



Rehabilitation in a long-haul COVID-19 world

About long-COVID

- The term “long-COVID” is commonly used to describe a collection of symptoms and health problems that some people who had COVID-19 experience after the initial infection is over.
- There are a few different terms to describe long-term health effects of COVID-19. Long-COVID is one, but you may also hear terms like “post-COVID-19 syndrome,” “post-COVID-19 conditions,” “chronic COVID-19” or “post-acute sequelae of SARS-CoV-2 (PASC).” People with long-COVID are sometimes called “long-haulers” (*References, 1).

Long-haul or post-COVID symptoms

General symptoms

- Tiredness or fatigue that interferes with daily life
- Symptoms that get worse after physical or mental effort (also known as “post-exertional malaise”)
- Fever

Respiratory and heart symptoms

- Difficulty breathing or shortness of breath
- Cough
- Chest pain
- Fast-beating or pounding heart (also known as heart palpitations)

Long-haul or post-COVID symptoms, continued

Neurological symptoms

- Difficulty thinking or concentrating (sometimes referred to as “brain fog”)
- Headache
- Sleep problems
- Dizziness when you stand up (lightheadedness)
- Pins-and-needles feelings
- Change in smell or taste
- Depression or anxiety

Long-haul or post-COVID symptoms, continued

Digestive symptoms

- Diarrhea
- Stomach pain

Other symptoms

- Joint or muscle pain
- Rash
- Changes in menstrual cycles
- Food allergies or sensitivities not previously experienced
- Difficulty with balance

Long-haul or post-COVID symptoms, continued

Additionally, people experiencing any severe illness may develop health problems following hospitalization or treatment, such as post-intensive-care syndrome (PICS).

PICS refers to the health effects that may begin when a person is in an intensive care unit (ICU) and that may persist after a person returns home. These effects can include muscle weakness, problems with thinking and judgment, and symptoms of post-traumatic stress disorder (PTSD). [PTSDexternal icon](#) involves long-term reactions to a very stressful event. For people who experience PICS following a COVID-19 diagnosis, it is difficult to determine whether these health problems are caused by a severe illness, the virus itself or a combination of both (*References, 2).

Emotional impact of long-COVID

- Feeling anxious, struggling to catch their breath and their heart feels like it's racing
- Feeling low in mood
- Poor sleep
- Wondering if it will ever go away
- Worries about finances and getting back to work
- Worries about family or friends becoming ill and suffering

Emotional impact of long-COVID, continued

- Health experts not always being able to answer all their questions or give explanations
- Unpleasant images from when they were first unwell, which seemed to come "out of the blue"
- Nightmares
- Feelings of panic with any hospital reminders or medical appointments

Americans with Disabilities Act (ADA) considerations

Examples of individuals with an impairment that substantially limits a major life activity:

- An individual diagnosed with COVID-19 who experiences ongoing but intermittent multiple-day headaches, dizziness, brain fog and difficulty remembering or concentrating, which the employee's doctor attributes to the virus, is substantially limited in neurological and brain function, concentrating and/or thinking, among other major life activities.
- An individual diagnosed with COVID-19 who initially receives supplemental oxygen for breathing difficulties and has shortness of breath, associated fatigue and other virus-related effects that last, or are expected to last, for several months, is substantially limited in respiratory function and, possibly, major life activities involving exertion, such as walking (*References, 3).

ADA considerations, continued

Examples of individuals with an impairment **that substantially limits** a major life activity:

- An individual who has been diagnosed with COVID-19 experiences heart palpitations, chest pain, shortness of breath and related effects due to the virus that last, or are expected to last, for several months. The individual is substantially limited in cardiovascular function and circulatory function, among others.
- An individual diagnosed with “[long-COVID](#),” who experiences COVID-19-related intestinal pain, vomiting and nausea that linger for many months, even if intermittently, is substantially limited in gastrointestinal function, among other major life activities and, therefore, has an actual disability under the ADA. For other examples of when “long-COVID” can be a substantially limiting impairment, see references, 3.

ADA considerations, continued

Examples of individuals with an impairment that **does not** substantially limit a major life activity:

- An individual who is diagnosed with COVID-19 who experiences congestion, sore throat, fever, headaches and/or gastrointestinal discomfort, which resolve within several weeks, but experiences no further symptoms or effects, is not substantially limited in a major bodily function or other major life activity and, therefore, does not have an actual disability under the ADA. This is so even though this person is subject to CDC guidance for isolation during the period of infectiousness.
- An individual who is infected with the virus causing COVID-19 but is asymptomatic – that is, does not experience any symptoms or effects – is not substantially limited in a major bodily function or other major life activity and, therefore, does not have an actual disability under the ADA. This is the case even though this person is still subject to CDC guidance for isolation during the period of infectiousness (*References, 3).

