Key Findings:

Studies have found adults with underlying medical conditions—or pre-existing conditions such as chronic kidney disease, obesity, diabetes, hypertension, and asthma—who contract COVID-19 have a higher risk for more severe illness, including hospitalization, admission to intensive care units (ICU), and death.\textsuperscript{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.\textsuperscript{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 transplantation, and type 2 diabetes.\textsuperscript{6,8}
- Among COVID-19 cases, the three most common underlying health conditions are cardiovascular disease (32%), diabetes (30%), and chronic lung disease (18%).\textsuperscript{4}
- Among COVID-19 hospitalizations, the three most common underlying conditions are hypertension (57.7%), obesity (47.8%), and metabolic disease (42.9%).\textsuperscript{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%).\textsuperscript{4}

Figure 1. Reported Underlying Health Conditions among COVID-19 Hospitalizations in Adults\textsuperscript{9}

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Obesity</th>
<th>Severe Obesity</th>
<th>Coronary Artery Disease</th>
<th>Hypertension</th>
<th>Diabetes</th>
<th>Chronic Kidney Disease</th>
<th>Asthma</th>
<th>Chronic Obstructive Pulmonary Disease</th>
<th>Absence of pre-existing health condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-44 years</td>
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<td>45-64 years</td>
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<td>65+ years</td>
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</tbody>
</table>

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 2020.¹²

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
References:


