

COVID PATIENT RECOVERY ALLIANCE

The COVID Patient Recovery Alliance is a multi-sector collaboration with the mission to support the energy and innovation of government and private-sector leaders as they care for individuals with long-COVID. The Alliance is developing national solutions that link diverse data sources, improve clinical care pathways, and ensure sustainable federal financial support for the care of these patients. The Alliance is particularly interested in those patients who served their communities and nation when called to duty; whose COVID-19-related costs are extraordinary and burdensome; or who are underserved by existing programs, including racial and ethnic minorities and communities experiencing health disparities.

For more information, please visit our website at COVID19PatientRecovery.org.

PURPOSE OF RESEARCH TRACKER

The research, news, and knowledge of long-COVID is quickly evolving. To stay up-to-date and informed on long-COVID, the Patient Recovery Alliance is performing routine intel scans from a variety of sources – from peer-reviewed publications to various news websites – and on variety of long-COVID-related topics, including health care coverage, workers' compensation, impacted populations, symptoms, and prevalence. The outputs of these intel scans are compiled in this document, which will be periodically updated.

COVID-19 Patient Recovery Alliance Research Tracker

Date	Article	Publication	Key Takeaways
November 2020			
30-Nov-20	For Covid Long-Haulers, a Little-Known Diagnosis Offers Possible Treatments—and New Challenges	<i>WSJ</i>	Some with COVID-19 have been diagnosed with POTS. However, it is unclear whether those with post-Covid POTS will follow similar recoveries to people with non-Covid POTS.
25-Nov-20	Estimated incidence of COVID-19 illness and hospitalization	<i>Oxford Academic</i>	<p>Researchers estimated that through the end of September, 1 of every 2.5 hospitalized infections and 1 of every 7.1 non-hospitalized illnesses may have been nationally reported.</p> <p>Applying these multipliers to reported COVID-19 cases, along with data on the prevalence of asymptomatic infection from published systematic reviews, researchers estimated that 2.4 million hospitalizations, 44.8 million symptomatic illnesses, and 52.9 million total infections may have occurred in the U.S. population from February 27–September 30, 2020. There were nearly 6.9 million laboratory-confirmed COVID-19 infections, but when researchers adjusted for potential false-negative test results, 52.9 million total infections may have occurred.</p> <p>That means only 13% of total infections were identified and reported, the team said in their paper published Nov. 25 in the journal <i>Clinical Infectious Diseases</i>.</p> <p>In other words, about 84% of the U.S. population has yet to contract the coronavirus, “and thus most of the country remains at risk, despite already high rates of hospitalization,” the CDC researchers said. It is estimated that through the end of September, 1 of every 2.5 (95% Uncertainty Interval (UI): 2.0–3.1) hospitalized infections and 1 of every 7.1 (95% UI: 5.8–9.0) non-hospitalized illnesses may have been nationally reported.</p>
24-Nov-20	Understanding worker compensation claims associated with COVID-19	<i>Local 21 News</i>	<p>“There is a growing concern surrounding what will be done to offset the workers compensation program and prevent knee jerk reactions from insurers, relying on exclusions to get out of paying claims.”</p> <p>After 9/11, “insurance companies started to rely on exclusions in their policies saying they didn’t have to cover terrorism. The insurance companies balked, and the federal government basically stepped in and created a 9/11 compensation fund.”</p> <p>“A federal program apart from workers compensation is in the realm of possibility.”</p> <p>“The commonwealth reports 9,035 COVID-19 workers comp claims as of Monday. The National Council on Compensation Insurance says 2 of 100 cases may result in permanent partial disability and one of 2,000 claims may result in permanent total disability, if covid-19 follows normal disease patterns.”</p> <p>The employer may have the burden of proof to show there is no way the worker could have contracted the disease while on the job.</p>
23-Nov-20	Gottlieb warns that long term effects of COVID still unknown	<i>The Hill</i>	Former Food and Drug Administration (FDA) Commissioner Scott Gottlieb said he is concerned effects could be serious. Gottlieb said the issue was largely a failure of public health agencies to ramp up diagnostic testing. He specifically said FDA Commissioner Stephen Hahn should have acted more quickly to involve private clinical labs.