During medical management



Employee participating in therapy at time of referral

- **Cognition and speech-related issues** – participating in cognitive speech therapy to improve memory and attention, planning and organization, problem-solving, language and naming skills
- **Shortness of breath** – practicing breathing exercises and respiratory therapy to improve lung function
- **Fatigue** – working with the patient to pace themselves, to prioritize activities and discover exercise types and duration they can endure without excessive fatigue
- **Abnormal heart rate changes** – postural orthostatic tachycardia syndrome (POTS) can occur with long-COVID; people (usually women) experience a too-high increase in heart rate when they move from a lying to a standing position; gentle exercising, starting from a lying-down position, is important for patients who experience palpitations or rapid heartbeats (*References, 5).

During medical management

1. Qualified rehabilitation consultants (QRCs) can help health care providers with referral approvals to other health care providers, such as physical therapy, work hardening programs, health clubs, speech therapists (if there is a swallowing impairment), psychiatrists and licensed psychologists. Also, perhaps referral for services of home health aide or Meals On Wheels?
 - Participation in COVID-19 recovery meetings?
 - If balance is an issue, facilitating a safety review of the employee's home (much the same as for a senior citizen) to eliminate the risk of falls (get rid of throw rugs they may trip on, etc.).
2. Work with a therapist to set up a home exercise program (maybe create a chart to check off their progress) the employee can work at so they are not only relying on formal therapy sessions two to three times a week.

This might include relaxation exercises to relieve stress and anxiety to enhance sleep at night.

During medical management, continued

3. If the employee has a sedentary hobby, look at getting them re-engaged with it (such as fishing or scrapbooking) to promote some form of physical activity, even if it is only 15 to 30 minutes to start each day.
4. If it doesn't appear the employee will be returning to work with the date of injury employer, look at interest testing, as a prelude to vocational exploration, for work that is less physically demanding but will incorporate some past work experiences. Also, consider doing a transferable-skills analysis.
5. Consider getting the employee into adult basic education classes (which are free) to brush up on math, reading and spelling skills. The higher the math score an employee achieves, the better their aptitude scores will be when vocational testing is done.

After basic academics have been brushed up, have the employee participate in a vocational evaluation.

During medical management, continued

6. Consider a referral to community resources, depending on the economic impact, to learn how to work out a budget, which may include day care services for kids, food stamps or the use of a food shelf, energy assistance and transportation assistance, including bus cards or facilitating a ride share program.
7. Review and have the employee address any legal issues or additional ways to save money. For example, attending DWI class, taking a 55-and-older driving class to reduce the cost of insurance premiums, going to court to make a temporary adjustment in child support due to having less income, so they don't fall behind, or having them attend AA-related classes, if there is a problem.
8. If the employee was in the military, check to see if any of their military service can be turned into college credits if a possible associates degree will get the employee back to their pay and to a suitable job.

During medical management continued

9. Encourage weekly scheduled phone calls to family and friends to discuss positive strides taken that day, to work toward the "light at the end of the tunnel." This helps keep the employee focused on an end goal and reduces isolationism.
10. Promote the use of a diary to record daily activity, to promote consistent use of energy versus the "boom and bust," where on a good day the employee does too much because they are feeling good and then pays for it the next day.
11. Promote participation in remote or in-person skills enhancement classes, such as basic computer, Word, Excel, etc.
12. Promote participation in secondary language classes (free) if English is not the employee's native language.

Plan how to manage the return-to-work environment

Cognition: "Brain fog" is a common experience that is used to explain several symptoms affecting one's thinking. The individual may feel confused, be disorganized, have memory problems, find it hard to focus or have slower information processing ability. The condition often worsens when the individual is fatigued (*References, 6).

To support thinking skills, consider doing the following:

- minimizing distractions;
- scheduling activities based on daily fatigue levels; and
- determining an area where the employee can talk out loud.

Plan how to manage the return-to-work environment, continued

To support thinking skills, consider doing the following:

- facilitating taking frequent mini-breaks;
- encouraging daily goal setting;
- using personal incentives;
- avoiding multi-tasking;
- pace-setting to avoid mistakes;
- gaining control of the conversation; and
- using memory aids.

Plan how to manage the return-to-work environment, continued

Speech related: COVID-19 may have affected the employee's breathing. Their voice may be weak and breathy or hoarse, or they may have difficulties with voice projection.

