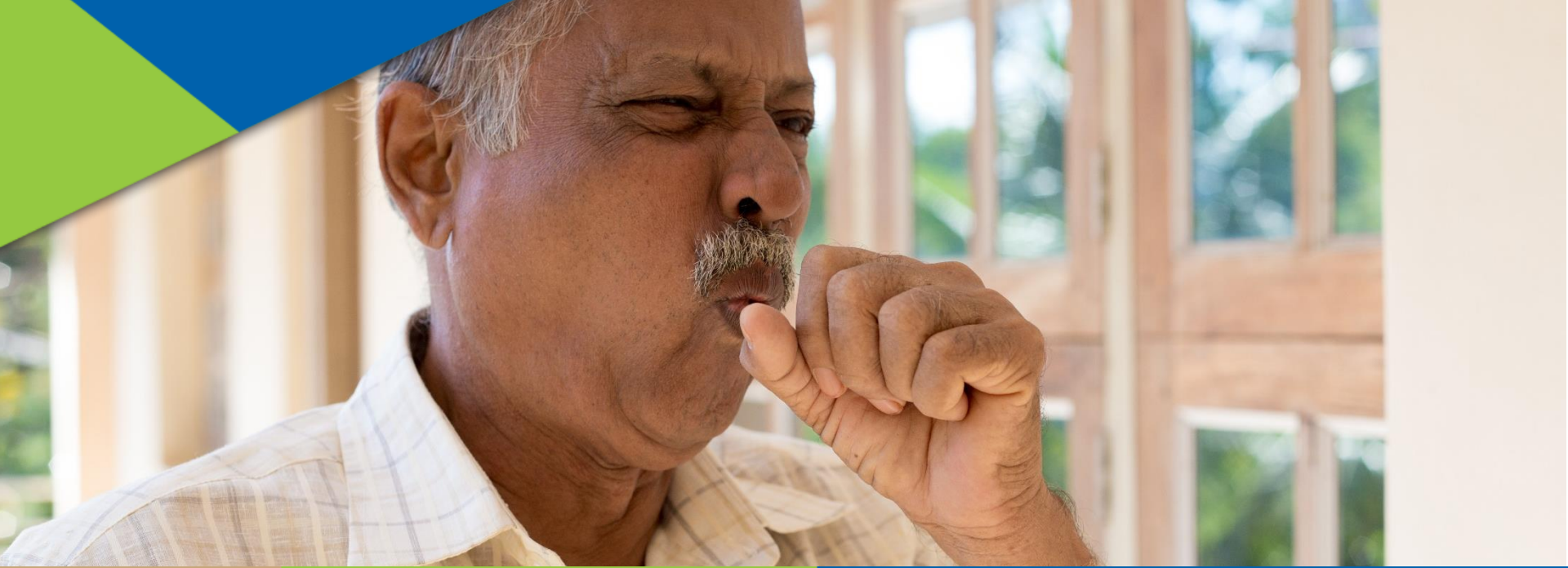

Don’t Be as Useless as the Letter “P” in Pneumonia

Fight Against Pneumonia with the Pneumococcal Vaccine

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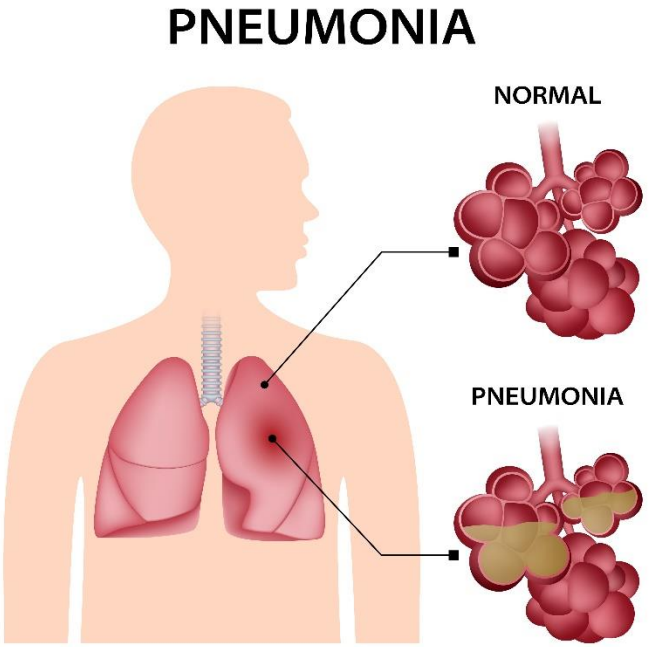
Quality Insights

QIN–QIO
Quality Innovation Network - Quality Improvement Organizations
CENTERS FOR MEDICARE & MEDICAID SERVICES iQUALITY IMPROVEMENT & INNOVATION GROUP

What is Pneumonia?

