BLUF:

• (U) As of 30 APR, more than one million confirmed civilian cases (61,005 deaths) have been reported in all 50 U.S. and its territories.

• (U) The FDA announced an Emergency Use Authorization for the antiviral drug, Remdesivir, after preliminary results of a clinical trail involving 1,063 COVID-19 patients show that those receiving it had a 31% faster recovery time and a lower mortality rate compared to those receiving a placebo.
(U) CASE REPORT: From mid-DEC 2019 to 30 APR 2020, 3,218,430 (+573,338) confirmed cases of Coronavirus Disease 2019 (COVID-19) including 228,625 (+44,253) deaths have been reported in 221 countries, territories, and areas worldwide. As of 27 APR, countries with the highest cumulative case counts include the U.S. (32% of cases, 27% of deaths), Spain (7% of cases, 11% of deaths), Italy (6% of cases, 12% of deaths), France (5% of cases, 10% of deaths), the United Kingdom (UK) (5% of cases, 11% of deaths), Germany (5% of cases, 3% of deaths), and Turkey (4% of cases, 1% of deaths). During the past week, disease incidence accelerated in Russia (a 103% increase in cases since 20 APR), and in Turkey, where cases increased by 88% compared to an increase of 52% the week prior.

(U) On 21 APR, the HHS Secretary renewed the COVID-19 public health emergency for the U.S. for an additional 90 days, effective 26 APR. CDC has added six additional symptoms to its COVID-19 symptom list including: chills, repeated shaking with chills, muscle pain, headache, sore throat, and new loss of taste or smell, in addition to fever, cough, and shortness of breath or difficulty breathing. On 29 APR, CDC released an MMWR, Characteristics and Clinical Outcomes of Adult Patients Hospitalized with COVID-19—Georgia, MAR 20, which characterized the demographics, underlying conditions, and outcomes of 305 patients. African-Americans were overrepresented among hospitalized COVID-19 patients, making up 80% of the cohort, however, the study reported that they were not at greater risk of requiring a ventilator or dying of COVID-19 compared to other racial/ethnic groups. A considerable proportion of patients 18-64 years of age who lacked high-risk conditions received ICU care (23%) or died (5%). CDC noted that this finding suggests that all adults, regardless of underlying conditions or age, can develop serious illness from COVID-19.

(U) As of 30 APR, media reported that eight states have partially lifted their COVID-19 stay-at-home restrictions, ten states plan to do so, and stay-at-home orders for two states (IL, NV) will expire on 30 APR.

(U) Per WHO’s updated transmission classifications, community transmission has been documented in 47 countries, territories, or areas as of 30 APR. WHO classifies countries as having “community transmission” if they are experiencing larger outbreaks of local transmission, defined through an assessment of factors including: large numbers of cases not linked to known chains of transmission, large numbers of cases detected through sentinel lab surveillance, and multiple unrelated clusters occurring in several areas of the country, territory, or area. WHO classifies the majority of affected areas (80%) as having “clusters of cases” or “sporadic cases.” Countries with “clusters of cases” have cases that are clustered in time, geographic location, and/or common exposures. Countries classified as having “sporadic cases” have reported one or more cases, either imported or locally detected. Transmission classifications are pending for 25 locations, primarily in Europe.

(U) Increased COVID-19 case reporting is expected in the U.S. due to amplified testing capacity and ongoing community spread. CDC is no longer reporting the extent of virus spread and transmission in U.S. states, territories, and the District of Columbia (DC); this information is being reported by each state’s health department. As of 30 APR, 1,042,874 (+200,250) confirmed cases (61,005 (+15,804) deaths) have been reported in all 50 U.S. states, DC, Puerto Rico, Guam, the Northern Mariana Islands, and the U.S. Virgin Islands.

(U) BACKGROUND: On 7 JAN, Chinese health officials reported the isolation of a novel coronavirus (subsequently called SARS-CoV-2) from a sample collected from one of 27 hospitalized cases of viral pneumonia of unknown etiology in Wuhan, China. Chinese health authorities subsequently made the full genetic sequence public, enabling other countries to develop PCR assays for the detection of SARS-CoV-2. On 11 MAR, the WHO Director-General declared COVID-19 a pandemic, the first to be caused by a coronavirus.

(U) DoD RELEVANCE: DoD shipboard populations are at increased risk of COVID-19. According to multiple media sources quoting an official Navy website, as of 29 APR, all sailors from the USS Theodore Roosevelt, currently docked in Guam, have been tested, with 969 cases testing positive for COVID-19, including one death and one current hospitalization.
(U) DoD RELEVANCE (cont’d): On 29 APR, according to multiple media sources quoting an official Navy website, the USS Kidd, a destroyer that had been deployed off of the Pacific Coast of South America, arrived in San Diego. Sixty-three percent of the crewmembers have been tested for COVID-19, with 64 testing positive. Two sailors were medically evacuated to U.S. hospitals. Fifteen sailors were transferred to the USS Makin Island for monitoring due to persistent symptoms. Thirteen ships that had previously reported one or more cases of COVID-19 while in port no longer report active cases.

(U) On 20 APR, the U.S. Secretary of Defense released a memo approving an extension of the 13 MAR stop movement order for all domestic travel by DoD official travelers through 30 JUN.

