

# Protocols for Covid-19

## Overview

Over the past few decades, we have seen several outbreaks of zoonotic coronavirus infections. These viruses have the potential of interspecies transmission leading to pathogenesis in humans. This particular respiratory coronavirus initially named 2019-nCoV, is known as severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2). Later, the World Health Organization (WHO) named this pandemic as Coronavirus disease 2019 (COVID-19). Individuals who were exposed to a wet market in Wuhan, China, were initially diagnosed with the disease. Similar to two previous outbreaks, severe acute respiratory syndrome coronavirus [SARS-CoV] and Middle East respiratory syndrome coronavirus [MERS-CoV], COVID-19 also causes respiratory illness.

## Technical Details

The diagnostic testing for COVID-19 includes three main strategies such as (a) detection of the virus using Reverse Transcriptase Polymerase Chain Reaction (RT-PCR) (b) detection of antibodies (IgM/IgG) to the virus using Enzyme-linked immunosorbent assay (ELISA) and (c) imaging modalities like CT scan to identify the extent of lung involvement. Among the different clinical specimens, bronchoalveolar lavage (93%) has the highest positivity rate for SARS-CoV-2 followed by sputum (72%) and nasal swabs (63%).