

COVID-19 - Persisting Symptoms Follow-up Call

Office Hours Telehealth Triage Protocols | Adult | 2021

DEFINITION

- Previously **diagnosed** with COVID-19 with positive COVID test, and has COVID-19 symptoms lasting 3 or more weeks.
- Patient is concerned that symptoms are not improving fast enough.
- Patient has additional questions or concerns.
- May or may not have new symptoms.

Persisting Symptoms of COVID-19 (long COVID, post COVID-19 syndrome) include:

- *Common physical symptoms:* chest pain, cough, fatigue, hair loss, headache, joint pain, loss of smell, loss of taste, and shortness of breath.
- *Other physical symptoms:* diarrhea, dizziness, eye redness, hearing loss, nausea or vomiting, and sweating.
- *Common mental health symptoms:* anxiety, attention deficit ("brain fog", problems with concentration and memory), depression, post-traumatic stress disorder, and trouble sleeping (insomnia).

This protocol was **last updated** 8/25/2021.

TRIAGE ASSESSMENT QUESTIONS

Call EMS 911 Now

SEVERE difficulty breathing (e.g., struggling for each breath, speaks in single words)

R/O: respiratory failure, hypoxia

[1] SEVERE weakness (e.g., can't stand or can barely walk) AND [2] new-onset or WORSE

R/O: dehydration, infection

Difficult to awaken or acting confused (e.g., disoriented, slurred speech)

R/O: hypoxia, hypercapnia

Bluish (or gray) lips or face now

R/O: cyanosis and need for oxygen

Sounds like a life-threatening emergency to the triager

See More Appropriate Protocol

[1] Typical COVID-19 symptoms AND [2] lasting less than 3 weeks

Go to Protocol: COVID-19 - Diagnosed or Suspected (Adult). R/O: Acute COVID-19

[1] Chest pain, pressure, or tightness AND [2] new-onset or worsening

Go to Protocol: Chest Pain (Adult)

[1] Fever AND [2] new-onset or worsening

Go to Protocol: Fever (Adult). Note: Fever is not a common symptom of long COVID (post COVID-19 syndrome). See other symptom protocol if there are localizing symptoms in addition to fever. Triager should also consider the possibility of new infection with COVID-19.

Go to ED Now

[1] MODERATE difficulty breathing (e.g., speaks in phrases, SOB even at rest, pulse 100-120) AND [2] new-onset or WORSE

[1] MODERATE difficulty breathing AND [2] oxygen level (e.g., pulse oximetry) 91 to 94 percent

Oxygen level (e.g., pulse oximetry) 90 percent or lower

R/O: hypoxia

Go to ED/UCC Now (or to Office with PCP Approval)

MODERATE difficulty breathing (e.g., speaks in phrases, SOB even at rest, pulse 100-120)

[1] Drinking very little AND [2] dehydration suspected (e.g., no urine > 12 hours, very dry mouth, very lightheaded)

Reason: may need IV hydration

Patient sounds very sick or weak to the triager

Reason: severe acute illness or serious complication suspected

Go to Office Now

[1] MILD difficulty breathing (e.g., minimal/no SOB at rest, SOB with walking, pulse <100) AND [2] new-onset

Oxygen level (e.g., pulse oximetry) 91 to 94 percent

R/O: hypoxia

Discuss With PCP and Callback by Nurse within 1 Hour

[1] PERSISTING SYMPTOMS OF COVID-19 AND [2] NEW symptom AND [3] could be serious

R/O: long COVID (post-COVID-19 syndrome). Reason: see healthcare provider (doctor, NP, PA) for medical (re)evaluation and to confirm diagnosis. Based on nursing judgement consider using appropriate symptom protocol.

[1] Caller has URGENT question AND [2] triager unable to answer question

See in Office Today

[1] PERSISTING SYMPTOMS OF COVID-19 AND [2] symptoms WORSE

R/O: long COVID (post-COVID-19 syndrome). Reason: see healthcare provider (doctor, NP, PA) for medical (re)evaluation and to confirm diagnosis.

