requiring source client to follow Respiratory Hygiene Etiquette
- Requiring source client to wear a mask
- Isolation in well ventilated private Room

Respiratory Hygiene Etiquette:

- Cover the nose/mouth when coughing or sneezing.
- Wear surgical or procedure mask if coughing mask will be provided by clinic staff.
- Use tissue to contain respiratory secretions and dispose of them in the nearest waste receptacle.
- Perform hand hygiene after having contact with respiratory secretion.

Source Control Measures

- Source control procedures minimize the spread of potentially infectious airborne particles and droplets from symptomatic individuals. Source Control procedures include the following:
  - Postings signs near entrances instructing patients to inform health care staff if they have symptoms of respiratory infection.
  - Posting information about respiratory hygiene/cough etiquette and making surgical or procedure masks and tissues available to symptomatic patients.

Source Control Measures Continued

- Making adequate handwashing facilities with soap or alcohol-based hand sanitizers available to patients and people accompanying them.
- Placing symptomatic persons in a separate room or area, preferable with a separate ventilation system
- Instructing persons with whom employees may have contact of the employer's source control measures.

Source Control Measures for Staff

- Notifying staff when a client is suspected of an ATD so the following can be Implemented:
  - Droplet precautions/Airborne precautions.
  - Applying appropriate PPE including wearing a surgical mask and/or N95 depending on the ATD, gloves and gown etc.).
  - Hand hygiene
  - Environmental controls disinfection of exam rooms commonly touched surfaces

Why is Hand Hygiene Important?

Cleaning your hands:

- Prevents the spread of infections.
- Prevents cross-contamination and reduces Healthcare-associated Infections (HAIs).
- Protects you, the client, visitors, our colleagues, and our family members and loved ones from infection.

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Hand Washing vs. Alcohol-Based Hand Rub

Hand Washing

Wash with soap and water when hands are visibly dirty, contaminated, or if caring for a clients with an infection that produces spores, such as Norovirus or C. diff.

1. Wet your hands with water.
2. Apply hand soap.
3. Rub your hands together vigorously for at least 20 seconds (covering all surfaces of the hands and fingers).
4. Rinse your hands with water.
5. Dry hands using paper towels.
6. Use paper towel to turn off the faucet.

Alcohol-Based Hand Rub (ABHR)

Preferred method with exceptions listed above in red.

Note: ABHR is effective against COVID-19.

Use an alcohol-based hand rub if hands are not visibly soiled.

1. Put product on hands and rub hands together.
2. Cover all surfaces until hands feel dry.
3. This takes around 20 seconds.

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When is Hand Hygiene Required?

Before

- ❑ Contact with a patient
- ❑ Contact with a patient's environment
- ❑ Putting on gloves
- ❑ Eating or drinking
- ❑ Performing any medical procedure

After

- ❑ Contact with a patients skin or bodily fluids
- ❑ Contact with potentially contaminated surfaces
- ❑ Removing gloves
- ❑ Eating or drinking
- ❑ Using the toilet
- ❑ Blowing your nose, coughing, sneezing, or touching your face or hair

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Additional PPE Requirements During Pandemic

- In addition to Standard Precautions, additional PPE may be required during the COVID-19 pandemic.
  - Some examples include universal masking as well as a respirator (e.g. N95) and eye protection (e.g. face shield) during a COVID-19 outbreak.

Hand Hygiene and Personal Protective Equipment (PPE)

- Gloves are the most common form of PPE used.
- Hand hygiene must be performed before putting gloves on and after removing gloves.
- Gloves are not a substitute for hand hygiene.
- Dispose gloves after each task as organisms are transferred to different surfaces with used gloves.
- Gloves are required for tasks such as handling dirty linen, potential risk for exposure to body fluids, and when directly touching ready-to-eat food (e.g. making a sandwich, buttering bread).

What should YOU do to prevent the spread of infections?

