



**COVID-19, HIV and Telemedicine**

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**Continuing Education Disclosure**

- The activity planners and speaker do not have any financial relationships with commercial entities to disclose.
- The speaker will not discuss any off-label use or investigational product during the program.

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**Learning Objectives**

Upon completing this course, participants should be able to:

- Discuss COVID-19 in people with HIV (PWH) including current modes of prevention
- Understand some strategies to improve virtual client visits

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### Chatbox Question!

- What 1-3 words describe how you feel about the COVID-19 pandemic?



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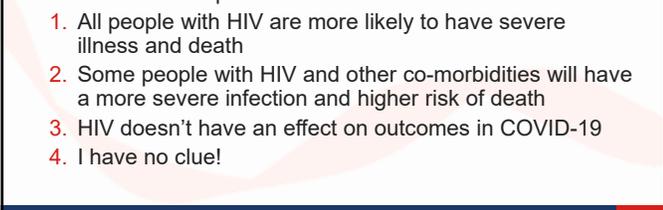
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### Question for Thought

Which of the following is correct regarding people with HIV infection who acquire COVID-19?

1. All people with HIV are more likely to have severe illness and death
2. Some people with HIV and other co-morbidities will have a more severe infection and higher risk of death
3. HIV doesn't have an effect on outcomes in COVID-19
4. I have no clue!



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Global Confirmed

73,518,382

Global Deaths

1,636,225

U.S. Confirmed

16,724,772

U.S. Deaths

303,849



DATA IN MOTION

COVID-19 Data in Motion: Tuesday, December 15, 2020



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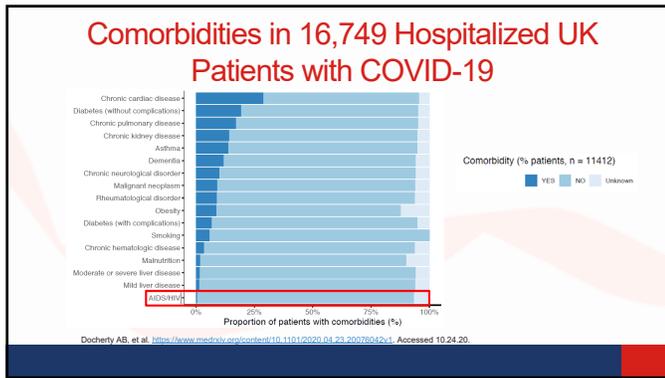
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### Presenting Characteristics, Comorbidities, and Outcomes Among 5700 Patients Hospitalized With COVID-19 in the New York City Area

Richardson S, et al. JAMA 2020;DOI:10.1001/jama.2020.6775.

Comorbidity	Total No.
Cancer	320 (5.6)
Cardiovascular disease	3026 (53.1)
Hypertension	2026 (35.7)
Coronary artery disease	595 (10.4)
Congestive heart failure	371 (6.5)
Chronic respiratory disease	479 (8.4)
Asthma	287 (5.0)
Chronic obstructive pulmonary disease	154 (2.7)
Obstructive sleep apnea	154 (2.7)
Immunosuppression	42 (0.7)
HIV	55 (1.0)
History of solid organ transplant	268 (4.7)
Kidney disease	186 (3.3)
Chronic	186 (3.3)
End-stage	19 (0.3)
Liver disease	19 (0.3)
Chronic	19 (0.3)
Hepatitis B	8 (0.1)
Hepatitis C	3 (0.0)
Metabolic disease	1737 (30.5)
Obesity (BMI ≥30)	4170 (73.2)
No.	791 (13.9)
Mental illness (BMI >35)	4170 (73.2)
No.	1808 (31.9)
Diabetes*	1808 (31.9)

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- ### Disproportionate Burden of COVID-19 Among Racial Minorities and Those in Congregate Settings
- Outbreak March 3 - April 26, 2020 in Boston, MA
    - 36 people with HIV with confirmed COVID-19
    - 11 with probable infection
  - Social Disparities
    - 77% of those with diagnosed or suspected COVID-19 were non-Hispanic Black or Latinx - only 40% of the clinic population is Black or Latinx
    - 85% had non-HIV comorbidity:
      - Obesity, hypertension, cardiovascular disease
    - 44% exposed to long-term care settings
- AETC Advancing Evidence to Transform Care  
Meyerowitz EA, AIDS 2020, 34:1781-1787

