

COVID-19: Impact of Pre-existing Health Conditions In Adults



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Pre-existing conditions include, but are not limited to: chronic kidney disease, obesity, diabetes, hypertension, asthma, chronic obstructive pulmonary disease (COPD), serious heart conditions, sickle cell disease, solid organ transplant, and Type 2 diabetes.¹⁻⁸

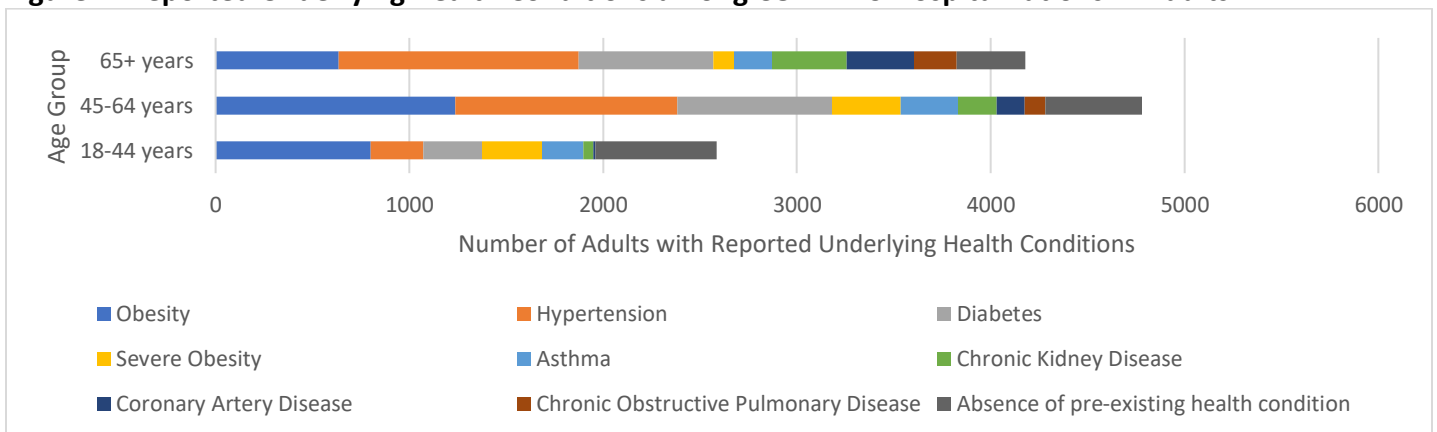
Key Findings:

- Studies have found adults with underlying pre-existing conditions who contract COVID-19 have a higher risk for more severe illness, including hospitalization, admission to intensive care units (ICU), and death.¹⁻⁸
- COVID-19 hospitalizations were up to **6 times higher** and deaths **12 times higher** among patients with reported pre-existing conditions compared to patients with no reported pre-existing conditions between January and May of 2020.⁴

Pre-Existing Conditions and COVID-19 Outcomes in Adult Populations:

- Different pre-existing conditions pose different risks for individuals who contract COVID-19. Based on strong evidence from multiple studies, the list of pre-existing conditions that put individuals at increased risk for **severe** illness include: serious heart conditions (heart failure, coronary artery disease), chronic kidney disease, chronic obstructive pulmonary disease (COPD), obesity, sickle cell disease, solid organ transplant, and type 2 diabetes.⁶⁻⁸
- Among COVID-19 cases, the three most common underlying health conditions are **cardiovascular disease (32%)**, **diabetes (30%)**, and **chronic lung disease (18%)**.⁴
- Among COVID-19 hospitalizations, the three most common underlying conditions are **hypertension (57.7%)**, **obesity (47.8%)**, and **metabolic disease (42.9%)**.⁵
- Between January 22 and May 30, 2020, the highest rates of COVID-19-related ICU admissions were among adults with underlying conditions aged 60-69 years (11%) and 70-79 years (12%).⁴

Figure 1. Reported Underlying Health Conditions among COVID-19 Hospitalizations in Adults⁹



Ko et al., September 18, 2020.

Mitigation & Prevention Recommendations:

- Proper hand washing, physical distancing – even outdoors, mask use, and complete home confinement, if possible, will reduce the risk of COVID-19 infection in individuals with chronic illness. Family members affected or suspected to be affected by COVID-19 should isolate in a separate room, as much as possible.¹⁰
- Contact physician immediately if individuals with underlying medical conditions suspect they have been exposed to COVID-19.^{8,10}
- Continue with treatment plan and medications prescribed by physician to manage any pre-existing medical conditions.⁸
- Schedule telehealth appointments, if possible, with healthcare providers to safely manage pre-existing conditions.⁸
- Continue to practice healthy habits, including regular physical activity, regular sleep routines, limited screen time, and consumption of nutritious, unprocessed foods.^{8,11}
- Receive annual seasonal influenza vaccine, especially in during the pandemic..¹²

Summary:

Pre-existing medical conditions increase the risk for hospitalization for COVID-19.¹⁻⁵ Certain pre-existing conditions have been shown to pose a higher risk for severity of COVID-19 that includes hospitalization, ICU admission, and death. Among U.S. COVID-19 cases, the most common underlying conditions are cardiovascular disease, diabetes, and chronic lung disease.⁴ COVID-19 hospitalizations are more common among U.S. adults with hypertension, obesity, and metabolic disease.⁵ Practicing proper hand hygiene, physical distancing, and mask use in addition to managing underlying medical conditions and overall health will reduce the risk of COVID-19 infection and/or the severity of COVID-19 in individuals with pre-existing conditions.⁸⁻¹²

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