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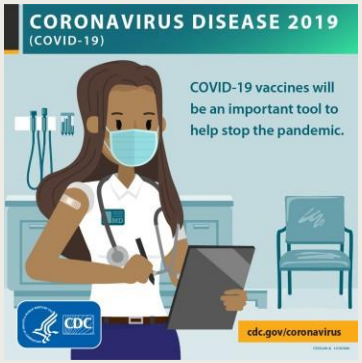
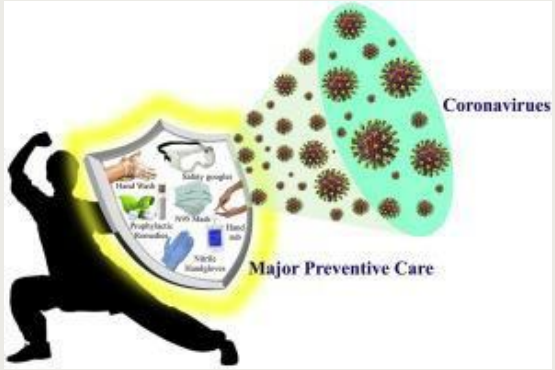
COVID-19

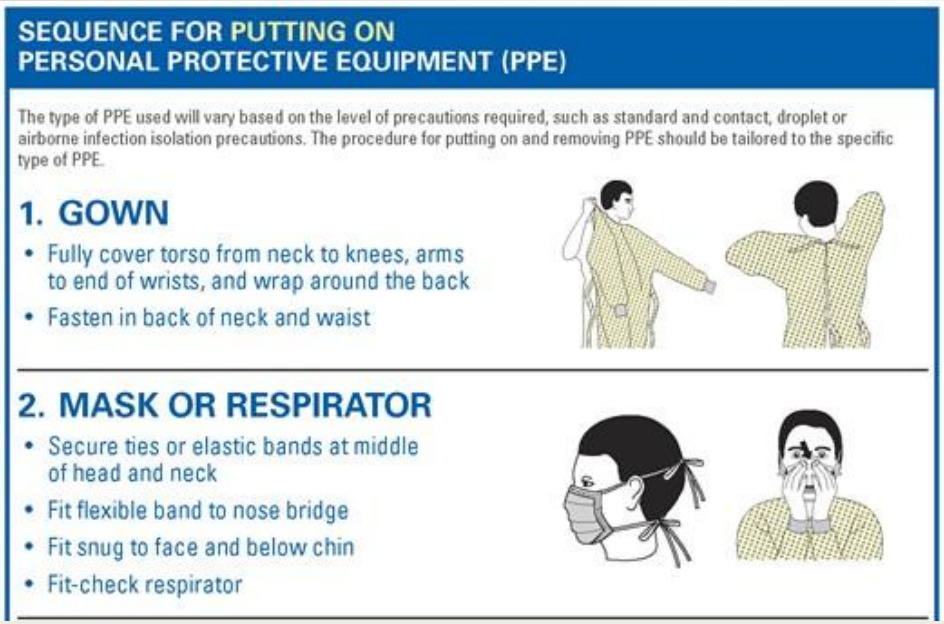
What should I be doing to protect myself and others?

- Receive your uptodate COVID-19 vaccines if you have not already done so.
- Practice social distancing and stay at least 6 feet away from people around you when possible.
- Perform frequent hand hygiene with an alcohol-based hand rub or washing your hands with soap and water for at least 20 seconds.
- Using PPE with hand hygiene appropriately.
- Staying home when symptomatic with COVID-19 symptoms and immediately reporting to your direct supervisor if you do not feel well at work.
- Immediately report any known COVID-19 exposure in your household or community (e.g. friend that visited became COVID-19 positive) to your direct supervisor.