Callback by PCP Today

[1] Caller has NON-URGENT question AND [2] triager unable to answer

See in Office Within 3 Days

[1] PERSISTING SYMPTOMS OF COVID-19 AND [2] NO medical visit for COVID-19 in past 2 weeks

R/O: long COVID (post-COVID-19 syndrome). Reason: see healthcare provider (doctor, NP, PA) for medical evaluation and to confirm diagnosis.

Patient wants to be seen

See in Office Within 2 Weeks

[1] PERSISTING SYMPTOMS OF COVID-19 AND [2] symptoms SAME AND [3] medical visit for COVID-19 in past 2 weeks

R/O: long COVID (post-COVID-19 syndrome). Reason: see healthcare provider (doctor, NP, PA) for medical (re)evaluation and to confirm diagnosis.

Home Care

[1] PERSISTING SYMPTOMS OF COVID-19 AND [2] symptoms BETTER (improving)

R/O: long COVID (post-COVID-19 syndrome). Note: patient has had medical evaluation in past 2 weeks for persisting COVID-19 symptoms.

[1] PERSISTING SYMPTOMS OF COVID-19 AND [2] NEW symptom AND [3] that sounds mild

R/O: long COVID (post-COVID-19 syndrome). Note: patient has had medical evaluation in past 2 weeks for persisting COVID-19 symptoms.

Long COVID (e.g., post-COVID syndrome), questions about

HOME CARE ADVICE

1. Reassurance and Education - Persisting COVID-19 Symptoms:

- Some people who recover from COVID-19 will have at least one persisting symptom for weeks to months afterwards.
- The five most common physical symptoms are fatigue (58%), headache (44%), hair loss (25%), and breathing difficulty (24%). The most common mental health symptoms are problems with concentration and memory, sometimes referred to as "brain fog", seen in about 1 in 4 (27%) people.
- Regular follow-up appointments with your healthcare provider are important until you feel better.
- *Here is some care advice that should help.*

2. Symptoms:

- Persisting Symptoms of COVID-19 (long COVID, post COVID-19 syndrome) include the following.
- *Common physical symptoms:* chest pain, cough, fatigue, hair loss, headache, joint pain, loss of smell, loss of taste, and shortness of breath.
- *Other physical symptoms:* diarrhea, dizziness, eye redness, hearing loss, nausea or vomiting, and sweating.
- *Common mental health symptoms:* anxiety, attention deficit ("brain fog", problems with concentration and memory), depression, post-traumatic stress disorder, and trouble sleeping (insomnia).

3. General Care Advice for Persisting COVID-19 Symptoms:

- *Cough:* Use cough drops. If the air is dry, use a humidifier in the bedroom. Dry air makes coughs worse.
- *Fatigue:* Rest more. Drink plenty of liquids.

- **Headache, muscle aches, and other pains:** Take acetaminophen every 4 to 6 hours (Adults 650 mg) OR ibuprofen every 6 to 8 hours (Adults 400 mg). Before taking any medicine, read all the instructions on the package.

4. **Care Advice for Fatigue:**

- Fatigue and feeling tired is the most common persisting symptom in people who have had COVID-19.
- **Eat healthy:** Eat healthy meals. Avoid overeating.
- **Rest:** Rest more. Get enough sleep.
- **Stay active:** Recognize that you may not be able to accomplish as much as before. It is normal to feel tired after exercising. But, try to stay physically active. Walk or lightly exercise every day.
- **Stay hydrated:** Drink plenty of liquids. Not drinking enough fluids and being a little dehydrated is a common cause of fatigue and weakness. If you think you are dehydrated, several glasses of fruit juice, other clear fluids, or water. This will improve hydration.

5. **Care Advice for Mild Diarrhea, Nausea, and Vomiting:**

- **Mild Diarrhea:** Drink clear fluids like water, 1/2 strength sports drink or oral rehydration liquid (e.g., Pedialyte). Slowly start bland foods like saltine crackers, white bread, mashed potatoes, noodles, bananas, yogurt, or soup. Slowly return to a normal diet.
- **Mild Nausea or Vomiting:** Sip small amounts (1 tablespoon or 15 ml) of water or half-strength sports drink every 5 minutes for 8 hours. After 4 hours with no vomiting, slowly increase the amount. After no vomiting for 8 hours, slowly add in bland foods - saltine crackers, white bread, rice, mashed potatoes.
- **Check Your Urine:** it should be light yellow to clear if you are getting enough fluids.

