Welcome to
Talking with Patients about Long COVID

September 22, 2022
12:00PM – 1:00PM
Housekeeping

This webinar is being recorded. Please access today’s slides and recording through the following link: https://eziz.org/covid/crucialconversations

Please use “Q&A” to ask questions or raise your hand to ask a question.

For post-webinar questions, contact rachel.jacobs@cdph.ca.gov.
Questions & Answers

During today's session, please use the Q&A panel to ask your questions.

Please use the “Chat” panel for discussion
Webinar Objectives

Participants will learn:

• Recent data on manifestations of long COVID
• How to effectively and proactively talk with patients about long COVID
• Resources to use when talking with patients
## Agenda: Thursday, September 22, 2022

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<th>No.</th>
<th>Item</th>
<th>Speaker(s)</th>
<th>Time (PM)</th>
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<td>1</td>
<td>Welcome</td>
<td>Rachel Jacobs (CDPH)</td>
<td>12:00 – 12:05</td>
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<td>Talking with Patients about Long COVID</td>
<td>Sharon Goldfarb, DNP, RN, FNP-BC</td>
<td>12:05 – 12:40</td>
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<td><strong>Questions &amp; Answers</strong></td>
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<td>12:40 – 12:55</td>
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<td>Resources, Poll, and Wrap-Up</td>
<td>Rachel Jacobs (CDPH)</td>
<td>12:55 – 1:00</td>
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Poll: CDPH appreciates your feedback!

How confident are you in your ability to effectively discuss Long COVID?

- Very confident
- Confident
- Somewhat confident
- Slightly confident
- Not confident
Talking with Patients about Long COVID
Sharon Goldfarb, DNP, RN, FNP-BC
HealthImpact and #ThisIsOurShot
COVID-19 Bivalent Booster Doses

The updated vaccines are designed to help protect people from the most prevalent strain, Omicron BA.4 and BA.5. The booster is a bivalent vaccine, which contains the mRNA sequence for the spike protein of two strains.

Eligibility for the two vaccines:
- Moderna: 18 years and older
- Pfizer: 12 years and older

Guidance: Administer at least 2 months after completion of the primary series or the most recent booster dose of an FDA approved or authorized monovalent (original) COVID-19 vaccine.
Vaccine Effectiveness Against Long COVID

Studies suggest that people who are vaccinated against COVID-19 are less likely to develop Long COVID.

Fig. 3: Risk and 6-month excess burden of post-acute sequelae in people with BTI compared to those with SARS-CoV-2 infection without prior vaccination.
What are the symptoms of Long COVID?

Please write your answers in the “Chat.”
What is Long COVID?

Many Names

- Post-COVID conditions (PCC)
- Long COVID
- Long-haul COVID
- Post-acute COVID-19
- Post-acute sequelae of SARS CoV-2 infection (PASC)
- Long-term effects of COVID
- Chronic COVID

Symptoms of Long-haul COVID

- Brain
  - Fatigue, brain fog, trouble sleeping, mood disorders
- Heart
  - Chest pain, rapid heart rate
- Lungs
  - Trouble breathing, chest pain, cough, shortness of breath
- Liver
  - Organ damage
- Pancreas
  - Organ damage
- Ears, nose, & throat
  - Ringing in ears, loss of taste/smell, sore throat
- Spleen
  - Organ damage
- GI tract
  - Diarrhea, nausea
- Kidneys
  - Organ damage
- Musculoskeletal
  - Muscle and joint pain
Long COVID Symptoms

This graphic shows the pooled prevalence of long-COVID by symptoms:

- The five most common effects were fatigue (58%), headache (44%), attention disorder (27%), hair loss (25%), and dyspnea (24%).
- More than 50 long-term effects of COVID-19

More than 50 long-term effects of COVID-19: a systematic review and meta-analysis
What Do We Know?

- Post-COVID conditions (PCC) include a wide array of ongoing health concerns that may last weeks, months, or longer.
- PCC are more likely in those who have had severe infections, hospitalizations, or MIS-C, but there are cases of PCC in those with mild cases.
- Female, older, nonwhite
- Comorbidities (Cardiac, DM, CKD)
- Unvaccinated individuals are more likely to have PCC.
Diagnosis of PCC Occurs at Four Weeks Following Initial COVID-19 Diagnosis

- There is no diagnostic testing
- Other causes for symptoms may be confounding
- Acceleration into new or worsening diagnosis:
  - Diabetes
  - Dementia
Lab Test are on the Way: BIOMARKERS

A UCSF study surveyed 46 previously infected patients about 32 physical long-COVID (loss of memory, irritability, agitation, depression, anxiety, post-traumatic stress, and specific sensory losses). In addition, laboratory researchers analyzed blood plasma samples from 12 never-infected control subjects without neuropsychiatric symptoms for comparison.

