

# COVID-19 and Chronic Disease Prevention and Interventions

- Reducing chronic disease risk factors and improving management of chronic conditions can help protect people from serious illness from COVID-19.
- These efforts can reduce health and economic costs of chronic conditions and COVID-19 and better prepare communities for future public health emergencies.



Six in ten Americans live with at least one chronic disease, like heart disease and stroke, cancer, or diabetes. These and other chronic diseases are the leading causes of death and disability in America, and they are also a leading drivers of the nation's \$4.3 trillion in annual [health care costs](#).

People with chronic diseases are often at high risk for poor health outcomes during public health emergencies like the COVID-19 pandemic. Research shows that people with certain underlying conditions (for example, heart disease, diabetes, or obesity) were more likely to get very sick from COVID-19 and be hospitalized, need a ventilator, or die.<sup>[1](#)</sup> The risk of death increases as the number of underlying conditions increases.<sup>[2](#)</sup>

Among people who were hospitalized with COVID-19:

- Patients with high [body mass index](#) (BMI) had higher costs of inpatient care. Compared to adults with healthy BMI (18.5–24.9), costs ranged from \$875 more for adults with BMI of 25 to 29.9 to \$4,495 more for adults with BMI ≥45.<sup>[3](#)</sup>
- Patients with high BMI had longer hospital stays compared to patients with healthy weight, ranging from 0.20 days longer for those with BMI of 35 to 39.9 to 0.71 days longer for those with BMI of ≥45. <sup>[1](#)</sup>
- Patients who had overweight or obesity had a higher risk of acute complications such as pneumonia (4%–10% higher), respiratory failure (8%– 30% higher), and acute kidney injury (8%–42% higher).<sup>[1](#)</sup>
- Patients with type 1 diabetes had a 21% higher risk of being in the intensive care unit or on a mechanical ventilator and a 5% higher risk of death compared to patients without diabetes.<sup>[4](#)</sup>
- Among patients hospitalized with severe COVID-19 complications, 39.7% had diabetes as an underlying medical condition. The percentage increased to 46.5% for patients aged 50 to 64.<sup>[5](#)</sup>

Many chronic diseases can be prevented with healthier behaviors or effective preventative care. But the COVID-19 pandemic made this hard, and the prevalence of many chronic conditions has increased since the pandemic started. Fewer people received recommended cancer screening. Use of health care services declined for preventive, routine, and even emergency care.<sup>[6](#)</sup>

Data from 2019–2021 show that in 19 states and 2 territories, at least 35% of adults have obesity—more than double the number of states with a high obesity prevalence since 2018.<sup>[7](#)</sup> Obesity may have increased because of less access to healthy foods and fewer opportunities for physical activity.<sup>[8](#)</sup>

Substance use and some mental conditions became more common.<sup>[9](#)</sup> Diabetes may be diagnosed more often after having COVID-19.<sup>[10](#)</sup> Although many of these issues have improved since the early pandemic period, much work remains to be done.

## Missed medical care during COVID-19 pandemic

In June 2020, [4 in 10 adults surveyed](#) reported delaying or avoiding routine or emergency medical care because of the COVID-19 pandemic.

For over 30 years, the [National Center for Chronic Disease Prevention and Health Promotion](#) (NCCDPHP) has built the evidence, expertise, relationships, skills, and public health infrastructure to help Americans prevent chronic conditions or manage them to stay well and avoid complications. During the COVID-19 pandemic, NCCDPHP added new guidelines, resources, and approaches to help people make healthy choices and reduce the likelihood of getting a chronic disease.

NCCDPHP worked with CDC's COVID-19 response to issue interim guidance to keep patients and staff safe in dental settings and later adapted the guidelines for use with school sealant programs for children. The guidance for dental settings made several important recommendations for personal protective equipment and ventilation.

NCCDPHP launched an award-winning national communications campaign called [How Right Now/Qué Hacer Ahora](#) in 2020 to provide tailored mental health resources for people with chronic stress, grief, and loss related to the pandemic. Evaluation findings from the first year showed that the campaign increased resilience, use of self-care strategies, and community engagement for the people most in need, including African American, Hispanic/Latino, and American Indian/Alaska Native people as well as those experiencing violence or economic distress. Campaign reach from August 2020 through May 2021 was about 28 million. In 2022, the campaign added new priority groups, such as school staff and teachers.

NCCDPHP worked with the Association of Maternal and Child Health Programs to develop a preparedness checklist to serve as a framework for local, state, tribal and territorial emergency planning. The checklist increases the capacity of all U.S. jurisdictions to ensure that the needs of women of reproductive age, especially pregnant and postpartum women, and infants are addressed in emergency planning activities like the COVID-19 pandemic.

In October 2020, NCCDPHP's Racial and Ethnic Approached to Community Health (REACH) program partnered with CDC's Immunization Services Division to reduce racial and ethnic disparities in adult vaccination coverage for both COVID-19 and influenza. Thirty-eight current REACH recipients were awarded funds to implement community-focused COVID-19 and flu vaccination promotional activities aiming to increase vaccine awareness, access, and confidence.

Because of its established community relationships, the REACH program was well-positioned to share messages about increased risk of severe COVID-19 in racial and ethnic minority groups. As a result of these funded activities, 162,157 community members were vaccinated over 12 months.

In August 2021, NCCDPHP developed the [Community Health Workers for COVID Response and Resilient Communities initiative \(CCR\)](#) to strengthen the public health workforce, slow the spread of COVID-19, and move toward health equity.

Community health workers, as trusted members of the communities they serve, connect people to care and address barriers to care. NCCDPHP awarded grants to more than 67 state, tribal, local, and territorial entities to train, deploy, and engage CHWs to address health disparities in the communities that have been hit hardest by COVID-19.

Since its launch in August 2021, CCR initiative has trained over 2,000 CHWs in COVID-19 response efforts. Award recipients supported the integration of CHWs into nearly 2,000 organizations and developed over 500 new partnerships to enhance CHW efforts. CHWs supported over 5,900 vaccination events, including pop-up clinics, and reached over 16.9 million community members with education and messaging. CHWs also made over 400,000 referrals to social services, including referrals for food and nutrition services, housing and shelter services, and public health insurance or other benefits to cover health care costs.

From March 1, 2020, to December 31, 2021, CDC staff shared guidance and resources to help more than half of the CDC-recognized organizations (n=806) that were previously delivering the National DPP lifestyle change program in person to deliver a percentage of their class sessions virtually. This included both training and information on distance learning platforms and lifestyle coach training materials to help others in the National DPP community to continue to offer the program.

NCCDPHP will continue to assess these efforts to better understand what is most effective for improving access to information, healthy behaviors, and care so people can stay well. Better overall health not only improves people's quality of life but may decrease their risk for severe illness when public health emergencies happen.

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