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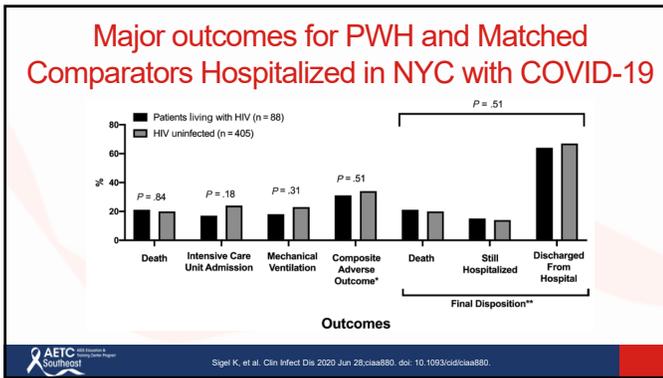
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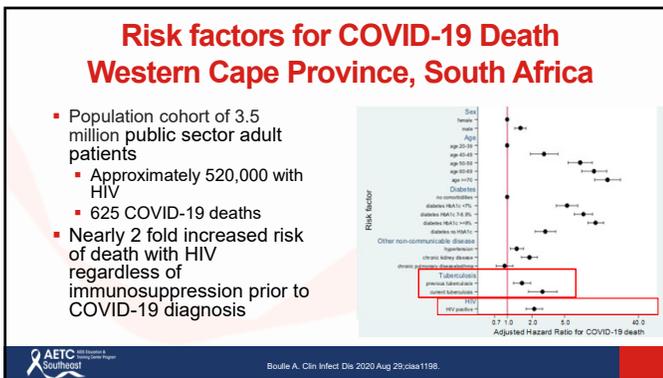
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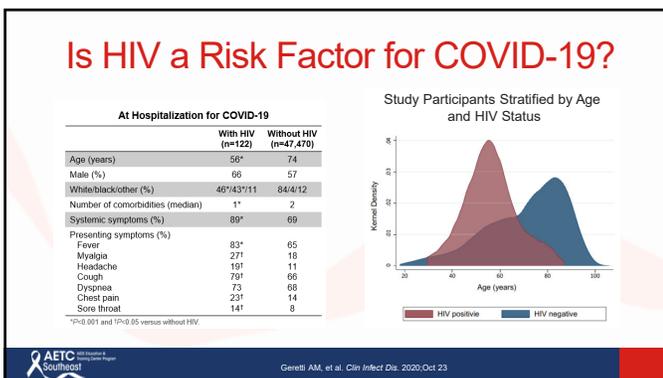
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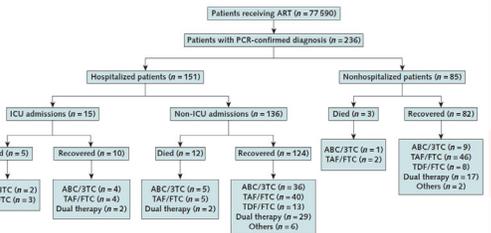
## Outcomes of COVID-19 Related Hospitalizations Among People with HIV in the UK

Table 4. Cox Proportional Hazards Model of the Association Between Human Immunodeficiency Virus (HIV) Status and Day-28 Mortality

