






Postprandial Biological hazard or biohazard is any biological sample of a microbe, toxin or virus that primarily affects health of humans but can be extended to animals. It is used as a warning so that people who are potentially exposed to it can take necessary precautions. It is extremely important to contain it if there are any risks of it getting exposed to the environment. The biohazard symbol was developed

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too or develop flu-like symptoms such as shortness of breath, fatigue, cough and fever, difficulty in breathing, chest pain, bluish lips or face and confusion. The lesser common symptoms include runny nose, sore throat, sneezing, vomiting, nausea and diarrhea. The disease may progress to pneumonia, multiple-organ failure and ultimately death.

COVID-19 Diagnostic Tests

Laboratory testing for the disease includes methods that can detect the presence of virus or antibodies produced in response. The presence can be confirmed for very active cases using the method of RT-PCR (Reverse Transcription-Polymerase Chain Reaction) that detects the virus' RNA. Serology, on the other hand, can be used for diagnosis and population surveillance. Real time RT-PCR can be done on nasopharyngeal sputum or swab samples, for which results are available within a few hours to 2 days [14]. Other testing techniques include non-PCR based tests. Abbott lab uses its FDA-approved isothermal nucleic acid amplification method which is time efficient and deliver positive results in approximately 5 minutes and negative ones in 13 minutes.

Many countries have developed their own PCR tests. Berlin, for example, developed its RT-PCR test at Charité and formed the foundation for 2,50,000 kits that had been distributed by the WHO.

The South Korean company, Kogenebiotech has developed a PCR-based SARS-CoV-2 detection kit. In the US, the CDC is distributing its 2019-Novel Coronavirus (2019-nCoV) Real-Time RT-PCR Diagnostic Panel to public health labs through the International Reagent Resource. In Russia, the State Research Centre of Virology and Biotechnology VECTOR has developed and produced the COVID-19 test. On March 12, 2020, Mayo Clinic developed a test to detect COVID-19. On March 13, 2020, Roche Diagnostics received FDA approval for a test which could be performed within 3.5 hours in high volume and allows one machine to conduct approximately 4,128 tests in 24 hours. Taiwan has developed a test that makes use of monoclonal antibodies which specifically bind to the nucleocapsid protein (N protein) of the virus and it may provide results in 15 to 20 minutes just like a rapid influenza test.

Prevention and Control of COVID-19

Prevention of transmission can be done through maintaining overall good hygiene, washing hands regularly, coughing or sneezing into a tissue, avoiding touching face without unwashed hands, wearing surgical masks in public, social distancing, self-isolation, quarantining and adopting standard precautions.

Washing hands for at least 20 seconds with soap which bursts the virus' protective bubble is recommended by the CDC. Alcohol-based hand sanitizer with 60% alcohol content can be used when soap and water are not readily available. Surfaces can be highly contagious because the viability of the virus is quite high. Disinfecting with various

A small non-randomised trial conducted in France has found it to be a promising potential treatment [17]. Convalescent plasma (plasma containing antibodies from recovered patients) has been used to treat diseases like measles and SARS. In recent situations, transfusion is done from the recovered patient to the one suffering from COVID-19.

There have been success reports from China but no controlled studies are done yet. The treatment is still considered experimental. Another drug that has grabbed a lot of attention is Remdesivir, which was used for treating the SARS and MERS viruses, which are very similar to the SARS-CoV-2. It works by targeting a critical part of the virus and inactivates its ability to reproduce. It was used on a patient in the Washington state on January 20, 2020 and the patient who was severely ill had survived. However, extensive research needs to be done to prove its safety and effectiveness on the larger population and randomized trials are currently underway in the US and China. A vaccine can be expected at the earliest only by 2021.

From travel to construction, entertainment to education, the industries have been adversely impacted by the COVID-19 pandemic. The global economy is in distress with market recessions and disruptions in supply-demand chains. World cities are trying their best to help solve and manage things efficiently by various procedures, law enforcements and lockdowns. The US is working on a third stimulus package where the government plans to give money incentives of \$1200 per adult and \$500 per child, to help them mitigate the crisis [18]. It has also included free testing for COVID-19, the US Central Bank has cut down its interest rates and also planned to inject \$700 billion into the US economy by buying government bonds from the market. In the UK, the Bank of England has slashed the bank rate by 50 points. A scheme has been introduced that would pay grants to companies for avoiding mass layoffs [19]. Germany is planning a \$1600 billion package to support its economy. The French government has announced a \$50 billion package for small businesses and employees, majorly through deferral of tax payments to help tackle the economic emergency. In China, the People's bank of China (PBOC) had announced its decision in early February to inject \$174 billion into the markets through open market operations in order to maintain 'reasonable and abundant liquidity' in the banking system. India is doing its part to not only help its people but people of other countries as well [20]. On April 9, 2020, India had lifted its ban on export of hydroxychloroquine for thirty nations across the world who had approached India for its release. Such actions help in strengthening international relationships and promote togetherness in fighting the pandemic.

Unprecedented times call for unprecedented measures. Lockdowns and quarantines are currently the way of the world. There is no certainty to anything and many even warn about a second wave of the virus. The only thing that people can do to help is to stay safe at home. Many are complaining about boredom and isolation. But not realising that the time we have right now can be used in constructive and creative ways would be a foolish thing to do. And who better to turn

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