

H28 A COVID-19 Profile in Mumbai City, India, With a Humanitarian Forensic Aspect

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Learning Overview: After attending this presentation, attendees will understand the profile of COVID-19 in Mumbai City in a highly populated city. Attendees will also learn a forensic humanitarian aspect.

Impact on the Forensic Science Community: This presentation will impact the forensic science community by helping to implement effective management in COVID-19 in a highly populated city like Mumbai. This presentation will also impact the forensic science community by providing dead body management in COVID-19 and implementing the preventive measures in COVID-19 body disposal in either a cosmopolitan city or developing country.

On December 31, 2019, the China Health Authority alerted the World Health Organization (WHO) to several cases of pneumonia of unknown etiology in Wuhan City in Hubei Province in central China. The cases had been reported since December 8, 2019, and many patients worked at, or lived around, the local Huanan Seafood Wholesale Market, although other early cases had no exposure to this market. On January 7, a novel coronavirus, originally abbreviated as 2019-nCoV by WHO, was identified from the throat swab sample of a patient. This pathogen was later renamed as Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) by the Coronavirus Study Group, and the disease was named Coronavirus Disease 2019 (COVID-19) by the WHO. As of January 30, 7,736 confirmed and 12,167 suspected cases had been reported in China and 82 confirmed cases had been detected in 18 other countries. On the same day, WHO declared the SARS-CoV-2 outbreak as a Public Health Emergency of International Concern (PHEIC).

The number of confirmed cases worldwide as of October 7, 2020, are 35,659,007, with over 1,044,269 deaths as per WHO COVID -19 Dashboard. The largest number of cases have been reported in the United States with over 7,380,326 cases and 208,787 deaths followed by India with 6,757,131 cases and 104,555 deaths, and Brazil with 4,927,235 cases and 146,675. This pandemic has led to worldwide lockdown, strangling of the global economy, and devastation of human life. Scientists and health care workers are working all over the globe for a possible cure for this deadly virus.

In Mumbai city, there are a total of 214,445 positive cases with 9,105 deaths, with a fatality rate of 4.25% as of October 7, 2020. Among total deaths in Mumbai city, 7,706 deaths are in decedents aged over 50 years. Total tests conducted (October 7, 2020) was 1,178,111 in Mumbai city with 18.20% positivity (October 7, 2020). Contact tracing was successfully done in 31 lakhs; among them, 12 lakhs were high risk and 19 lakhs were low risk. The “chase the virus” policy of Municipal Corporation of Greater Mumbai city in slums resulted in very good control of the virus in highly populated cities like Mumbai. High-risk contacts sent to institutional facilities totaled 123,409 in “chase the virus” policy. Males outnumber the females in positive cases in Mumbai city.

Mumbai city organized well the disposal of COVID-19 human remains, by proper planning and management, including standard precautions by health care workers while handling confirmed COVID-19 positive remains. Challenges included dealing with a diverse population with diverse religious beliefs and delays in disposing of remains in the mortuary due to relatives being under quarantine or due to lockdown restrictions.

COVID-19, Mumbai City, Humanitarian Forensic