HIV-positive Versus HIV-negative	Hazard Ratio	95% CI	P value
Unadjusted	0.77	.54-1.11	.17
Adjusted for sex	0.76	.53-1.10	.15
Adjusted for ethnicity	0.88	.60-1.29	.52
Adjusted for age	1.47	1.01-2.14	.05
Adjusted for age and sex	1.45	1.00-2.12	.05
Adjusted for sex, ethnicity, age, baseline date, and indeterminate/probable hospital acquisition of COVID-19	1.49	1.01-2.20	.04
Adjusted for sex, ethnicity, age, baseline date, indeterminate/probable hospital acquisition of COVID-19, and 10 comorbidities*	1.50	1.02-2.22	.04
Adjusted for sex, ethnicity, age, baseline date, indeterminate/probable hospital acquisition of COVID-19, 10 comorbidities*, and hypoxia/receiving oxygen at presentation†	1.69	1.15-2.48	.008
Adjusted for sex, ethnicity, age, baseline date, indeterminate/probable hospital acquisition of COVID-19, 10 comorbidities* and hypoxia/receiving oxygen at presentation† among individuals aged <65 years	2.87	1.70-4.86	<.001

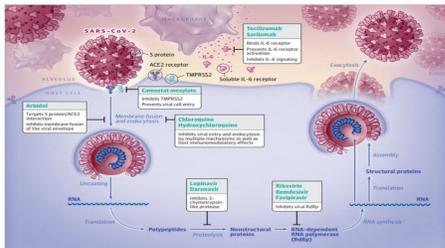


## Study flow chart of 77 590 HIV-positive persons receiving ART in Spain February 1 to April 15, 2020



Del Amo J et al. *Ann Intern Med.* 2020;173:538-541. doi:10.7326/M20-3689.

## Drug Targets for SARS CoV-2



Sanders JM, et al. *JAMA* 2020 May 12;323(18):1824-1836.

### ART for People with HIV and COVID-19

- To date, there is no clear evidence suggesting a benefit of a particular HIV antiretroviral regimen in people with COVID-19 and HIV
- People should not have their HIV regimen changed or have antiretrovirals added in order to prevent or treat COVID-19

DHHS.gov. Interim Guidance for COVID-19 and Persons with HIV. Available at <https://clinicalinfo.hiv.gov/guidelines/covid-19-and-persons-hiv-interim-guidance/interim-guidance-covid-19-and-persons-hiv>



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### Considerations During COVID-19 Pandemic

- Ensure patients have access to antiretroviral therapy
  - 90 day supply if possible
  - Mail order or non-contact pickup or delivery
- In patients who are considering ART switch for convenience
  - Consider delay until close monitoring and follow-up are available
- Encourage appropriate vaccinations
  - Influenza
  - Pneumococcal vaccines

DHHS.gov. Interim Guidance for COVID-19 and Persons with HIV. Available at <https://clinicalinfo.hiv.gov/guidelines/covid-19-and-persons-hiv-interim-guidance/interim-guidance-covid-19-and-persons-hiv>



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### Face to Face or Virtual Visit?

- Patients and their care team should weigh risks and benefits of face-to-face clinic visits
  - Extent of local COVID-19 transmission
  - Health needs that will be addressed during the appointment
  - HIV status (e.g., CD4 cell count, HIV viral load) and overall health
  - Can the patient be appropriately cared for via telehealth?



Interim Guidance for COVID-19 and Persons with HIV. Available at <https://clinicalinfo.hiv.gov/guidelines/covid-19-and-persons-hiv-interim-guidance/interim-guidance-covid-19-and-persons-hiv>



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### What Might Need to Be Added to Conversations During COVID Pandemic?

- Two way communication regarding medication supply and other needs
- Plan in case PWH develops symptoms of COVID-19
  - How to self-isolate or quarantine
  - Symptomatic care at home
  - Access to medications
  - How to evaluate if symptoms develop
    - Testing
    - Clinical care
  - Ensure care facility knows COVID-19 symptoms are present to ensure proper triage and interventions to prevent transmission in healthcare setting


 Interim Guidance for COVID-19 and Persons with HIV. Available at <https://clinicalinfo.hiv.gov/guidelines/covid-19-and-persons-hiv/interim-guidance/interim-guidance-covid-19-and-persons-hiv>

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### Telehealth

#### Pros

- Convenient
  - Eliminate costs/difficulties of transportation
  - No need for childcare
  - Less time off work needed
- May enable better medication reconciliation
- Many insurances now reimbursing
- Can screen share!