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23-Nov-20	Sanford Health launches outpatient COVID-19 therapy centers	<i>Duluth News Tribune</i>	<p>Sanford Health opened a COVID-19 outpatient therapy center for patients determined to be high risk and treated with bamlanivimab.</p> <p>“Sanford Health is based in Sioux Falls, with major medical centers in Fargo, N.D., and Bemidji, Minn., as well as hundreds of clinics across its Upper Midwest footprint of largely rural states. The health system plans to use its rural presence to provide access to medications under investigation for clinical trials related to COVID-19, as well as the bamlanivimab drug.”</p>
22-Nov-20	Puzzling, often debilitating after-effects plaguing COVID-19 “long-haulers”	<i>60 Minutes</i>	<p>Symptoms experienced include migraines, pins and needles in the hands, post-viral fatigue, inflammation in the lungs, and tachycardia, dizziness, blurry vision, heavy limbs, and brain fog.</p> <p>“The average age of patients who are feeling this post-acute Covid syndrome are twenties to forties.”</p> <p>Mount Sinai’s center for COVID-19 patients “modeled the hospital’s approach to another public health crisis: the September 11th attacks.”</p> <p>“This virus has many different effects on the human body just like what 9/11 did to, you know, their—those survivors. So as a kind of catastrophic event at one time that causes a large group of special patients, you know, in a way, this is very similar to 9/11, but on a much grander scale,” said Dr. Zijian Chen, who heads the Center.</p> <p>“Mount Sinai is studying commonalities among that pool of patients using data they’ve compiled, and is scanning long-hauler’s brains, lungs and hearts using high-resolution imaging to see exactly what damage the virus might have done.”</p> <p>“As head of autopsy and neuropathology at Mount Sinai, Dr. Mary Fowkes examined more than a hundred people who died from COVID. Early on, she was stunned by how widespread the destruction was.” “an autopsy is the most useful. Because it will help us determine how this virus is actually making people sick.”</p>
18-Nov-20	COVID-19: Brain complications ‘increasingly reported’ in virus patients with diabetes and hypertension	<i>Sky News</i>	<p>“Life-threatening complications including strokes and brain bleeds have been found in a significant number of coronavirus patients.”</p> <p>“Dr Freeman, the chief resident at Penn Medicine’s department of radiology, and his team analysed the records of COVID-19 patients who underwent CT and or MRI scans between January and April of this year. They found that of the 1,357 patients in total, 81 had brain scans performed due to altered mental states or other neurological defects, including speech and vision problems. More than one in five of these patients had emergency or critical findings, including strokes, brain bleeds and blocked blood vessels. At least half of those patients had pre-existing histories of high blood pressure or type two diabetes.”</p> <p>Two-thirds of the patients who had critical results were African American, according to the Radiological Society of North America.</p>

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18-Nov-20	<u>A Proposed Framework and Timeline of the Spectrum of Disease Due to SARS-CoV-2 Infection Illness Beyond Acute Infection and Public Health Implications</u>	JAMA	<p>A rare multisystem inflammatory illness has been observed in both children and adults following acute SARS-CoV-2 infection.</p> <p>Hyperinflammation can occur in organ systems distinct from those affected during COVID-19 and can begin after host clearance of SARS-CoV-2 infection. “The pathophysiology of this illness, termed multisystem inflammatory syndrome in children (MIS-C) and in adults (MIS-A), remains under investigation but likely reflects a dysregulated host immune response. MIS-C and MIS-A manifest approximately 2 to 5 weeks after onset of SARS-CoV-2 infection.”</p> <p>Patients have been observed having prominent cardiovascular, gastrointestinal, dermatological, and mucocutaneous manifestations similar to the hyperinflammatory condition Kawasaki disease.</p> <p>A theoretical framework of the onset of conditions may help with clinical understanding and surveillance.</p>
8-Nov-20	<u>Insights into Disparities Observed with COVID-19</u>	<i>Journal of Internal Medicine- NIH</i>	<p>In the United States, specific race/ethnicities, particularly African Americans and Native Americans, are strong COVID-19 risk components.</p> <p>For age and racial/ethnicities, the accumulation of health co-morbidities are common precipitating mechanisms. In particular, underlying socio-economic structures in the United States likely drive development of co-morbidities, putting affected populations at higher risk for severe COVID-19.</p> <p>Male gender has also emerged as a severity risk factor.</p>
5-Nov-20	<u>A New Item on Your Medical Bill: The ‘Covid’ Fee</u>	<i>The New York Times</i>	<p>Some providers are charging a “COVID fee,” sometimes charged for personal protective equipment or for cleaning. This is more prevalent in dental offices and assisted living facilities.</p> <p>Charges might range from a few dollars to \$1,000.</p> <p>Some states attorneys general have become involved who say this charge directly to the patient violates consumer protection laws.</p>
3-Nov-20	<u>Employers are rethinking sick leave, work from home policies to protect COVID-19 ‘long haulers’</u>	ABC News	<p>“Many employers are reevaluating their sick leave, work from home and disability policies to accommodate their employees, especially those now known as COVID-19 ‘long haulers.’”</p> <p>“Employers are still thinking of ways to make life easier for employees recovering from COVID-19. Some solutions could include establishing sick leave policies, giving employees access to support services and creating hybrid work environments. Because many COVID-19 patients don’t have any symptoms, it may be safer to start implementing widespread testing rather than rely on symptom-based stay-at-home policies.”</p>
3-Nov-20	<u>Long-term Health Consequences of COVID-19</u>	JAMA	<p>Cardiovascular, pulmonary, neurologic, and mental health sequelae.</p> <p>The report calls for an integrated, multidisciplinary approach to better characterize how post–acute disease manifests in organ systems and affects overall health.</p>