Putting on Personal Protective Equipment (PPE)



Link to CDC PDF on PPE sequence:
https://www.cdc.gov/hai/pdfs/ppe/ppe-sequence.pdf

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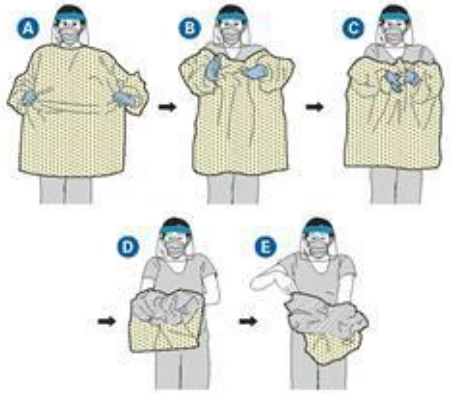
Removing on Personal Protective Equipment (PPE) Example 2

HOW TO SAFELY REMOVE PERSONAL PROTECTIVE EQUIPMENT (PPE) EXAMPLE 2

Here is another way to safely remove PPE without contaminating your clothing, skin, or mucous membranes with potentially infectious materials. **Remove all PPE before exiting the patient room** except a respirator, if worn. Remove the respirator **after** leaving the patient room and closing the door. Remove PPE in the following sequence:

1. GOWN AND GLOVES

- Gown front and sleeves and the outside of gloves are contaminated!
- If your hands get contaminated during gown or glove removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Grasp the gown in the front and pull away from your body so that the ties break, touching outside of gown only with gloved hands
- While removing the gown, fold or roll the gown inside-out into a bundle
- As you are removing the gown, peel off your gloves at the same time, only touching the inside of the gloves and gown with your bare hands. Place the gown and gloves into a waste container



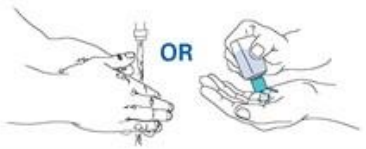
2. GOGGLES OR FACE SHIELD

- Outside of goggles or face shield are contaminated!
- If your hands get contaminated during goggle or face shield removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Remove goggles or face shield from the back by lifting head band and without touching the front of the goggles or face shield
- If the item is reusable, place in designated receptacle for reprocessing. Otherwise, discard in a waste container

3. MASK OR RESPIRATOR

- Front of mask/respirator is contaminated — DO NOT TOUCH!
- If your hands get contaminated during mask/respirator removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Grasp bottom ties or elastics of the mask/respirator, then the ones at the top, and remove without touching the front
- Discard in a waste container

4. WASH HANDS OR USE AN ALCOHOL-BASED HAND SANITIZER IMMEDIATELY AFTER REMOVING ALL PPE



PERFORM HAND HYGIENE BETWEEN STEPS IF HANDS BECOME CONTAMINATED AND IMMEDIATELY AFTER REMOVING ALL PPE

CDC

Link to CDC PDF on PPE sequence:
https://www.cdc.gov/hai/pdfs/ppe/ppe-sequence.pdf

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Respirator On / Respirator Off

When you put on a disposable respirator

Position your respirator correctly and check the seal to protect yourself from COVID-19.

Cup the respirator in your hand. Hold the respirator under your chin with the nose piece up. The top strap (on single or double strap respirators) goes over and rests at the top back of your head. The bottom strap is positioned around the neck and below the ears.

Place your fingertips from both hands at the top of the metal nose clip (if present). Slide fingertips down both sides of the metal strip to mold the nose area to the shape of your nose.

Place both hands over the respirator, take a quick breath in to check the seal. Breathe out. If you feel a leak when breathing in or breathing out, there is not a proper seal.

Select other PPE items that do not interfere with the fit or performance of your respirator.

Link to CDC PDF on disposable respirators:
https://www.cdc.gov/coronavirus/2019-ncov/downloads/hcp/fs-respirator-on-off.pdf