#### Cons

- Concerns re: client confidentiality
- Many providers lack telehealth with equipment to allow patient exam
- May exacerbate social disparities
  - Lacking phone or computer
  - Low health literacy or technology literacy
- Problems with internet connections
- Lack of face to face interactions which can negatively affect patient-provider rapport




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### HIV Viral Suppression Rates During COVID-19: Ward 88, San Francisco

- Single-center cohort study of HIV care pre versus post shelter-in-place (12/19-2/20 versus 4/20-5/20)
- HIV RNA <200 copies/mL pre shelter-in-place (n=1766): 81%
- Post shelter-in-place (versus pre)
  - Odds for patients having HIV RNA ≥200 copies/mL increased 31%
    - Increased odds among blacks (versus white) and homeless
  - Retention-in-care increased slightly
    - Facilitated by an increase in telehealth visits

	Adjusted Odds Ratio (95% CI) (post versus pre shelter-in-place)	
	HIV RNA ≥200 Copies/mL*	No-Show Visits
Overall	1.31 (1.08-1.53)	0.91 (0.77-1.09)
Female versus male	0.94 (0.77-1.15)	0.99 (0.80-1.21)
Race/ethnicity (ref. white)		
Black	1.80 (1.33-1.91)	1.14 (0.94-1.38)
LatinX	1.04 (0.83-1.34)	1.06 (0.88-1.27)
Asian	0.92 (0.63-1.34)	1.16 (0.82-1.64)
Other	0.96 (0.78-1.19)	0.97 (0.77-1.24)

\*Propensity score analysis.


 Spinelli MA, et al. AIDS

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### Tips for a Successful Virtual Visit

- Know your technology – video vs audio only
  - Practice virtual visits with all platforms you are able to use
- Have a backup plan
- Make sure clients know what to expect!
  - Did they receive good instructions on how to access the visit room?
  - How will the patient know when to try to enter the virtual room?
    - Text, call, or log in at a specified time and wait




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### Tips for Empathic Phone Communication

- Focus on the client – try to avoid distractions
- Make sure they are comfortable with visit
  - Is the time convenient?
  - Do they feel comfortable and secure?
- Normalize the virtual visit experience
- Practice reflective listening
- Jump in quickly if conversation starts to lag, check in




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### Tips for Empathic Phone Communication

- Narrate pauses
  - "I'm thinking about what you just said. It seems important."
- Narrate smile
  - "I have a big smile on my face hearing you say that."
- Affirm strengths more often
  - People are more vulnerable when they can't see you
  - "I'm glad you were willing to give this phone (or video) visit a try."
  - "I can tell you are working really hard to stay safe and keep your family healthy."




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### Tips for Video Sessions

- Dress in accordance with your organization's dress code
- Test out your video image to make sure lighting is good



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### Tips for Video Sessions

- Stage your background
  - Avoid clutter
  - Avoid violent background art/posters or bedroom furniture
  - Can you use a virtual background?
- Use a headset and close doors
- Make sure you are comfortable!
- Can you have a separate place for your virtual visits and your administrative work?



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### Tips for Video Sessions

- Create a new ritual
- Acknowledge new-ness of process
- Vary eye contact
- Notice your client's home environment
- Acknowledge your own environment if appropriate
  - Dog barking, sirens outside, etc.
- Try to minimize charting during visit



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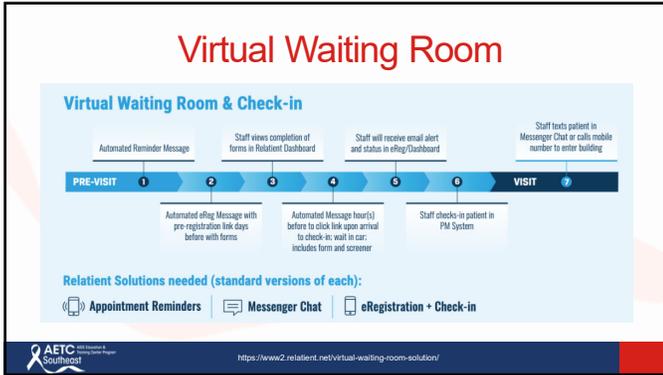
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## Model & Encourage Healthy Behaviors