Biomarkers (protein-filled sacs, called exosomes, selected for only those exosomes derived from neurons and supporting cells known as astrocytes) are found at elevated levels that may persist for many months. These viral proteins hanging around may attribute chronic symptoms in long COVID primarily to prolonged or altered immune responses. The initial acute infection might trigger long-term, maladaptive changes in the immune system. The ongoing presence of viral proteins within the body might cause chronic inflammatory responses. The presence of certain viral molecules might also trigger autoimmune responses in which the immune system attacks the body’s own tissues.
### Symptoms May Come and Go: Think Chronic Fatigue Symptoms

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Description</th>
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<tbody>
<tr>
<td>General Fatigue that interferes with life</td>
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<tr>
<td>Post-exertional malaise</td>
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<tr>
<td>Fever</td>
<td></td>
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<tr>
<td>SOB</td>
<td>Difficulty breathing</td>
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<tr>
<td>Difficulty thinking/ concentrating “Brain Fog”</td>
<td>Headache</td>
</tr>
<tr>
<td>Sleep problems</td>
<td>Dizziness</td>
</tr>
<tr>
<td>Pins and Needles</td>
<td>Change or absence of taste and/or smell</td>
</tr>
<tr>
<td>Depression/ anxiety</td>
<td>Rash</td>
</tr>
<tr>
<td>Changes in menstrual cycle</td>
<td>Hair loss</td>
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<tr>
<td>Stokes Pains</td>
<td>Joint/ Muscle Pain</td>
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<tr>
<td>Cough</td>
<td>Chest pain</td>
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<tr>
<td>Palpitations</td>
<td></td>
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<tr>
<td>Diarrhea</td>
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**More than 50 long-term effects of COVID-19: a systematic review and meta-analysis**
Nervous System

- Encephalopathy
- Dementia
- Cognitive problems
- Sleep disorders
- Headache
Integumentary System

Certain skin symptoms also showed significantly higher risk in the post-acute period, including:
- Hair loss
- Pressure ulcers
Respiratory System

Several pulmonary manifestations in the post-acute phase were significant. These included:

- Pulmonary fibrosis
- Dyspnea
- Acute pharyngitis
Circulatory and Blood

Identified cardiovascular manifestations with a higher risk in the post-acute period were:

- Pulmonary embolism
- Thromboembolism
- Chest pain
- Abnormal heartbeat
- Anemia
Endocrine System

- Malnutrition
- Diabetes mellitus
- Fluid & electrolyte disorder
- Edema
Digestive System

- Constipation
- Abdominal pain
General and Musculoskeletal

- Malaise and fatigue
- Fever
- Joint pain
Who is at Risk? AGE

Potential PCC conditions with the highest excess burden in the under 65 years age group were
• dyspnea, chest pain, abnormal heartbeat, malaise, and fatigue

Potential PCC conditions with the highest excess burden in the 65 years of age and older age group included
• dyspnea, malaise, fatigue, edema, diabetes, anemia, cognitive problems, joint pain, malnutrition, and abdominal pain
Long COVID in Children

- Children have reported ongoing respiratory, cardiac, neurologic, and other symptoms following COVID-19 infection.
- A recent meta-analysis, which evaluated 21 studies and over 80,000 children, determined that 25% of SARS-CoV-2-positive children had persistent symptoms at 4 weeks after acute COVID-19.
Who is at Risk? SEX

Higher excess burdens in male patients:
• Dyspnea
• Sleep disorders
• Malnutrition
• Joint pain

Higher excess burden in female patients:
• Hair loss
• Anemia
Patients with coronary artery disease
- cognitive problems
- sleep disorders
- encephalopathy

Patients with chronic kidney disease
- pressure ulcers
- diabetes, fluid disorders
- joint pains

Patients with chronic pulmonary disease
- malaise and fatigue
- encephalopathy
- alopecia
- chest pain.
This is the first study to report the nature and prevalence of post-COVID-19 condition, while correcting for individual symptoms present before COVID-19 and the symptom dynamics in the population without SARS-CoV-2 infection during the pandemic.

Implications:
1 in 8 people = 12 million individuals in U.S. of about 90 million infections
COVID-19 May Raise Risk of Long-Term Brain Injury

Large U.S. study in Nature Medicine found that people infected with COVID-19 were:

- **77%** more likely to develop memory problems.
- **50%** more likely to have an ischemic stroke, which is caused by blood clots, compared with the never infected group.
- **80%** more likely to have seizures
- **43%** more likely to have mental health issues, such as anxiety or depression
- **35%** more likely to have headaches and
- **42%** more likely to suffer movement disorders, such as tremors, compared with the control groups.
The Mental Health Impacts of Long COVID

Scientific American Article:
People of Color with Long COVID Face Long Uphill Battle to be Heard
In Conclusion

Hope
Community and Communication
Science and Research
Innovation and Creativity
Empathy and Respect
Thank you for joining us today and feel free to stay in touch

- Sharon Goldfarb, DNP, RN, FNP-BC
  Sharon@healthimpact.org
Questions & Answers

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Please use the “Chat” panel for discussion
Poll & Resources
Rachel Jacobs, CDPH
Poll: CDPH appreciates your feedback!

