COVID-19 Insights for Employers

The spectrum of symptomatic COVID-19[1]

Most patients with COVID-19 experience mild-to-moderate symptoms. Many of them will recover without requiring treatment, but some will become seriously ill and require treatment.

The CDC recognizes an extensive range of underlying medical conditions that can put employees at higher risk for severe COVID-19. These are some of the conditions[1,2]:

- Cancer
- Cerebrovascular disease
- Chronic kidney diseases
- Chronic lung diseases*
- Chronic liver diseases†
- Diabetes mellitus, types 1 and 2
- Heart conditions (heart failure, coronary artery disease, cardiomyopathies)
- HIV
- Mental health disorders‡
- Obesity (body mass index ≥30 kg/m^2)
- Physical inactivity
- Pregnancy and recent pregnancy
- Smoking, current and former
- Tuberculosis

*Interstitial lung disease, pulmonary embolism, pulmonary hypertension, chronic obstructive pulmonary disease, bronchiectasis.

†Cirrhosis, nonalcoholic fatty liver disease, alcoholic liver disease, autoimmune hepatitis.

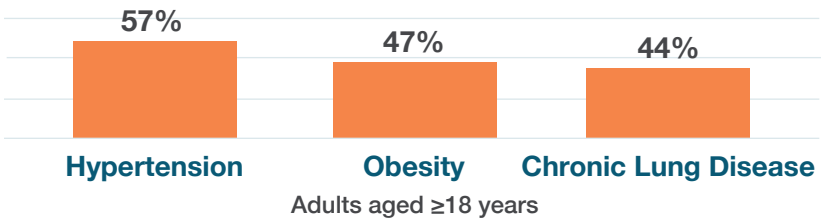
‡Mood disorders, including depression, and schizophrenia spectrum disorders.

HIV = human immunodeficiency virus.

The most common comorbidities associated with COVID-19 hospitalization among the workforce[3]

Employees with underlying medical conditions are at increased risk of hospitalization for COVID-19. Increased age is also an independent risk factor for COVID-19. In COVID-19 cases reported from March 1, 2020 through August 31, 2022 to the CDC COVID-19 Associated Hospitalizations Surveillance Network (COVID-NET),§ among adults, hypertension, obesity, and chronic lung disease were the most prevalent underlying medical conditions of those hospitalized for COVID-19. Other common comorbidities included cardiovascular disease and neurologic disease. From 2020 to 2022, adults from 18-64 years of age accounted for 53% of COVID-19 associated hospitalizations.

Most prevalent underlying medical conditions in adults hospitalized for COVID-19 (March 2020 through August 2022)[3‖]



Adults aged ≥18 years

§The Coronavirus Disease 2019 (COVID-19)–Associated Hospitalization Surveillance Network (COVID-NET) conducts population-based surveillance for laboratory-confirmed COVID-19–associated hospitalizations in children and adults. The current network covers nearly 100 counties in the 10 Emerging Infections Program (EIP) states and 4 additional states through the Influenza Hospitalization Surveillance Project (IA [March 2020-May 2022], MI, OH, and UT). The network represents approximately 10% of the US population (~32 million people).[3]

‖The denominator for each underlying condition is the total number of patients with no missing data for that condition.

High-risk conditions are associated with higher-intensity care[4]

Patients with COVID-19 and high-risk conditions¶ are

2x as likely to be hospitalized

3x as likely to be admitted to the intensive care unit

This Blue Cross analysis# showed that the average age of patients with COVID-19 hospitalized or admitted to the intensive care unit was 54 years old vs 39 years old in outpatient settings.

¶Compared to COVID-19 patients without chronic kidney disease, chronic obstructive pulmonary disease, heart disease, diabetes, or obesity.

#Analysis of claims by the Blue Cross Blue Shield Association based on a geographically diverse sample of 4.5 million insured members.

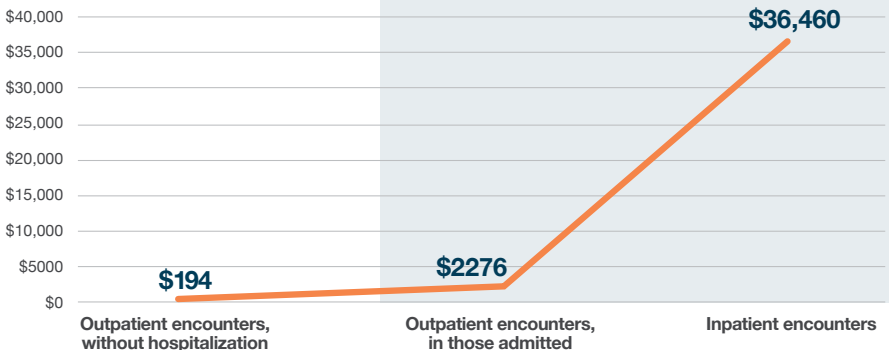
Scan this code to review the Centers for Disease Control and Prevention (CDC) expanded list of conditions associated with progression to severe COVID-19**

**The QR code on this page will take you to a website that is owned and operated by the CDC. Pfizer is not responsible for the content or services of this site.