- Frequent handwashing – 20 seconds
- Alcohol based hand sanitizer (at least 60% alcohol)
- Avoid touching face
- Avoid crowds
  - Social distancing
    - 6 foot separation from others
- Stay home if you are sick
- If instructed to quarantine, do so until instructed you can stop – call your provider or health department if unsure

[https://www.cdc.gov/coronavirus/2019-ncov/about/prevention.html#CDC\\_AA\\_reVal=https%3A%3A%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fabout%2Fprevention-treatment.html](https://www.cdc.gov/coronavirus/2019-ncov/about/prevention.html#CDC_AA_reVal=https%3A%3A%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fabout%2Fprevention-treatment.html)

Accessed 3/13/20.

AETC | All content is copyright © 2019  
Southwest

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## Masking

6 feet

**AETC** All Hands & Knees  
Southeast

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## Choosing a Mask

**DO choose masks that**

- Have two or more layers of washable, breathable fabric
- Completely cover your nose and mouth
- Fit snugly against the sides of your face and don't have gaps

**Goggles & Face Shields**

- Wear a goggle with two layers, or face it to those face layers

**Special Situations**

**GLASSES**

- If you wear glasses, find a mask that fits closely over your nose or one that has a nose wire to brace hinges

**DO NOT choose Masks that**

- Are made of fabric that makes it hard to breathe, for example, vinyl
- Have an activation valve or vent which allows virus particles to escape
- Are intended for healthcare workers, including N95 respirators or surgical masks

**Caution: Evaluation is ongoing but effectiveness is unknown at this time**

<https://www.cdc.gov/coronavirus/2019-nCoV/prevent-getting-sick/about-face-coverings.html>

**AETC** All Hands & Knees  
Southeast

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## Droplet Transmission Through Face Masks

**A**

Relative droplet count

Fitted N95-14  
Surgical-1  
Polyprop-5  
Polyprop-4  
Swath  
Cottons-13  
Cottons-7  
Valved N95-2  
Cottons-8  
MaxAT-6  
Cotton-10  
Cottons-9  
Knitted-3  
Bandanas-12  
None  
Neck Gaiter-11

Fischer EP, et al. Science Advances 02 Sep 2020; Vol. 6, no. 36, eabd3083 DOI: 10.1126/sciadv.abd3083

**AETC** All Hands & Knees  
Southeast

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### Pfizer BioNTech COVID-19 Vaccine

- Series of 2 doses, 3 weeks apart
- Safety data to support the EUA
  - Randomized, placebo-controlled international study

37,586 participants (most US)

18,801 received vaccine

18,785 received saline placebo

95% Effective

Patack FP. N Engl J Med. December 10, 2020

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### COVID-19 Vaccine

- NOT a live virus vaccine
- mRNA vaccine – makes proteins that are part of the virus, but does not make the whole virus
- Does not interfere with your body's genetic material
- Will not cause a positive COVID-19 PCR test

Spike protein

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### COVID-19 Vaccine

- 2-dose series – administered in arm muscle 21 days apart (acceptable range 17-21 days)
- Both doses are needed for protection! Single dose efficacy has not been studied/proven
- Vaccines are not known to be interchangeable
  - If start with Pfizer vaccine, finish with it. Same with Moderna.

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### Who Should Get the Vaccine?

- Approved for people over age 16
- Anyone at risk, even if already had COVID-19 infection
  - Wait 90 days if you were treated for COVID infection with monoclonal antibodies or convalescent plasma
  - Wait until patient out of quarantine
- Can give after COVID-19 exposure




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### Immunocompromised People

- People who have an immunocompromising condition, including HIV may be at increased risk for severe disease
- Data is not currently available about safety and efficacy in this population – let the patient know this
- Can still give the vaccine unless there are other contraindications
- Should still follow all current guidance to protect themselves against COVID-19