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1-Nov-20	Doctors Begin to Crack Covid's Mysterious Long-Term Effects	WSJ	<p>“Doctors call the condition ‘post-acute Covid’ or ‘chronic Covid,’ and sufferers often refer to themselves as ‘long haulers’ or ‘long-Covid’ patients.”</p> <p>“A recent survey of more than 4,000 Covid-19 patients found that about 10% of those age 18 to 49 still struggled with symptoms four weeks after becoming sick, that 4.5% of all ages had symptoms for more than eight weeks, and 2.3% had them for more than 12 weeks. The study, which hasn’t yet been peer reviewed, was performed using an app created by the health-science company Zoe in cooperation with King’s College London and Massachusetts General Hospital.”</p> <p>“Another preliminary study looking mostly at nonhospitalized Covid patients found that about 25% still had at least one symptom after 90 days. A European study found about one-third of 1,837 nonhospitalized patients reported being dependent on a caregiver about three months after symptoms started.”</p> <p>“A leading explanation for long-Covid symptoms is that immune-system activity and ensuing inflammation continue to affect organs or the nervous system even after the virus is gone.”</p> <p>“Doctors also are reporting cases of long-Covid patients with gastrointestinal issues. Recent work has found the new coronavirus, known as SARS-CoV-2, in fecal matter and intestinal lining of some Covid-19 patients, suggesting the virus can infect and damage the cells of the gut. The intestines have a high density of ACE2 receptors, a type of protein on the surface of cells, which SARS-CoV-2 uses to infiltrate cells.”</p> <p>“David Putrino, director of rehabilitation innovation at Mount Sinai Health System in New York City, said the majority of the more than 300 long-Covid patients being seen at its Center for Post-Covid Care appear to have developed a dysautonomia-like condition.”</p>
1-Nov-20	Long-Haulers Are Redefining COVID-19	WSJ Sarah Toy, Sumathi Reddy, Daniela Hernandez	<p>Damage to intestinal cells and gut bacteria, dysautonomia.</p> <p>Many are dealing with symptoms weeks or months after they were expected to recover, often with puzzling new complications that can affect the entire body—severe fatigue, cognitive issues and memory lapses, digestive problems, erratic heart rates, headaches, dizziness, fluctuating blood pressure, even hair loss. Doctors say anxiety caused by social isolation and uncertainty surrounding the pandemic may exacerbate symptoms.</p> <p>Recent work has found the new coronavirus, known as SARS-CoV-2, in fecal matter and intestinal lining of some Covid-19 patients, suggesting the virus can infect and damage the cells of the gut. The intestines have a high density of ACE2 receptors, a type of protein on the surface of cells, which SARS-CoV-2 uses to infiltrate cells.</p> <p>Some symptoms could be collateral damage from the body’s immune response during the acute infection, researchers said. Some patients might harbor an undetectable reservoir of infectious virus or have bits of noninfectious virus in some cells that trigger an immune response. Another possibility is that the virus causes some people’s immune systems to attack and damage their own organs and tissues, researchers said. A June study found roughly half of 29 hospitalized ICU patients with Covid-19 had one or more types of autoantibodies—antibodies that mistakenly target and attack a patient’s own tissues or organs.</p> <p>Doctors say some patients appear to be developing dysautonomia, or dysregulation of the autonomic nervous system, the part of the nervous system that regulates involuntary functions like breathing, digestion and heart rate.</p>

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			<p>More than 300 long-Covid patients being seen at Mt. Sinai's Center for Post-Covid Care appear to have developed a dysautonomia-like condition.</p> <p>In October, the National Institutes of Health added a description of such cases to its Covid-19 treatment guidelines, saying doctors were reporting Covid-19-related long-term symptoms and disabilities in people with milder illness.</p>