

VA research on COVID-19

As one of the nation's leaders in health research, VA is working to find ways to prevent and treat COVID-19. Visit the website of VA's COVID-19 research volunteer list (va.gov/coronavirus-research) to learn how to participate in these efforts.

ABOUT COVID-19

- COVID-19 is a disease caused by a new type of coronavirus. Symptoms include fever, cough, shortness of breath, and loss of taste or smell.
- Symptoms can range from mild to severe. Older adults and people with severe underlying medical conditions like heart or lung disease or diabetes seem to be at higher risk for developing more serious complications from COVID-19.
- According to the Centers for Disease Control and Prevention, patients should seen emergency medical care if they have trouble breathing, persistent pain or pressure in the chest, confusion, inability to wake or stay awake, or bluish lips or face.
- VA <u>recommends</u> patients with more mild symptoms contact their doctor or VA medical center first before going to a clinic, urgent care, or emergency room, to protect against the spread of the virus.
- VA offers COVID-19 diagnostic testing for Veterans who are enrolled in VA health care and meet the CDC testing criteria.

VA RESEARCH ON COVID-19: OVERVIEW

• In response to the pandemic, VA Research has undertaken a wide array of activities to support and advance VA's clinical and research missions and help Veterans affected by the disease.

- VA is both funding its own studies and working with industry partners to include VA sites in clinical trials for new vaccines and treatments. VA is also coordinating with other federal agencies on national-scale studies on understanding the natural history of and treatments for COVID-19 or specimen collections from patients with COVID-19, to aid in vaccine and therapeutics development.
- VA is using data and informatics expertise to create common elements for harmonized research and examining off-label use of approved medications.

 VA's Evidence Synthesis Program is rapidly synthesizing evidence from the available scientific literature and translating this evidence into usable guidance for clinicians in VA and beyond.
- Researchers and projects are being coordinated across VA to encourage best practices and avoid duplication.
 National VA data is also providing realworld evidence on disease patterns and treatment safety and effectiveness.
- VA has created a nationally coordinated COVID-19 biorepository that can adapt as future needs arise concerning other diseases. Biospecimens include those collected from clinical workflow, as well as

those proactively collected specifically for targeted hypotheses on COVID-19.

SELECTED RESEARCH PROJECTS

- VA is funding a <u>phase 2 clinical trial</u>, the HITCH trial, exploring whether degarelix, an androgen suppressor treatment used in prostate cancer, may be effective for men with COVID-19.
- The wide-reaching "VA CURES" master protocol enables a series of clinical trials across VA. VA CURES offers a standardized framework for studies on many potential treatments for COVID-19, without the need for a new study design and protocol each time. The first trial involves 702 Veterans hospitalized for COVID-19 across 25 VA sites, and is examining the effects of convalescent plasma.
- VA is part of two major national research initiatives on COVID-19 vaccines and therapeutics: Operation Warp Speed (OWS) and the Accelerated COVID-19

 Therapeutic Interventions and Vaccines (ACTIV) initiative. Through OWS, VA is working with several drug companies to recruit volunteers for vaccine trials. ACTIV, coordinated by the National Institutes of Health, is a public-private partnership to develop a coordinated research strategy for prioritizing and speeding development of the most promising treatments and vaccines.

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SUICIDE PREVENTION

- VA is collaborating with the Department of Defense on an observational, natural history study of COVID-19, called EPIC³. Researchers will collect data and biospecimens from volunteers for up to two years to better understand the clinical course of COVID-19.
- VA has undertaken several data analysis projects aimed at sharing data and increasing understanding the virus and how it spreads. Some of these projects will take place through the COVID-19 Insights Partnership. Others, involving genetics, will be part of VA's Million Veteran Program.
- In addition to studying how to prevent or treat COVID-19, VA is examining the mental health impact of the pandemic. To date, VA has funded nearly 30 studies looking at mental, behavioral, and social health and COVID-19. Some are new projects focused wholly on COVID-19, whereas others are supplements to existing projects that are broader in scope.

RECENT STUDIES: SELECTED HIGHLIGHTS

• Hospitalized VA patients with COVID-19 had a more than five times higher risk of death than patients hospitalized with the flu, found a CDC study including VA researchers.

- The study looked at electronic health records data from nearly 4,000 patients with COVID-19 and more than 5,000 with influenza. Those hospitalized for COVID-19 had a much higher death rate. COVID-19 also carries a significantly higher risk of both respiratory and non-respiratory complications, compared with flu. Risk of COVID-19 complications was higher in Black and Hispanic patients, compared with white patients. (Morbidity and Mortality Weekly Report, Oct. 23, 2020)
- San Francisco VA researchers studied how long it took health care workers with COVID-19 to test negative after initial infection. Using a test called RT-PCR, they found that time between initial COVID-19 infection and a negative test ranges from seven to 57 days. The average time was 34.5 days. Understanding this time range could help institutions make decisions on when it is safe for employees to return to work. (*Journal of Occupational and Environmental Medicine*, Aug. 13, 2020)
- A new approach to temperature screening for COVID-19 is needed in nursing homes, according to a Providence VA study. Current guidance for COVID-19 screening in nursing homes includes checking for fever, defined as at least 38°C. However,

many older patients may not reach this temperature threshold even when infected. Researchers studied SARS-CoV-2 screening data on more than 7,000 residents of VA community living centers. They found that, while virus-positive patients did show rising temperatures, only 27% met the fever threshold. Repeated measurements with a patient-specific baseline could improve screening efforts in older patients, conclude the researchers. (Journal of the American Medical Directors Association, July 2020)

· Daily COVID-19 screening for all staff and residents in community living centers is an effective strategy to curb the spread of the virus, found a VA Greater Los Angeles study. After identifying two cases of COVID-19 at one site, all staff members and residents were administered RT-PCR testing. Researchers found 14 of 19 residents who tested positive showed no symptoms of infection. Half of the eight staff members who tested positive were also asymptomatic. The testing allowed for rapid identification and isolation of infected individuals, interrupting the spread of the virus. (*Morbidity and* Mortality Weekly Report, May 29, 2020)

For more information on VA research on COVID-19, please visit www.research.va.gov/covid-19

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Updated November 2020 • For a digital version of this fact sheet with active links to sources, visit www.research.va.gov/topics