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Communication Resources

- What is Long COVID? Fliers in English and Spanish
- Voices of Long COVID Toolkit
For Patients: Resources for Post-COVID Conditions

- Where to get care for a post-COVID condition
- Planning for your appointment with a medical provider
- Tools for recovery and rehabilitation
- Finding support groups for post-COVID conditions
- Resources regarding disability benefits and accommodations
- More helpful resources
#ThisIsOurShot Toolkit
COVID-19 Crucial Conversations Campaign

**COVID-19 Vaccine Conversations**

**Top Messages**

**Safety**
The vaccine will protect you from getting very sick from COVID. Over 150 million Americans have been safely vaccinated and are now protected.

**Side Effects**
Side effects are common. They are a sign your body is building up its defenses to protect you. Many people temporarily feel:
1. Sore arm (near site of vaccination)
2. Fatigue
3. Headache
4. Muscle pain
5. Joint pain

**Effectiveness and Variants**
Each vaccine is nearly 100% effective at preventing hospitalization and death from COVID and its variants. It will allow us to do the things we love and miss most. Vaccinated individuals can get a mild COVID infection.

**Speed**
It’s good to be careful when new things come along. Health experts took all the necessary steps to produce a safe vaccine, and it was built on 20 years of research and science.

**Questions?**
I’m glad you want to know more. Ultimately, the choice is yours. If you have questions, talk with your doctor or healthcare provider soon. Text your zip code to GETVAX (438282) to get your free vaccine today.

**Top 5 Reasons Your Kids Should Get the COVID-19 Vaccine**

- Unvaccinated children are at risk of getting COVID-19, and can suffer very serious complications, and potential long-term impacts that we are still learning about. The vaccine is safe and effective, and no long-term problems have been seen for any vaccine.

- The science behind the vaccine has been under development and studied by the U.S. Department of Health and Human Services for over 20 years.

- Getting those who are eligible vaccinated can help keep school communities safe.

- Kids have missed critical social and emotional milestones with their school community. Getting them safely back to the classroom and their favorite extracurricular activities helps support their mental health and wellness.

- Vaccines are safe, effective, and free, regardless of insurance or immigration status.

Get your children back to school safely. Get them vaccinated against COVID-19 today! Learn more at VaccinateALL58.com.
Help Us Determine The Future of TIOS and VY!

Take Our Survey Here!
Next Crucial Conversations Webinar: Talking with Patients about Flu and COVID-19 Vaccines

Please join Karina Miranda, MSN, RN and #VacunateYa, to discuss what your patients need to know about flu & COVID-19 vaccines.

When: Thursday, October 12th at 12:00PM-1:00PM

Register here!
## Upcoming Opportunities

### Monday

**My Turn and myCAvax Office Hours**  
Next session: Monday, October 3, 12PM

### Friday

**Provider Consolidated Webinar**  
Next session: Friday, September 23, 9AM

**Note:** New session length of 90-minutes to include COVID-19 Vaccine, COVID-19 Therapeutics, MPX Vaccine, and MPX Therapeutics
## Additional Support

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<th>Type of Support</th>
<th>Description</th>
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| **COVID-19 Provider Call Center** | The COVID-19 Call Center for Providers and Local Health Departments is dedicated to medical providers in California and their COVID-19 response, specifically addressing questions about State program requirements, enrollment, and vaccine distribution, including the Vaccine Marketplace.  
  - Email: covidcallcenter@cdph.ca.gov  
  - Phone: (833) 502-1245, Monday through Friday from 8AM–6PM | |
| **Enrollment Support** | For Provider enrollment support, please contact myCAvax Clinic Operations at  
  - Email: myCAvaxinfo@cdph.ca.gov | |
| **myCAvax Help Desk** | Dedicated staff provide up-to-date information and technical support on the myCAvax system.  
  - Email: myCAvax.HD@Accenture.com  
  - Phone: (833)-502-1245, option 3, Monday through Friday 8AM–6PM | |
| **My Turn Clinic Help Desk** | For onboarding support (those in the process of onboarding): myturnonboarding@cdph.ca.gov  
For technical support with My Turn Clinic for COVID-19 and flu vaccines: MyTurn.Clinic.HD@Accenture.com or (833) 502-1245, option 4: Monday through Friday 8AM–6PM | |
| **Archived Communications** | For archived communications from the COVID-19 Provider Call Center about the California COVID-19 Vaccination Program visit  
  - Website: EZIZ Archived Communications | |

*Updated 6.6.22*
Special Thanks to
Today's Presenter:
Sharon Goldfarb, DNP, RN, FNP-BC

Webinar Planning & Support:
Rachel Jacobs, Cheri Banks, Charles Roberts, Michael Fortunka, and Blanca Corona