- Pneumonia is an infection involving inflammation of the air sacs in one or both lungs.



Common Causes of Pneumonia

- Community-acquired pneumonia
  - bacteria
  - bacteria-like organisms
  - viruses, including COVID-19
  - fungi
- Hospital-acquired pneumonia
- Healthcare-associated pneumonia
- Aspiration pneumonia

Risk Factors

- Anyone can be affected
- People age 65 years or older
- Children age 2 years or younger
- Being hospitalized
- Chronic disease
  - COPD or heart disease
- Smoking
- Weakened or suppressed immune system

Complications

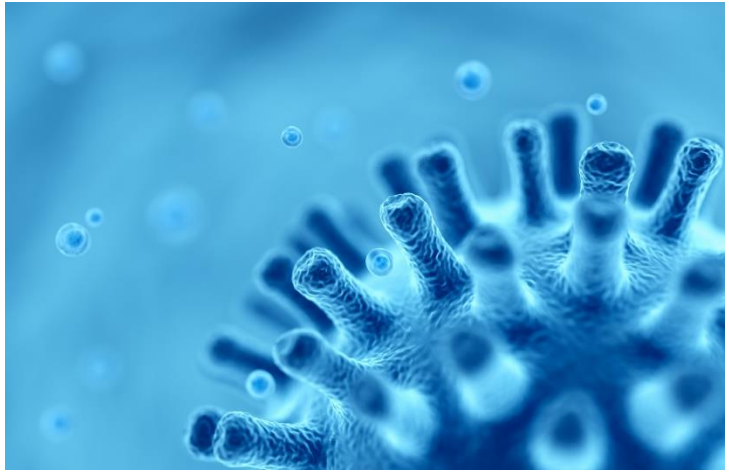
- Bacteria in the bloodstream
- Difficulty breathing
- Fluid around the lungs
- Lung abscess

Prevention

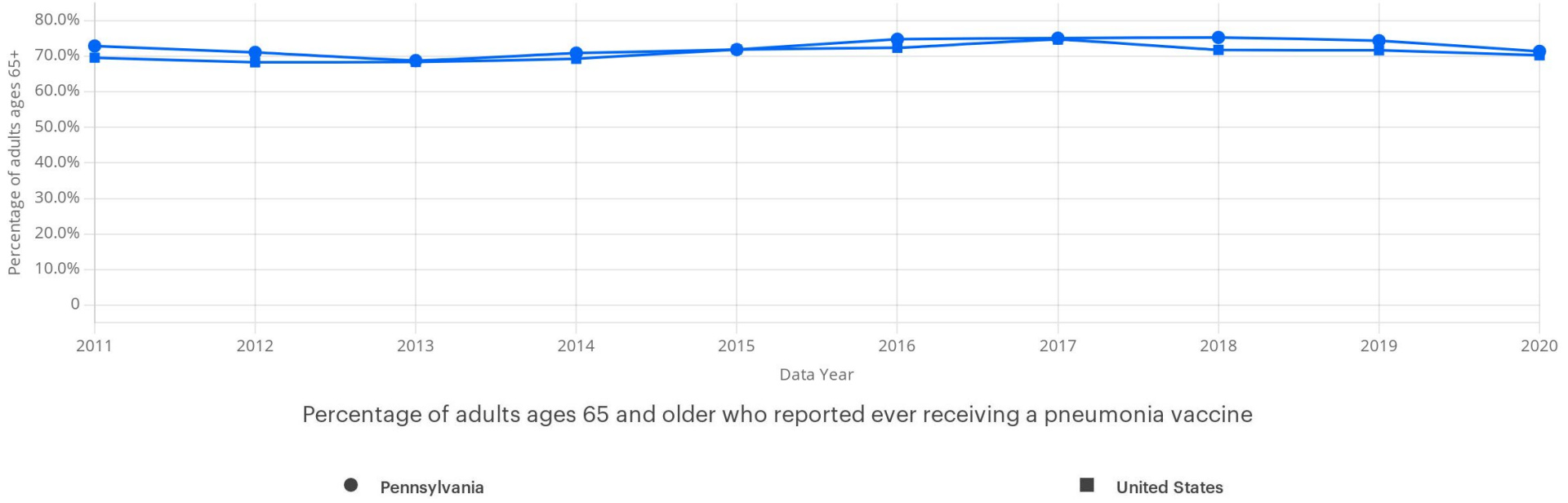
- Get vaccinated
- Practice good hygiene
- Don’t smoke
- Keep immune system strong

What is COVID Pneumonia?