6. **Pain Medicines:**

- For pain relief, you can take either acetaminophen, ibuprofen, or naproxen.
- They are over-the-counter (OTC) pain drugs. You can buy them at the drugstore.
- **Acetaminophen - Regular Strength Tylenol:** Take 650 mg (two 325 mg pills) by mouth every 4 to 6 hours as needed. Each Regular Strength Tylenol pill has 325 mg of acetaminophen. The most you should take each day is 3,250 mg (10 pills a day).
- **Acetaminophen - Extra Strength Tylenol:** Take 1,000 mg (two 500 mg pills) every 8 hours as needed. Each Extra Strength Tylenol pill has 500 mg of acetaminophen. The most you should take each day is 3,000 mg (6 pills a day).
- **Ibuprofen (e.g., Motrin, Advil):** Take 400 mg (two 200 mg pills) by mouth every 6 hours. The most you should take each day is 1,200 mg (six 200 mg pills), unless your doctor has told you to take more.
- **Naproxen (e.g., Aleve):** Take 220 mg (one 220 mg pill) by mouth every 8 to 12 hours as needed. You may take 440 mg (two 220 mg pills) for your first dose. The most you should take each day is 660 mg (three 220 mg pills a day), unless your doctor has told you to take more.

7. **Pain Medicines - Extra Notes and Warnings:**

- Use the lowest amount of medicine that makes your pain better.
- Acetaminophen is thought to be safer than ibuprofen or naproxen in people over 65 years old. Acetaminophen is in many OTC and prescription medicines. It might be in more than one medicine that you are taking. You need to be careful and not take an overdose. An acetaminophen overdose can hurt the liver.
- McNeil, the company that makes Tylenol, has different dosage instructions for Tylenol in Canada and the United States. In Canada, the maximum recommended dose per day is 4,000 mg or twelve Regular-Strength (325 mg) pills. In the United States, the maximum dose per day is ten Regular-Strength (325 mg) pills.
- Bayer, the company that makes Aleve, has different dosage instructions for Aleve in Canada and the United States. In Canada, the maximum recommended dose per day is 440 mg (2 pills or caplets). In the United States, the maximum dose per day is 660 mg (3 pills or caplets).

- **Caution:** Do not take acetaminophen if you have liver disease.
 - **Caution:** Do not take ibuprofen or naproxen if you have stomach problems, kidney disease, are pregnant, or have been told by your doctor to avoid this type of anti-inflammatory drug. Do not take ibuprofen or naproxen for more than 7 days without consulting your doctor.
 - *Before taking any medicine, read all the instructions on the package.*
8. **Cough Medicines:**
- **OTC Cough Syrups:** The most common cough suppressant in OTC cough medications is dextromethorphan. Often the letters "DM" appear in the name.
 - **OTC Cough Drops:** Cough drops can help a lot, especially for mild coughs. They reduce coughing by soothing your irritated throat and removing that tickle sensation in the back of the throat. Cough drops also have the advantage of portability - you can carry them with you.
 - **Home Remedy - Hard Candy:** Hard candy works just as well as medicine-flavored OTC cough drops. People who have diabetes should use sugar-free candy.
 - **Home Remedy - Honey:** This old home remedy has been shown to help decrease coughing at night. The adult dosage is 2 teaspoons (10 ml) at bedtime. Honey should not be given to infants under one year of age.
9. **Caution - Dextromethorphan:**
- Do not try to completely suppress coughs that produce mucus and phlegm. Remember that coughing is helpful in bringing up mucus from the lungs and preventing pneumonia.
 - **Research Notes:** Dextromethorphan in some research studies has been shown to reduce the frequency and severity of cough in adults (18 years or older) without significant adverse effects. However, other studies suggest that dextromethorphan is no better than placebo at reducing a cough.
 - **Drug Abuse Potential:** It should be noted that dextromethorphan has become a drug of abuse. This problem is seen most often in adolescents. Overdose symptoms can range from giggling and euphoria to hallucinations and coma.
 - **Contraindicated:** Do not take dextromethorphan if you are taking a monoamine oxidase (MAO) inhibitor now or in the past 2 weeks. Examples of MAO inhibitors include isocarboxazid (Marplan), phenelzine (Nardil), selegiline (Eldepryl, Emsam, Zelapar), and tranylcypromine (Parnate). Do not take dextromethorphan if you are taking venlafaxine (Effexor).
10. **Expected Course:**
- For many viral illnesses such as the common cold and the flu (influenza), most people are sick for 2 to 3 days and then get steadily better. Usually, within 2 to 3 weeks, people feel back to their usual state of health.
 - In contrast, one in five people who get sick with COVID-19 will still not feel back to their normal health after 3 weeks. Persisting symptoms are even more common in people who required hospitalization for COVID-19, older adults, and in people with chronic medical conditions. Symptoms can last weeks to months.
11. **Follow-Up With Your Healthcare Provider:**
- You should see your healthcare provider (doctor, NP, PA) on a regular basis until you feel better.
12. **Call Back If:**
- You have more questions
 - You become worse