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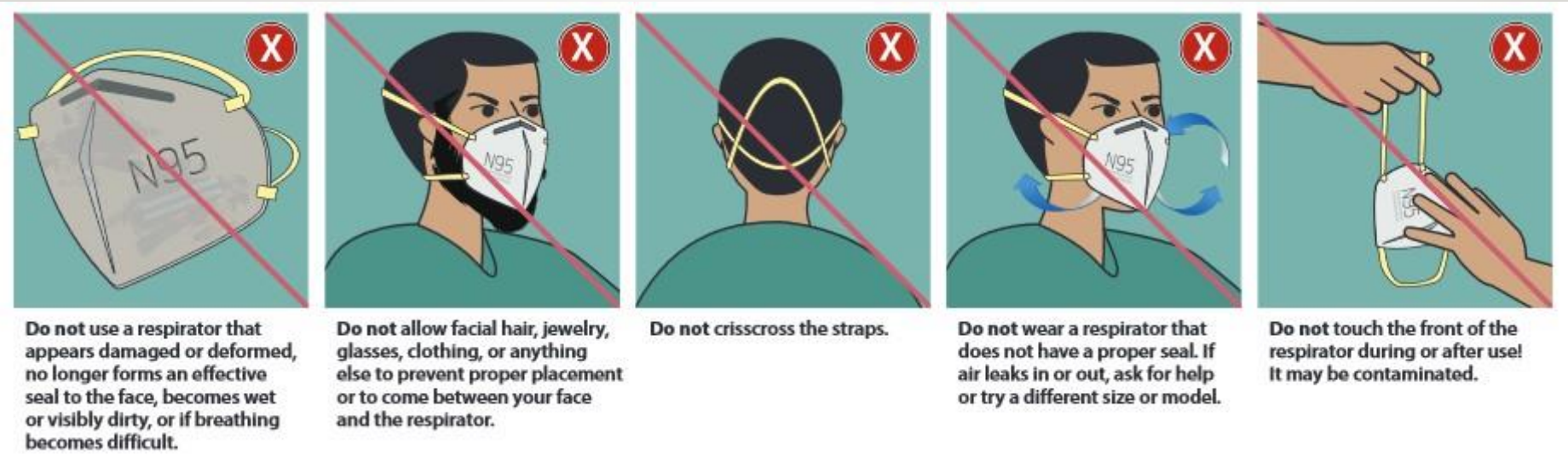
Respirator On / Respirator Off



Do not use a respirator that appears damaged or deformed, no longer forms an effective seal to the face, becomes wet or visibly dirty, or if breathing becomes difficult.

Do not allow facial hair, jewelry, glasses, clothing, or anything else to prevent proper placement or to come between your face and the respirator.

Do not crisscross the straps.

Do not wear a respirator that does not have a proper seal. If air leaks in or out, ask for help or try a different size or model.

Do not touch the front of the respirator during or after use! It may be contaminated.

Link to CDC PDF on disposable respirators:
https://www.cdc.gov/coronavirus/2019-ncov/downloads/hcp/fs-respirator-on-off.pdf

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Facemask Do's and Don'ts

When putting on a facemask

Clean your hands and put on your facemask so it fully covers your mouth and nose.

DO secure the elastic bands around your ears.

DO secure the ties at the middle of your head and the base of your head.

Link to CDC PDF on facemask do's and don'ts:
https://www.cdc.gov/coronavirus/2019-ncov/downloads/hcp/fs-facemask-dos-donts.pdf

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Facemask Do's and Don'ts

Link to CDC PDF on facemask do's and don'ts:
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Facemask Do's and Don'ts

When removing a facemask

Clean your hands and remove your facemask touching only the straps or ties.

DO leave the patient care area, then clean your hands with alcohol-based hand sanitizer or soap and water.

DO remove your facemask touching ONLY the straps or ties, throw it away*, and clean your hands again.

*If implementing limited-reuse: Facemasks should be carefully folded so that the outer surface is held inward and against itself to reduce contact with the outer surface during storage. Folded facemasks can be stored between uses in a clean, sealable paper bag or breathable container.