Unlike pneumonia, it has a tendency to effect both lungs, resulting in the air sacs filling with fluid and causing limited ability to take in oxygen.

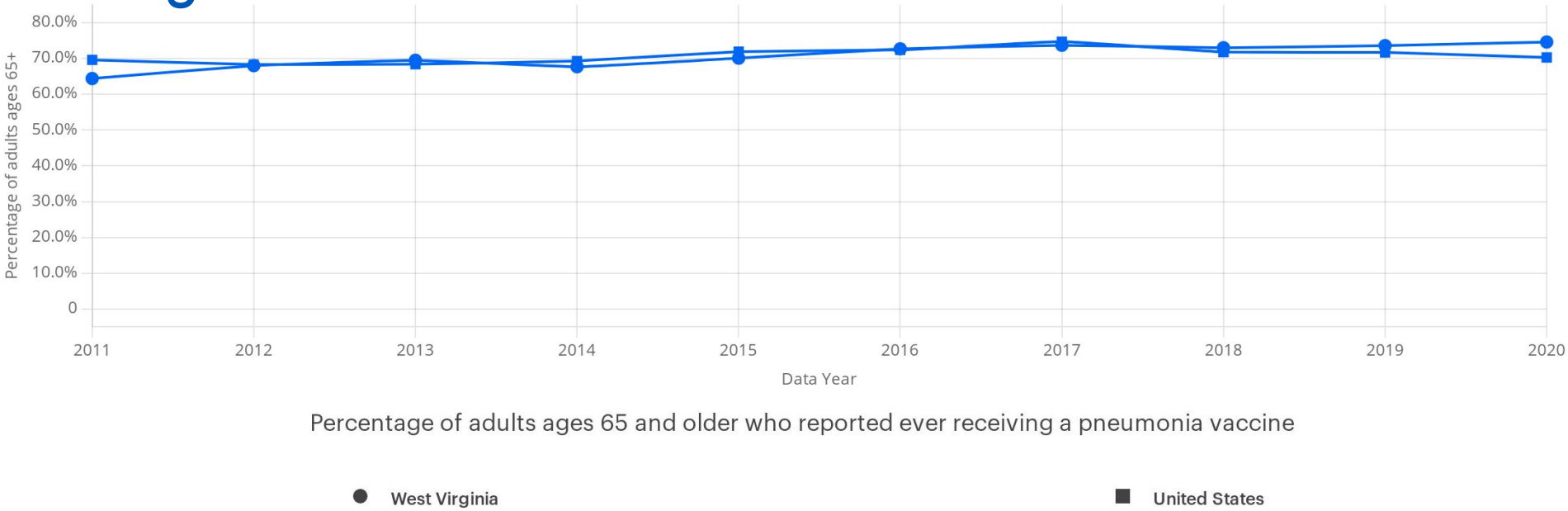


Pneumonia Vaccination Rates: 65+ in Pennsylvania



Source: *CDC, Behavioral Risk Factor Surveillance System*

Pneumonia Vaccination Rates: 65+ in West Virginia



Source: *CDC, Behavioral Risk Factor Surveillance System*

Two Categories

Pneumococcal conjugate vaccines

- PCV13 (Prevnar13)
  - Children younger than 2 years old
  - Children 2 to 18 years old with certain medical conditions
- PCV15 (Vaxneuvance)
  - 65 years or older
  - 19 to 64 years old with certain medical conditions
- PCV20 (Prevnar20)
  - 65 years or older
  - 19 to 64 years old with certain medical conditions

Pneumococcal polysaccharide vaccine

- PPSV23 (Pnemovax)
  - Children 2 to 18 years old with certain medical conditions after a dose of PCV13
  - 65 years or older after a dose of PCV15
  - 19 to 64 years old with certain medical conditions after a dose of PCV15

Side Effects

PCV13, PCV15, & PCV20

- Reaction where the shot was given
  - Redness
  - Swelling
  - Pain or tenderness
- Fever
- Loss of appetite
- Fussiness
- Feeling tired
- Headache
- Muscle aches or joint pain
- Chills

PPSV23

- Reaction where the shot was given
  - Redness
  - Pain
- Feeling tired
- Fever
- Muscle aches

Pneumococcal Vaccine Timing for Adults

Make sure your patients are up to date with pneumococcal vaccination.