CDC = Centers for Disease Control and Prevention.

Severe COVID-19 is costly and may be predictable[5*]

A retrospective claims analysis of unvaccinated adults with a confirmed diagnosis of COVID-19 showed that costs increased 200-fold when COVID-19 progressed to hospitalization. The majority of hospitalized adults were at high risk of progressing to severe COVID-19.



Most prevalent underlying conditions† among those requiring admission

60% had cardiovascular disease

~46% had diabetes or were obese

*Retrospective analysis of Optum Clinformatics Data Mart (CDM) database to evaluate costs and treatment patterns of unvaccinated adults aged ≥18 with a confirmed primary or secondary outpatient diagnosis of COVID-19. Subjects were included if they had an outpatient-encounter claim (index date) between May 1, 2020 and December 10, 2020 (the day prior to the first administration of a COVID-19 vaccine), 12 months of continuous enrollment before the index date, and ≥60 days of continuous healthcare enrollment after the index date. Patients were excluded if they had a COVID-19 diagnosis ≤30 days before the index date; were admitted to a hospital for COVID-19 within 48 hours of an outpatient diagnosis in the outpatient setting (indicative of severe disease at diagnosis); or were admitted to a skilled nursing facility, hospice, or inpatient rehabilitation facility within ≥60 days of the index date. Costs shown are nonzero standard costs, which represent allowed amounts higher than $0 paid to providers, and include prescription drugs, outpatient encounters, and (for those admitted) inpatient encounters. Emergency department visits were calculated separately and are not shown here.

†Other underlying conditions among those requiring admission included hypertension (78%) and gastrointestinal conditions (66%).

Severe COVID-19 impacts ability of symptomatic patients to return to work[6]

In a UK study of adults ~6 months after hospitalization for a primary diagnosis of COVID-19,‡ results showed a negative impact on employees' ability to return to work.

- **71%** did not feel fully recovered
- **18%** of those who had been working were no longer working
- **20%** had a new disability§
- **19%** experienced a health-related change in occupational status‖

‡Follow-up study of adults aged ≥18 discharged from hospitals in the UK with a clinical diagnosis of COVID-19 (N=1077). Median assessment was undertaken at 5.9 months postdischarge and included a detailed recording of symptoms and physiological and biochemical testing.

§As defined by the Washington Group Short Set on Functioning (WG-SS), a patient-reported outcome questionnaire measuring vision, hearing, walking, remembering, self-care, and communication. A participant is considered to have a new disability if response to any domain changed from "no difficulty" or "some difficulty" to "a lot of difficulty" or "cannot do it at all."

‖Such as change in full- or part-time status, no longer working after COVID-19, or occupation change due to ill health after COVID-19.

UK = United Kingdom.

Test to Treat initiative[7]

This national initiative gives individuals quick access to COVID-19 testing and, if they test positive and their healthcare provider determines that an authorized treatment is appropriate, a prescription can be written and filled at the same site. "One-Stop Test to Treat" sites are available at hundreds of locations nationwide. To find sites in their area, employees can visit the COVID-19 Test to Treat locator at https://covid-19-test-to-treat-locator-dhhs.hub.arcgis.com/

References: 1. World Health Organization. Coronavirus disease (COVID-19). Q&A. May 13, 2021. Accessed October 27, 2022. https://www.who.int/emergencies/diseases/novel-coronavirus-2019/question-and-answers-hub/q-a-detail/coronavirus-disease-covid-19 **2.** Centers for Disease Control and Prevention (CDC). Underlying medical conditions associated with higher risk for severe COVID-19: information for healthcare professionals. Updated June 15, 2022. Accessed October 14, 2022. https://www.cdc.gov/coronavirus/2019-ncov/hcp/clinical-care/underlyingconditions.html **3.** CDC. COVID-NET. A weekly summary of U.S. COVID-19 hospitalization data. October 15, 2022. Accessed October 26, 2022. https://gis.cdc.gov/grasp/COVIDNet/COVID19_5.html#medicalConditionsColumnDiv **4.** Blue Cross Blue Shield Association. Infographic: COVID-19 patients with high-risk conditions 3x more likely to need the ICU. February 9, 2021. Accessed October 27, 2022. https://www.bcbs.com/coronavirus-updates/stories/infographic-covid-19-patients-high-risk-conditions-3x-more-likely-need-the-icu **5.** Scott A, et al. *J Med Econ.* 2022;25(1):287-298. **6.** Evans RA, et al. Physical, cognitive, and mental health impacts of COVID-19 after hospitalisation (PHOSP-COVID): a UK multicentre, prospective cohort study. *Lancet Respir Med.* 2021;9(11):1275-1287. Erratum in: *Lancet Respir Med.* 2021 Dec 1:S2213-2600(21)00540-3. https://doi.org/10.1016/S2213-2600(21)00383-0 **7.** U.S. Department of Health & Human Services. Fact Sheet: COVID-19 Test to Treat. Published March 29, 2022. Accessed October 27, 2022. https://aspr.hhs.gov/TestToTreat/Documents/Fact-Sheet.pdf

PP-CPI-USA-0351
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November 2022