Additional information is available about how to safely put on and remove personal protective equipment, including facemasks: https://www.cdc.gov/coronavirus/2019-ncov/hcp/using-ppe.html.

cdc.gov/coronavirus

Link to CDC PDF on facemask do's and don'ts:
https://www.cdc.gov/coronavirus/2019-ncov/downloads/hcp/fs-facemask-dos-donts.pdf

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Risk Reduction Measures

SUSPECTED ATD CLIENT

- Place in separate room or well ventilated area
- Initiate source control measures
- Environmental controls disinfect exam room, equipment after client discharge
- Notification of all staff with potential client contact

Referrals

- If transfer of source case to a acute care facility is necesary it should occur within 5 hours of identification.
- The manager or designee will notify the following individuals of the source case transfer so that staff who will be having contact with the client can take precautions to prevent an exposure to the ATD.
  - Clinic employees
  - Local health officer (if applicable)
  - Referring hospital
  - Anyone who will have contact including paramedics, transport drivers etc.

Medical Service Procedures Employee Exposure

Reporting Exposure Incidents:

- The employee shall report to their manager any suspected exposure to a client with an ATD.
- The manager shall be responsible for conducting employee exposure surveillance.
- The employee shall be notified of exposure within 96 hours by their manager or designee.
- The manager shall refer the employee to the SFGH OHC for medical evaluation. Or respective site specific agency OHC if not civil service employee
- The employee and manager shall complete workers compensation forms.

Medical Service Procedures Employee Exposure

Post Exposure Evaluation

- Medical evaluation shall occur as soon as feasible.
- Medical evaluation will be done by site identified by your agency
- Recommendations regarding removal from work shall be provided by the medical provider identified by your agency.

TB Screening Program

First:

- Mangers will be responsible for the TB Screening Program at their site.
- At risk employees will be identified.
- Annual PPD or Symptom Review will occur.
- Semi-annual screening done for high risk employees.
- As needed screening.

Next Steps:

- If an employee has a positive symptom review or a PPD conversion, a referral will be made to the occupational health clinic identified by your agency for evaluation.
- Inform Local Health Office (If Applicable).
- Identify if employee will have any work restriction.

Vaccines

ATD Vaccination Recommendations & Vaccine Schedule

- Covid-19 depending on manufacturer one to two doses
- Influenza One dose annually.
- Measles, Mumps and Rubella two doses if you were born after 1956. Not recommended for individuals over age 65.
- Tetanus, Diptheria, and Acellular Pertussis (Tdap) One dose, booster as recommended.
- Chickenpox vaccine-people who have not been vaccinated by 13 years of age should get two doses of the vaccine, four to eight weeks apart.

Covid 19 Vaccine

Covid-19 vaccinations helps protect people from getting sick or severely ill withCovid-19.

To receive the most protection, people should receive all recommended doses of the Covid-19 vaccine.

Everyone 2 years of age and older is now eligible to get a Covid-19 Vaccination.

Is the vaccine safe?

Yes. All currently authorized and recommended Covid-19 vaccines are safe and efective and the CDC does not recommend one vaccine over another.

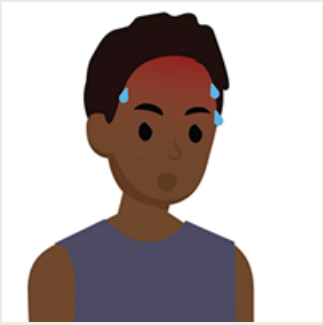
- Covid-19 vaccination will help protect you from getting Covid-19. You may have side effects, which are normal signs that your body is building protection. These side effects may affect your ability to do daily activities, but should go away in a few days. Some people have no side effects.
- Some people who are fully vaccinated against Covid-19 will still get sick because no vaccine is 100% effective. Experts continue to monitor and evaluate how often this occurs, how severe their illness if and how likely a vaccinated person is to spread Covid-19 to others.
- New variants of the virus that cause Covid-19 are spreading in the United States and in other parts of the world.

Possible Side Effects After Getting a Covid-19 Vaccine

On the arm where you got shot:

- Pain
- Redness
- Swelling

- Throughout the rest of your body:
- Tiredness
- Headache
- Muscle Pain
- Chills
- Nausea



Helpful Tips

To reduce pain and discomfort where you got the shot:

- Apply a clean, cool wet washcloth over the area.
- Use or exercise your arm.

