

12 November 2020

## **BRIEF19**

*A daily review of covid-19 research and policy*

### **RESEARCH BRIEFING**

#### **Two new studies on coronavirus cases in United States military environments.**

Yesterday *The New England Journal of Medicine* released two studies related to coronavirus in the military. The [first](#), a retrospective analysis, focused on infections on the aircraft carrier *USS Theodore Roosevelt* in the Spring of 2020, and the second was a [prospective study](#) evaluating the efficacy of at-home and monitored quarantine among Marine recruits. Both studies were assessed a military population meaning that following-up test subjects without any loss of data or cross-contamination occurred.

The results of the aircraft carrier study are unsurprising. Over the course of the infection, 1,271 individuals, or 26% of the crew, tested positive for SARS-CoV-2 by PCR, with an additional sixty sailors not tested but suspected. Of these individuals, 77% had no symptoms at time of confirmed infection, and 45% remained asymptomatic throughout their course. 23 people were hospitalized, 4 received intensive care, and 1 died. Individuals working in confined spaces appeared more likely to test positive.

In the Marine recruit study, all participants completed a two-week home quarantine period followed by a two-week observed quarantine on base with weekly PCR testing and antibody blood tests. While on base, participants were required to wear double-layer cloth masks except when sleeping and eating, to maintain six feet of social distancing, they could not leave the monitored areas, had no personal electronics (to limit surface spreading), and practiced routine personal hygiene. Bathroom facilities were cleaned with bleach after each use, food was served pre-plated, unidirectional flow through buildings was maintained, and daily temperature checks and symptom screening occurred. The same restrictions applied to the instructors assigned to each platoon. Data show that on arrival, around 1% of participants were positive by PCR, with an additional 2% becoming positive at the end of the supervised quarantine. 10% of the infected servicemembers reported symptoms during the week before a positive test or on the day of positivity. After epidemiologic analysis, shared rooming and platoon membership were found to be associated with the greatest risks for transmission.

—Joshua Lesko, MD

### **POLICY BRIEFING**

#### **The CDC unveils another change on mask wearing among the general public.**

The Centers for Disease Control and Prevention on Tuesday issued a new [scientific brief](#) extolling the benefits of masks. Previously, most guidance has encouraged mask use among the general public as a means of protecting those around the wearer from the spread of SARS CoV-2. However, in the new brief, the CDC cited growing evidence that wearing a mask not only protects others, but also can protect the wearer. Also cited in the new recommendation was a recent [study](#) from economists at Goldman Sachs which stated that increasing universal masking by just 15% could prevent a future lockdown and reduce associated losses by \$1 trillion. Further, it has been proposed that the benefits of masking may be synergistic when worn both for source control and personal protection, although definitive evidence is lacking. When choosing a mask, CDC recommends multi-layered cloth masks with a high thread count for those outside of healthcare settings. They also continue to recommend social distancing, hand hygiene, and adequate ventilation as important to preventing transmission.

—Jordan M. Warchol, MD, MPH

*Kimi Chernoby, MD, JD, Policy Section Founder. Joshua Niforatos, MD Research Section Editor, Frederick Milgrim, MD, Editor-at-Large. Kane Elfman PhD, Publishing and Design. Jeremy Samuel Faust MD MS, Editor-in-Chief.*

<http://www.brief19.com/> Twitter: [@brief\\_19](#) [submissions@brief19.com](mailto:submissions@brief19.com)

*Brief19 is a daily executive summary of covid-19-related medical research, news, and public policy. It was founded and created by frontline emergency medicine physicians with expertise in medical research critique, health and public policy.*