FIRST AID

FIRST AID Advice for Shock:

Lie down with feet elevated.

BACKGROUND INFORMATION

Key Points

- One in five people who get sick with COVID-19 will still not feel back to their normal health after 3 weeks.
- The five most common physical symptoms are fatigue (58%), headache (44%), hair loss (25%), and breathing difficulty (24%). The most common psychiatric symptoms are problems with concentration and memory, sometimes referred to as "brain fog", seen in about 27% of people.
- A recent medical visit to an HCP (doctor, NP, PA) for persisting COVID-19 symptoms provides some assurance that a patient's symptoms have been appropriately evaluated, diagnosed, and treated. However, a recent medical visit is not a *guarantee* that an acute illness has been completely evaluated, correctly diagnosed, and appropriately treated. There are many reasons for this including inadequate patient-HCP communication, and the unpredictable nature of disease progression.

Terminology

There are many different **terms** that are used to describe persisting symptoms after an acute COVID-19 infection.

- Chronic COVID-19
- Long COVID
- Long-haulers
- Long-term COVID
- Post-acute COVID-19
- Post-COVID syndrome

Symptoms

Symptoms after COVID-19 can be wide-ranging and highly variable.

The most **common physical symptoms** are:

- Chest discomfort, pain, or tightness (16%)
- Cough (19%)
- **Fatigue, feeling tired or weak** (58%)
- Hair loss (25%)
- Headache (44%)
- Joint pain (19%)
- Loss of smell (anosmia; 21%)
- Loss of taste (ageusia; 23%)
- Shortness of breath, breathlessness, or breathing difficulty (24%)

Less common physical symptoms are:

- Diarrhea
- Dizziness
- Eye redness

- Hearing loss
- Nausea or vomiting
- Sweating

Some **common mental health symptoms** are:

- Anxiety
- Attention deficit ("brain fog", problems with concentration and memory; 27%)
- Depression
- Post-traumatic stress disorder
- Trouble sleeping (insomnia)

Risk Factors

Three known risk factors for persisting symptoms of COVID-19 are:

- Chronic medical conditions
- Hospitalized for COVID-19
- Older age

Treatment

Treatment is directed at the symptoms.

Prevention

Social distancing and wearing masks have been proven to help prevent COVID-19. Vaccination helps prevent COVID-19.

Expected Course

For many viral illnesses such as the common cold and the flu (influenza), most people are sick for 2 to 3 days and then get steadily better. Usually, within 2 to 3 weeks, people feel back to their usual state of health.

In contrast, one in five people who get sick with COVID-19 will still not feel back to their normal health after 3 weeks. Persisting symptoms are even more common in people who required hospitalization for COVID-19, older adults, and in people with chronic medical conditions. Symptoms can last weeks to months.