(U) MEDICAL COUNTERMEASURES & DIAGNOSTICS: On 29 APR, Gilead Sciences, Inc. announced the results from the Phase III trial of Remdesivir in patients with severe manifestations of COVID-19. The Phase III trial evaluated 5-day and 10-day dosing durations of Remdesivir in hospitalized patients, and found that patients receiving the 10-day treatment achieved similar improvement in clinical status compared to those in the 5-day treatment course. Gilead reported that no new safety signals were identified with Remdesivir across either treatment group. Remdesivir is not yet licensed or approved anywhere globally, and has not yet been demonstrated to be safe or effective for the treatment of COVID-19.

(U) On 29 APR, media reported that the FDA planned to announce an Emergency Use Authorization for the antiviral drug, Remdesivir, after preliminary results of a clinical trial involving 1,063 COVID-19 patients showed that those receiving it had a 31% faster recovery time and a lower mortality rate compared to those receiving a placebo, according to NIH. The FDA is in discussions with Gilead Sciences Inc., the manufacturer of the drug, about making it widely available to COVID-19 patients.

(U) TRANSMISSION: CDC reports that droplet spread (exposure within six feet of someone with respiratory symptoms) and contaminated surfaces (touching a droplet-contaminated surface and then touching the eyes and mouth) continue to be the major routes of transmission of SARS-CoV-2. An 8 APR MMWR article described community transmission in Chicago, IL among participants of two family gatherings prior to social distancing orders being put in place. CDC reports that the onset of viral shedding and period of infectiousness for SARS-CoV-2 are not yet known. It is possible that viral RNA may be detectable in the upper or lower respiratory tract for weeks after illness onset, similar to what occurs with MERS-CoV and SARS-CoV, however, the presence of viral RNA does not necessarily mean the presence of infectious virus.

(U) There are also instances of asymptomatic (cases where the virus was detected, but the individual never developed symptoms) and pre-symptomatic (cases where virus was detected shortly before the individual developed symptoms) infections, seen in Singapore and a long-term care facility in WA State. It is unknown whether non-respiratory body fluids from an infected person (vomit, urine, breast milk, or semen) can carry viable SARS-CoV-2 virus. Based on the existing literature, CDC considers the incubation period of COVID-19 to range from 2-14 days.

(U) Two recent Emerging Infectious Diseases research articles describe new findings during the COVID-19 outbreak in Wuhan, China. Aerosol and Surface Distribution of Severe Acute Respiratory Syndrome Coronavirus 2 in Hospital Wards, Wuhan, China, 2020, describes how Chinese researchers used PCR to detect SARS-CoV-2 virus in air samples and surfaces in a hospital ICU and a COVID-19 ward. Results showed that the virus was widely distributed on floors, computer mice, trash cans, and bed handrails and could be detected in the air four meters (13 feet) away from infected patients. Severe Acute Respiratory Syndrome Coronavirus 2 RNA Detected in Blood Donations describes the detection of SARS-CoV-2 RNA in 0.05% of blood donors in Wuhan during the epidemic peak. All donors who had detectable levels of virus in their blood were asymptomatic at the time of blood donation and had no detectable IgG or IgM antibodies. Although there is no data to suggest SARS-CoV-2 may be transmitted through blood, if it does prove possible, then donor screenings might prevent transmission.

(U) On 27 APR, an article published online in Nature magazine by Chinese researchers measured viral RNA from SARS-CoV-2 in different areas of two hospitals in Wuhan, China in FEB and MAR. While the concentration of virus in aerosols in isolation wards and ventilated patient rooms was low, the concentrations were elevated in patients’ toilet areas. Some medical staff areas also had high concentrations of viral SARS-CoV-2 RNA, but these dropped to undetectable levels after the implementation of rigorous sanitation procedures.

Text updated from the previous report will be printed in blue; items in (+xx) represent the change in number from 23 APR 2020.

For information or assistance requests, contact AFHSB/IB at dhahcr.health-surv.list.ib-alert-response@mail.mil

APPROVED FOR PUBLIC RELEASE
(U) TRANSMISSION (con’t): In an article in Emerging Infectious Diseases, South Korean public health officials described an outbreak of COVID-19 in a call center in Seoul. Of 1,143 employees who were tested for COVID-19, 97 tested positive, of which 94 worked in a call center with 216 other employees, translating to an attack rate of 44% in that work space. Only four of the 97 people who tested positive remained asymptomatic after 14-days of quarantine, and none of their household contacts acquired secondary infections. The authors concluded that extensive contact tracing, testing all contacts, and early quarantine blocked further transmission and might be effective for containing rapid outbreaks in crowded work settings.

(U) On 28 APR, researchers from Duke University announced that a pet dog from North Carolina was believed to be the first dog in the U.S. to test positive for COVID-19. The Pug (a short-faced breed often having respiratory issues) belongs to a family participating in an ongoing Duke study. The mother, father, and son had tested positive for COVID-19, prompting researchers to test the family pets. Only the Pug tested positive and had mild symptoms, while the family’s other dog and cat were negative. On 22 APR, the CDC reported that two U.S. pet cats tested positive for COVID-19, and on 5 APR, USDA APHIS reported that several tigers and lions from the Bronx zoo fell ill with the virus. All of the animals have since recovered. It is believed that all of the animals were infected from human exposures; there is no current evidence to suggest that domestic animals can transmit COVID-19 to humans.


(U) TRAVEL ADVISORIES: On 20 APR, CDC issued a Warning – Level 3, Avoid Nonessential Travel–Widespread Ongoing Transmission advisory due to the global COVID-19 pandemic. On 31 MAR, the U.S. Department of State (DoS) issued a Level 4: Do Not Travel Global Health Advisory due to COVID-19. The DoS also issued a COVID-19 Update with information for U.S. passport holders on 15 APR.