- Keep hydrated by drinking eight to 10 glasses of water a day.
- Use the voice gently to avoid strain.
- Avoid late-night eating, which can cause acid reflux.
- Reduce or avoid smoking.
- Use sips of water and hard swallowing versus clearing the throat.

Plan how to manage the return-to-work environment, continued

Fatigue: To support a successful return to work it is often helpful to have a flexible and phased return. This might include altered hours or altered duties.

- Before returning to work it is important to think about the physical and cognitive demands required, including attention, problem-solving or organization skills.
- Look at daily home activities and consider transferability to work situations.
- Use social activities on the computer and phone.

Plan how to manage the return-to-work environment, continued

Abnormal heart rate changes: Although COVID-19 is primarily a respiratory or lung disease, the heart can also suffer. Symptoms in individuals may include feeling their heartbeat rapidly or irregularly (palpitations) in their chest and feeling lightheaded or dizzy, especially when standing, or chest discomfort (*References, 7).

- Consult with a physician, when appropriate, to increase activity on a graduated basis and to gauge what level of exertion is safe.
- Introduce new exercises and keeping the heart rate at 60% of the maximal heart rate.
 - **Heart rate calculation:** Subtract the person's age from 220 and multiply that by 0.6 to get 60% of the maximal rate. For example, if the person is 40 years old, $220 - 40 = 180$; $180 \times 0.6 = 108$ heart beats a minute (*References, 6).

Plan how to manage the return-to-work environment, continued

Abnormal heart rate changes, continued: The physician may recommend a step-by-step process as the employee's health improves (*References, 7).

- **Phase 1.** Gentle walking, breathing exercises, flexibility, stretching and yoga.
- **Phase 2.** Low-intensity activity, such as walking, light household or garden tasks, or gentle yoga.
- **Phase 3.** Moderate-intensity activity, such as walking and introducing inclines and resistance exercises.
- **Phase 4.** Moderate intensity aerobic and strength activities, such as cycling, swimming, faster-paced walking, jogging, Zumba or dance classes.
- **Phase 5.** Returning to baseline exercises, such as being able to carryout their normal routine.

Return to work same employer



ADA considerations

- The ADA allows employers to require a note from a qualified medical professional explaining it is safe for the employee to return to work (no risk of transmission) and the employee is able to perform their job duties.
- The ADA allows an employer to bar an employee from their physical presence in the workplace if the employee refuses to have a temperature reading taken or refuses to answer questions about whether the employee has COVID-19, has symptoms associated with COVID-19 or has been tested for COVID-19.
- The ADA requires all medical information about a particular employee to be stored separately from the employee's personnel file.
- If an employee is teleworking because of COVID-19 or symptoms associated with the disease, and in self-quarantine, the ADA allows the employer to tell its staff the employee is teleworking without saying why (*References, 3).

ADA considerations, continued

- **Note:** Federal Equal Employment Opportunity laws do not prevent an employer from requiring all employees to be vaccinated against COVID-19.
- The ADA and Title VII require an employer to provide reasonable accommodations for employees who, because of a disability or a sincerely held religious belief, practice or observance, do not get vaccinated against COVID-19, unless providing an accommodation would pose an undue hardship on the operation of the employer's business.
 - Reasonable accommodation for an unvaccinated employee entering the workplace might be wearing a face mask, working at a social distance from coworkers or non-employees, working a modified shift, getting periodic tests for COVID-19, being given the opportunity to telework or, finally, accepting a reassignment (*References, 3).

ADA considerations, continued

- Under the ADA, employees must tell their employer if they are requesting an exception to a COVID-19 vaccination requirement because of a conflict between that requirement and their sincerely held religious beliefs, practices or observances.
 - When making the request, employees do not need to use any “magic words,” such as “religious accommodation” or “Title VII.” However, they need to explain the conflict and the religious basis for it.
- An employer may ask employees whether they obtained a COVID-19 vaccination (*References, 3).

Returning to work for the same employer

Return workers to the highest possible level of work functioning using this hierarchy:

- same task and job, same employer;
- modified task and similar job, same employer;
- alternative task and new job, same employer;
- adapted task and similar job, different employer; and
- alternative task and new job, different employer (*References, 4).

Returning to work for the same employer, continued

1. Work with employer to facilitate a graduated return to work, maybe starting at two hours for “X” weeks, then to four hours for “X weeks,” etc.
2. Help to facilitate by creating a list for checking off tasks (and the times they are to be performed) to be accomplished each day, for the week, that the employee can use when having concentration problems.
3. Encourage the employee to maintain weekly contact with their employer to maintain a positive relationship.
4. Determine if the employee can work from home (remotely) doing either part or all of their job with the employer. If it is possible, determine what would be required to set this up, including a workstation.