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### Pregnant women

- There are no data on the safety of COVID-19 vaccines in pregnant women
  - Animal developmental and reproductive toxicity (DART) studies are ongoing
  - Studies in humans are ongoing and more planned
- mRNA vaccines and pregnancy
  - Not live vaccines
  - They are degraded quickly by normal cellular processes and don't enter the nucleus of the cell
- COVID-19 and pregnancy
  - Increased risk of severe illness (ICU admission, mechanical ventilation and death)
  - Might be an increased risk of adverse pregnancy outcomes, such as preterm birth
- If a woman is part of a group (e.g., healthcare personnel) who is recommended to receive a COVID-19 vaccine and is pregnant, she may choose to be vaccinated. A discussion with her healthcare provider can help her make an informed decision.

<https://www.cdc.gov/coronavirus/2019-nCoV/need-extra-precautions/pregnancy.html>




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### Pregnant women

- Considerations for vaccination:
  - level of COVID-19 community transmission (risk of acquisition)
  - her personal risk of contracting COVID-19 (by occupation or other activities)
  - the risks of COVID-19 to her and potential risks to the fetus
  - the efficacy of the vaccine
  - the known side effects of the vaccine
  - the lack of data about the vaccine during pregnancy
- Pregnant women who experience fever following vaccination should be counseled to take acetaminophen as fever has been associated with adverse pregnancy outcomes
- Routine testing for pregnancy prior to receipt of a COVID-19 vaccine is not recommended.




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### Breastfeeding/Lactating women

- There are no data on the safety of COVID-19 vaccines in lactating women or the effects of mRNA vaccines on the breastfed infant or milk production/excretion
- mRNA vaccines are not considered live virus vaccines and are not thought to be a risk to the breastfeeding infant
- If a lactating woman is part of a group (e.g., healthcare personnel) who is recommended to receive a COVID-19 vaccine, she may choose to be vaccinated




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### Contraindications and precautions

- Package insert:
  - Severe allergic reaction (e.g., anaphylaxis) to any component of the Pfizer-BioNTech COVID-19 vaccine is a contraindication to vaccination
  - Appropriate medical treatment used to manage immediate allergic reactions must be immediately available in the event an acute anaphylactic reaction occurs following administration of the vaccine
- Because of reports of anaphylactic reactions in persons vaccinated outside of clinical trials, the additional following guidance is proposed:
  - A severe allergic reaction to any vaccine or injectable therapy (intramuscular, intravenous, or subcutaneous) is a precaution to vaccination at this time
  - Vaccine providers should observe patients after vaccination to monitor for the occurrence of immediate adverse reactions:
    - Persons with a history of anaphylaxis: 30 minutes
    - All other persons: 15 mins




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### Public health recommendations for vaccinated persons

- Protection from vaccine is not immediate; vaccine is a 2-dose series and will take 1 to 2 weeks following the second dose to be considered fully vaccinated
- No vaccine is 100% effective
- Given the currently limited information on how well the vaccine works in the general population; how much it may reduce disease, severity, or transmission; and how long protection lasts, vaccinated persons should continue to follow all [current guidance](#) to protect themselves and others, including:
  - Wearing a mask
  - Staying at least 6 feet away from others
  - Avoiding crowds
  - Washing hands often
  - Following [CDC travel guidance](#)
  - Following quarantine guidance after an exposure to someone with COVID-19
  - Following any applicable workplace or school guidance

<https://www.cdc.gov/coronavirus/2019-nCoV/index.html>




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## COVID-19 Vaccine

- Should not be administered at the same time as another vaccine
  - Not studied.
  - 14 days before or after other vaccines




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## Pfizer BioNTech COVID-19 Vaccine

- Most common side effects
  - Pain at injection site, fatigue, headache, muscle pain, chills, joint pain and fever – symptoms usually last 2 days
  - Side effects more common after second dose
  - Administration needs to consider staffing needs as cannot discriminate vaccine side effects from COVID
    - People may need 1-2 days off from work if develop symptoms




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## Chat Box Question!

- What questions or concerns do you have about the COVID-19 vaccine?



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**THANK YOU  
FOR YOUR  
ATTENTION**



Questions?

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