CDC recommends pneumococcal vaccination for

- Adults 65 years old and older
- Adults 19 through 64 years old with certain underlying medical conditions or other risk factors:
  - Alcoholism
  - Cerebrospinal fluid leak
  - Chronic heart/liver/lung disease
  - Chronic renal failure*
  - Cigarette smoking
  - Cochlear implant
  - Congenital or acquired asplenia*
  - Congenital or acquired immunodeficiencies*
  - Diabetes
  - Generalized malignancy*
  - HIV infection*
  - Hodgkin disease*
  - Iatrogenic immunosuppression*
  - Leukemia*
  - Lymphoma*
  - Multiple myeloma*
  - Nephrotic syndrome*
  - Sickle cell disease or other hemoglobinopathies*
  - Solid organ transplants*

* Considered an immunocompromising condition

Pneumococcal vaccines

PCV13: 13-valent pneumococcal conjugate vaccine (Prevnar13®)
PCV15: 15-valent pneumococcal conjugate vaccine (Vaxneuvance™)
PCV20: 20-valent pneumococcal conjugate vaccine (Prevnar20®)
PPSV23: 23-valent pneumococcal polysaccharide vaccine (Pneumovax®)

For those who have never received a pneumococcal vaccine or those with unknown vaccination history

Administer one dose of PCV15 or PCV20.

If **PCV20** is used, their pneumococcal vaccinations are complete.

PCV20

If **PCV15** is used, follow with one dose of PPSV23.

- The recommended interval is at least 1 year.
- The minimum interval is 8 weeks and can be considered in adults with an immunocompromising condition*, cochlear implant, or cerebrospinal fluid leak.
- Their pneumococcal vaccinations are complete.

PCV15 → At least 1 year apart (8 weeks can be considered) → PPSV23

For those who previously received PPSV23 but who have not received any pneumococcal conjugate vaccine (e.g., PCV13, PCV15, PCV20)

You may administer one dose of PCV15 or PCV20.

Regardless of which vaccine is used (PCV15 or PCV20):

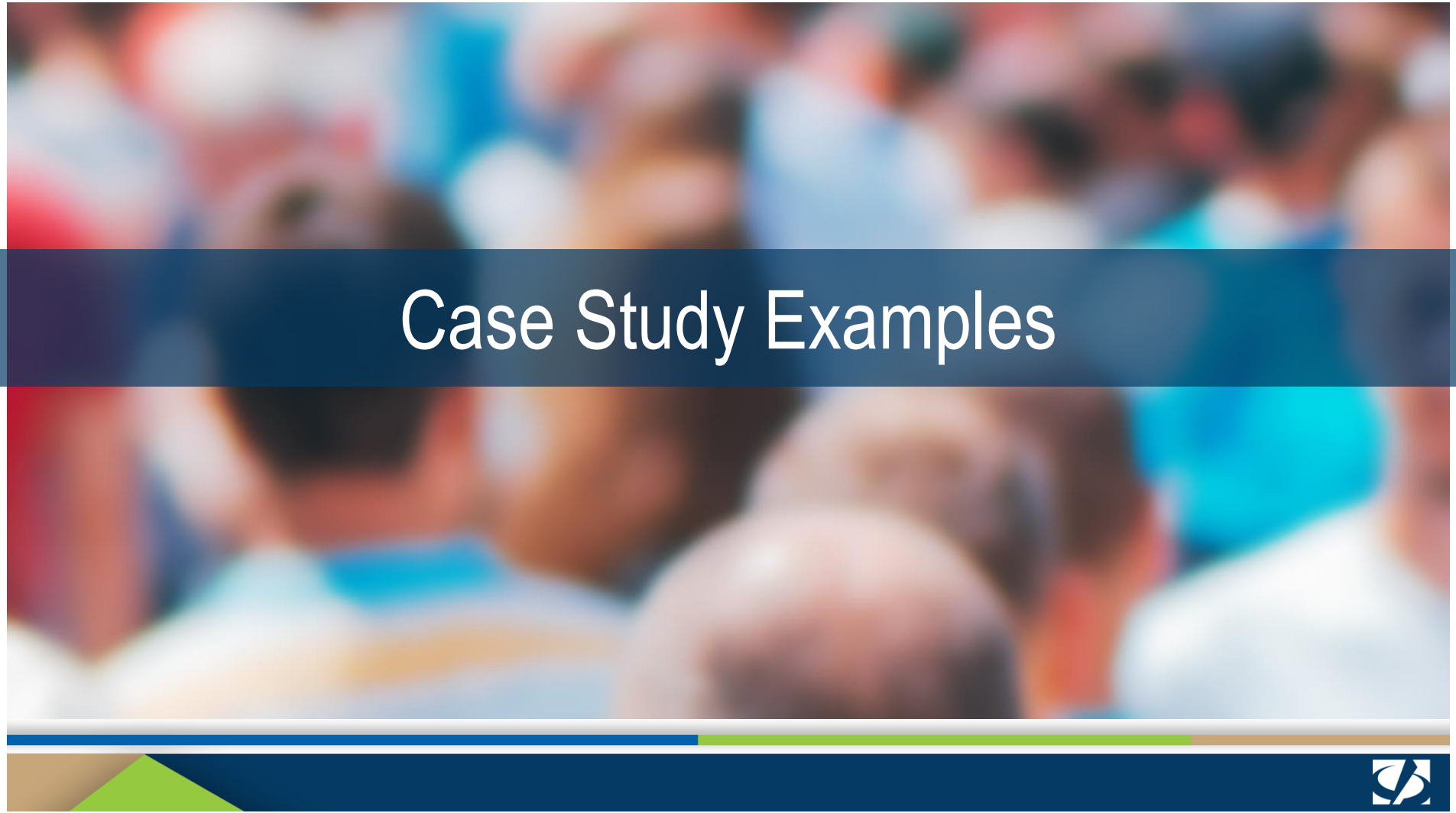
- The minimum interval is at least 1 year.
- Their pneumococcal vaccinations are complete.