Returning to work for the same employer, continued

5. Conduct an on-site job analysis with the employee and employer together to determine possible job modifications or responsibilities to facilitate a return to work. Additionally, identify regular break periods to reduce the fatigue factor.
6. Work with the employee about how to respond to coworker inferences of “milking the system” about why they were off work for so long when other coworkers returned after only two weeks.

Returning to work with a new employer



ADA considerations

- The ADA allows that employers may screen job applicants for symptoms of COVID-19 after making a conditional job offer, as long as it does so for all entering employees in the same type of job.
- An employer may take an applicant's temperature as part of a post-offer, pre-employment medical examination.
- An employer may not postpone the start date or withdraw a job offer because of the employer's concern that the individual is older, is pregnant or has an underlying medical condition that puts the individual at increased risk from COVID-19 (*References, 3).

Returning to work with a new employer, continued

1. Consider getting the employee involved in volunteer work that will allow some flexibility for work hours and a commitment to the job. This will help to increase work tolerance, re-establish a work history and, possibly, provide a new job reference.
2. Perhaps encourage employee vaccination and boosters so prospective employers may be notified in the cover letter (with the resume) that the employee is at less risk of needing time off work if hired.
3. Consider part-time jobs (a get-by job) to re-establish a work history and physical tolerance for work.
4. Consider job-sharing positions to get the employee's foot in the door with larger employers, so they can apply for better jobs with that employer or an outside employer.

Returning to work with a new employer, continued

5. Begin job-seeking-skills training, including resumes, cover letter development, how to apply for online ads that use artificial intelligence (to screen applicants out of the process), interview skills, etc.
 - Practice using a computer to do remote interviews and look confident while doing them.
 - Teach the employee how to use their cell phone for something other than phone calls.
 - Identify any religious observances that may interfere with what is considered a "normal" work schedule.
6. Look into possible apprenticeship programs where the employee is paid to learn a new trade.
7. Facilitate an on-the-job training program with prospective employers, which includes an on-site job analysis.

Returning to work with a new employer, continued

8. Use in-person or virtual job fairs to seek jobs and further refine the employee's interviewing and follow-up skills.
9. Have the employee research words, terms and job tasks in the work areas they are looking to go into: **a)** to assist with completion of artificial intelligence job applications; **b)** to assist with cover letter development; **c)** to improve for the actual job interview with the prospective employer; and **d)** if offered the job, to speak the same language and enhance acceptance by their new coworkers.

Minnesota Statutes 176.102, subdivision 1

Rehabilitation, Scope

- a) This section applies only to vocational rehabilitation of injured employees and their spouses as provided under subdivision 1a. Physical rehabilitation of injured employees is considered treatment subject to section [176.135](#).
- b) Rehabilitation is intended **to restore the injured employee so the employee may return to a job related to the employee's former employment or to a job in another work area which produces an economic status as close as possible to that which the employee would have enjoyed without disability.** Rehabilitation to a job with a higher economic status than would have occurred without disability is permitted if it can be demonstrated that this rehabilitation is necessary to increase the likelihood of reemployment. **Economic status is to be measured not only by opportunity for immediate income but also by opportunity for future income.**

Questions



References

1. [The long haul: When COVID-19 symptoms don't go away](#). NIH Medline Plus Magazine. **This is an update to the original article, published July 6, 2021. It was updated in July 2022 to reflect new information.*
2. [Long-COVID or post-COVID conditions](#). Updated May 5, 2022.
3. [What you should know about COVID-19 and the ADA, the Rehabilitation Act, and other EEO laws](#). *Technical assistance questions and answers – updated July 12, 2022.*
4. [Return to work after long-COVID: Evidence at 8th March 2021](#). Sara Pauwels¹, Isabelle Boets^{1,2}, Andrea Polli^{1,3}, Godewina Mylle², Hilde De Raeve², Lode Godderis^{1,2}.
5. [Long-COVID treatments and recovery: Post-COVID care helps patients cope with fatigue, shortness of breath, brain fog and more](#). Lisa Esposito. June 22, 2022.

References, continued

6. [Long-COVID rehabilitation booklet: Information for patients.](#) Leeds Community Healthcare NHS, July 2022 LN005039.
7. [Heart problems after COVID-19. Wendy Susan Post, M.D., M.S. and Nisha Aggarwal Gilotra, M.D. Updated April 28, 2022.](#)