BLUF:

- (U) On 17 APR, the Navy announced that it would be conducting a joint investigation with CDC on the COVID-19 outbreak aboard the USS Theodore Roosevelt, noting that pre-symptomatic transmission appears to have been a factor. According to media reports quoting Navy officials, 777 sailors from the USS Theodore Roosevelt have tested positive for COVID-19 as of 22 APR.

- (U) As of 23 APR, 842,624 confirmed civilian cases (45,201 deaths) have been reported in all 50 U.S. states, the District of Columbia (DC), Puerto Rico, Guam, the Northern Mariana Islands, and the U.S. Virgin Islands. Current hotspots include CA, DC, GA, MD, MS, NC, NJ, NY, OH, and VA.

- (U) On 21 APR, CA health officials announced that two deaths occurring in Santa Clara County in early to mid-FEB were due to COVID-19, signaling the virus was circulating in the U.S. earlier than previously thought.

The overall classification of this document is:

APPROVED FOR PUBLIC RELEASE

For information or assistance requests, contact AFHSB/IB at dha.ncr.health-surv.list.ib-alert-response@mail.mil
(U) CASE REPORT: From mid-DEC 2019 to 23 APR 2020, 2,645,092 (+569,077) confirmed cases of Coronavirus Disease 2019 (COVID-19) including 184,372 (+46,364) deaths have been reported in 221 countries, territories, and areas worldwide (see map). As of 22 APR, 67% of the 221 affected countries, territories, and areas have reported new cases within the past 24 hours. Countries with the highest cumulative case counts include the U.S. (32% of cases, 25% of deaths), Spain (8% of cases, 12% of deaths), Italy (7% of cases, 14% of deaths), France (6% of cases, 12% of deaths), Germany (6% of cases, 3% of deaths), and the United Kingdom (UK) (5% of cases, 10% of deaths). Cases continue to trend upward in Russia, Turkey, and Singapore.

(U) On 21 APR, CA health officials announced that two deaths occurring in residents of Santa Clara County on 6 and 17 FEB had been due to COVID-19. Prior to this report, the first known U.S. death due to COVID-19 occurred in the resident of a Seattle-based nursing home on 26 FEB. Neither of the Santa Clara cases had a history of travel to China, signaling that the virus was circulating in the U.S. much earlier than previously thought.

(U) Per WHO’s updated transmission classifications, community transmission has been documented in 38 (+12) countries, territories, or areas as of 23 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 (64%) 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 38 locations, predominantly 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 23 APR, 842,624 (+202,960) confirmed cases (45,201 (+14,216) 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.S. states and territories with the highest burden of COVID-19 include CA, DC, GA, MD, MS, NC, NJ, NY, OH, and VA. The U.S President has approved disaster declarations for all 50 states, the District of Columbia, Guam, the Northern Mariana Islands, the U.S. Virgin Islands, and Puerto Rico.

(U) BACKGROUND: On 7 JAN, Chinese health officials reported the isolation of a novel coronavirus (subsequently labelled “severe acute respiratory syndrome coronavirus 2” (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: On 17 APR, the Navy announced that it would be conducting a joint investigation with CDC on the COVID-19 outbreak aboard the USS Theodore Roosevelt. Data will be voluntarily taken from 1,000 sailors aboard the aircraft carrier, with medical personnel collecting nasal swabs, blood tests, and administering questionnaires to collect information about demographics and potential preexisting medical conditions. The USN Surgeon General has stated that pre-symptomatic transmission of SARS-CoV-2 appears to have been a factor in the breakout. According to multiple media reports quoting Navy officials, as of 22 APR, 777 sailors from the USS Theodore Roosevelt have tested positive for COVID-19. The aircraft carrier is docked in Guam to enable the testing, quarantine, and isolation of all 4,800 crew members.

(U) On 20 APR, after a two-week pause in training, the Army resumed sending recruits from areas of the U.S. considered at low risk for COVID-19 to basic military training. Basic training courses have been temporarily allowed to operate with fewer trainees to facilitate health monitoring and maintaining social distancing.

(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. On 15 APR, the commander of U.S. Forces Japan expanded the Public Health Emergency declaration to include all U.S. military bases in Japan.
(U) MEDICAL COUNTERMEASURES & DIAGNOSTICS (cont’d): On 21 APR, media reported that the Abbott Laboratories ID NOW device, a rapid diagnostic “point of care” test used to detect SARS-CoV-2 via swab in less than 15 minutes, is reporting high false negative test results. Researchers at the Cleveland Clinic tested more than 200 samples known to contain coronavirus using five of the most commonly used tests, including the Abbott ID NOW device. According to the Cleveland Clinic, the device only detected 85.2% of samples, a false negative rate of 14.8%. Abbott Laboratories released guidance stating that test problems could stem from sample storage in a viral transport media prior to testing, instead of being inserted directly into the device.

(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 infectiosity 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 1 APR, The Federal Emergency Management Agency (FEMA) released Coronavirus (COVID-19) Pandemic Mass Casualty Management, which recommends that those handling deceased COVID-19 victims wear gloves, shoe covers, gowns, masks, aprons, and eye protection. A 9 APR letter published in the Journal of Forensic and Legal Medicine described the infection and death of a forensic medicine specialist in Bangkok, Thailand on 20 MAR from COVID-19 after handling an infected corpse. The letter noted that it is not routine practice in Thailand to examine deceased individuals for COVID-19, and at the time of the specialist’s death there were only imported cases in Thailand, with limited community spread of the virus.

(U) TRAVEL ADVISORIES: On 27 MAR, CDC issued a Warning – Level 3, Avoid Nonessential Travel–Widespread Ongoing Transmission advisory due to the global COVID-19 pandemic. On 19 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 7 APR.