To reduce discomfort from fever:

Drink plenty of fluids.

Dress lightly.

Remember

- Side effects may affect your ability to do daily activities, but should go away in a few days.

Influenza Vaccine

- Influenza is a contagious respiratory illness caused by influenza viruses.
- It can be spread by coughing, sneezing or nasal secretions.
- Signs and symptoms
  - Fever/chills
  - Sore throat
  - Muscle aches
  - Fatigue
  - Cough
  - Headache
  - Runny or stuffy nose

- More on Influenza:
  - Efficacy
    - Depends primarily on the age and immunocompetence of the recipient
    - Degree of similarity between the viruses in the vaccine and those in circulation
  - Safety
    - Serious adverse events after influenza vaccination are uncommon
  - Method of administration
    - Injection
  - Benefits
    - Prevents seasonal influenza virus infections and potentially severe complications, including death.

MMR Vaccine

What is MMR?

Measles

- Virus causes rash, cough, runny nose, eye irritation and fever.
- It can lead to ear infection, pneumonia, seizures, brain damage and death.

Mumps

- Virus causes fever, headache, muscle pain, loss of appetite and swollen glands.
- It can lead to deafness, meningitis, painful swelling of the testicles or ovaries and rarely sterility.

Rubella

- Virus causes rash, arthritis and mild fever.
- If a women gets rubella while she is pregnant, she could have a miscarriage or her baby could be born with serious birth defects.

- MMR
  - Efficacy-
    - Effective in preventing disease caused by these viruses.
  - Safety-Most common adverse events:
    - Pain where the vaccine is given
    - Fever
    - Mild rash
    - Swollen glands in the cheeks or neck
  - Method of administration
    - subcutaneously
  - Benefits
    - Protects against dangerous, even deadly, diseases.

Tdap Vaccine

Tdap = Tetanus, diptheria and pertussis - can be very serious diseases.

Tetanus

- Causes painful muscle spasms and stiffness, usually all over the body.

Diphtheria

- Can cause a thick membrane to cover the back of the throat. It can lead to breathing problems, paralysis, heart failure and even death.

Pertussis (Whooping Cough)

- Causes severe coughing spells which can lead to difficulty breathing, vomiting and disturbed sleep.

- More info on Tdap:
  - Efficacy-
    - Tetanus cases have fallen by over 96% and diphtheria cases by over 99%.
  - Safety-
    - Pain at injection site
    - Redness or swelling
    - Mild fever
    - Headache
    - Nausea.
  - Method of administration
    - Injection
  - Benefits
    - Provides protection

Chickenpox Vaccine

- Chickenpox is a disease caused varicella zoster virus. Most people with chickenpox get very itchy blisters and sores all over their body.
- Chickenpox is spread person-to-person through the air. It is very contagious.
- Chickenpox can be a serious disease, especially in babies and adults. The disease can cause serious skin infections, pneumonia, brain damage and even death. Chickenpox is especially dangerous for people who have a weakened immune system.
- Chickenpox is still infecting people in the U.S. and the rest of the world. It is extremely contagious and can be spread by an infected person before they even know they are sick.
- Vaccination is the most effective step you can take to be protected from this serious disease.

- Chickenpox vaccine
  - Efficacy-varicella vaccine is 70% to 90% effective for preventing varicella and more than 95% effective for preventing severe varicella.
  - Safety
    - Sore arm from the injection.
    - Mild rash, up to 1 month after vaccination.
  - Method of administration
    - Injection
  - Benefits
    - Saves lives
    - Protects against serious disease
    - Prevents discomfort from disease.

Employee Participation

- The administrator of the program shall make sure they and the employees review the effectiveness of the program annually.
- Deficiencies found in the plan corrected.

ATD Program on Line

- The DPH ATD Programs are available on the DPH Intranet.
  - The ATD Programs can be found by going to the DPH Intranet, accessing the Occupational Safety and Health Website and looking under the Safety and Health Link and then under the ATD Program Link.

Resources

- Cal/OSHA Title 8