Telephone Triage Assessment and Disposition

The triager's task in a follow-up call is to assess whether the patient is getting better (improving), staying the same, or getting worse.

It is useful for the triager to directly ask the patient questions like these:

- *Are you getting better?*
- *Do you feel the same?*
- *Are you getting worse?*
- If the patient is getting worse: *in what specific way are you getting worse?*

Since a recent medical visit is not a *guarantee* that an acute illness has been completely evaluated,

correctly diagnosed, and appropriately treated, a conservative triage approach is recommended.

- Triageing the patient using an appropriate symptom guideline-protocol, as if they had never seen a healthcare provider, may be needed.
- When in doubt, the triager should consult with the medical provider or refer patient in for re-examination.

REFERENCES

1. Carfi A, Bernabei R, Landi F; Gemelli Against COVID-19 Post-Acute Care Study Group. Persistent Symptoms in Patients After Acute COVID-19. *JAMA*. 2020 Aug 11;324(6):603-605.
2. Goërtz YMJ, Van Herck M, Delbressine JM, et.al. Persistent symptoms 3 months after a SARS-CoV-2 infection: the post-COVID-19 syndrome? *ERJ Open Res*. 2020 Oct 26;6(4):00542-2020.
3. Hansen CH, Michlmayr D, Gubbels SM, Mølbak K, Ethelberg S. Assessment of protection against reinfection with SARS-CoV-2 among 4 million PCR-tested individuals in Denmark in 2020: a population-level observational study. *Lancet*. 2021 Mar 27;397(10280):1204-1212.
4. Huang C, Huang L, Wang Y, et.al. 6-month consequences of COVID-19 in patients discharged from hospital: a cohort study. *Lancet*. 2021 Jan 16;397(10270):220-232.
5. Lopez-Leon S, Wegman-Ostrosky T, Perelman C, Sepulveda R, Rebolledo PA, Cuapio A, Villapol S. More than 50 Long-term effects of COVID-19: a systematic review and meta-analysis. *medRxiv [Preprint]*. 2021 Jan 30:2021.01.27.21250617.
6. Mikkelsen ME, Abramoff B. Coronavirus disease 2019 (COVID-19): Evaluation and management of adults following acute viral illness. In: Finlay G, Kunins L, eds. *UpToDate*. Waltham, MA: UpToDate Inc. <https://www.uptodate.com>. Accessed February 21, 2021.
7. National Institute for Health and Care Excellence (NICE). COVID-19 rapid guideline: managing the long-term effects of COVID-19. Accessed 02/20/2021. NICE guideline [NG188]. Published date: 18 December 2020. Available at: <https://www.nice.org.uk/guidance/ng188>.
8. Rubin R. As Their Numbers Grow, COVID-19 "Long Haulers" Stump Experts. *JAMA*. 2020 Sep 23.
9. Sykes DL, Holdsworth L, Jawad N, Gunasekera P, Morice AH, Crooks MG. Post-COVID-19 Symptom Burden: What is Long-COVID and How Should We Manage It? *Lung*. 2021 Feb 11:1-7.
10. Tenforde MW, Kim SS, Lindsell CJ, et.al. Delayed Return to Usual Health Among Outpatients with COVID-19 in a Multistate Health Care Systems Network - U.S. *MMWR Morb Mortal Wkly Rep*. 2020 Jul 31;69(30):993-998. doi: 10.15585/mmwr.mm6930e1.
11. Xiong Q, Xu M, Li J, Liu Y, Zhang J, Xu Y, Dong W. Clinical sequelae of COVID-19 survivors in Wuhan, China: a single-centre longitudinal study. *Clin Microbiol Infect*. 2021 Jan;27(1):89-95.

AUTHOR AND COPYRIGHT

Author: David A. Thompson, MD, FACEP
Copyright: 2000-2021, LaGrange Medical Software, Inc. All rights reserved.
Company: Schmitt-Thompson Clinical Content
Content Set: Office Hours Telehealth Triage Protocols | Adult
Version Year: 2021
Last Revised: 8/25/2021
Last Reviewed: 8/25/2021