PPSV23 → At least 1 year apart → PCV15 or PCV20

NCIRDig410 | 04/01/22

www.cdc.gov/pneumococcal/vaccination.html

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention


Case Study Examples

Case Study 1:

Jane is a healthy 65-year-old with an unknown vaccination history. She is requesting a pneumococcal vaccine. Is she eligible for a pneumococcal vaccine today? If yes, which vaccine can be given and in what order?

Case Study 1:

Jane is a healthy 65-year-old with an unknown vaccination history. She is requesting a pneumococcal vaccine. Is she eligible for a pneumococcal vaccine today? If yes, which vaccine can be given and in what order?

Yes. PCV15 or PCV20 can be given today followed by PPSV23 a year later.

Case Study 2:

Tom is a healthy 70-year-old requesting a COVID-19 booster. His clinician also recommends a pneumococcal vaccine today. Can Tom be given both vaccines today? If yes, which vaccines are recommended?

Case Study 2:

Tom is a healthy 70-year-old requesting a COVID-19 booster. His clinician also recommends a pneumococcal vaccine today. Can Tom be given both vaccines today? If yes, which vaccines are recommended?

Yes. PCV20 and a COVID-19 booster can be administered at the same time.

Case Study 3:

Stacey is a 70-year-old with a history of chronic heart disease. At 65, she received a dose of PCV15. Can Stacey receive a pneumococcal vaccine today? If yes, which vaccine can be given?

Case Study 3:

Stacey is a 70-year-old with a history of chronic heart disease. At 65, she received a dose of PCV15. Can Stacey receive a pneumococcal vaccine today? If yes, which vaccine can be given?

Yes. PPS23.

Case Study 4:

Joe is a healthy 50-year-old inquiring about the pneumococcal vaccine. Can Joe be given a pneumococcal vaccine?

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Joe is a healthy 50-year-old inquiring about the pneumococcal vaccine. Can Joe be given a pneumococcal vaccine?

No. CDC recommends healthy adults be 65 or older.

Case Study 5:

Kim is a 30-year-old with a history of HIV. Her clinician recommends she receive a pneumococcal vaccine. Which vaccine should be given and at what time(s) should dose(s) be given?

Case Study 5:

Kim is a 30-year-old with a history of HIV. Her clinician recommends she receive a pneumococcal vaccine. Which vaccine should be given and at what time(s) should dose(s) be given?

1 dose of PCV20 or 1 dose of PCV15, followed by 1 dose of PPSV23 8 weeks later.

Thank You

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