**STUDENT NAME:**

Outbreak!: COVID-19

**Instructions**: Read the short passage below about the SARS-CoV-2 virus and the COVID-19 pandemic. Use the information in the passage as well as the online resources provided (or others) to develop an action plan to contain the spread of the virus and reduce fatalities. The action plan must be supported by evidence found in available resources. Citations and references should be included in the action plan.

**Activity:**

You have been chosen by the CDC to lead the COVID-19 pandemic task force for the United States. You will need to determine how to contain the spread of the virus and the best strategies to prevent future infections. Create an action plan to present to the government to stop the outbreak. Make sure you include:

- What treatment method(s) will you use?

- Timeline for treatment(s)

- Who will receive treatment first? Last?

- Long term solutions to prevent future outbreaks

**Background**

The SARS-CoV-2 virus has spread across the globe. The disease outbreak began in China and was carried to additional countries through international travel and trade. The virus is a type of coronavirus, a group of related viruses that cause diseases in mammals and birds and typically cause respiratory tract infections. SARS-CoV-2 is the virus that causes the disease COVID-19. SARS-CoV-2 is a mouthful but it explains clearly what this is: a severe acute respiratory syndrome caused by the 2nd coronavirus of its kind. Though COVID-19 is similar to SARS in that it is a respiratory syndrome that can lead to minor upper respiratory infections, fevers, and in the most serious cases pneumonia and death, it gets a different name to help doctors correctly diagnose it: coronavirus that started in 2019. Those with underlying conditions such as high blood pressure, heart and lung problems or diabetes are at high risk of serious illness if they are infected with SARS-CoV-2.

While many coronaviruses lead to minor infections such as the common cold, SARS-CoV-2 is different. COVID-19 is an emerging infectious disease. This means that there is no immunity in the population and therefore will cause sickness in more people. Additionally, SARS-CoV-2 is easily spread making its transmission much harder to contain. The death rate can be as low as 1% but can be as high as 10% if proper precautions are not taken.

Scientists have long used antibodies in their treatments of viral diseases. Antibodies are used as immunotherapy to combat the virus in real time. Vaccines are created to induce the body to create natural antibodies that can protect someone from future infection. This is just like when someone is infected with SARS-CoV-2 and the body creates antibodies to fight it.

**Resources**

[Data on COVID-19 Cases in the United States](https://coronavirus.jhu.edu/us-map) (Johns Hopkins University)

[CDC COVID-19 Background](https://www.cdc.gov/coronavirus/2019-ncov/index.html)

[La Jolla Institute Leading Global Hunt For Antibodies To Coronavirus](https://youtu.be/Zdlg6JYbX3A)

[Health Authorities Roll Out New Coronavirus Tests to Gauge Infection’s Spread](https://www.wsj.com/articles/health-authorities-roll-out-new-coronavirus-tests-to-gauge-infections-spread-11586511004)

[Should you get the COVID-19 antibody test?](https://www.abc15.com/news/let-joe-know/should-you-get-the-covid-19-antibody-test)

[South Korea’s Containment Strategy](https://www.youtube.com/watch?v=xAVolr-_LqY&feature=youtu.be)

[Taiwan’s COVID-19 Community Management Strategy](https://fightcovid.edu.tw/cdc-guidelines/community-management)

**COVID-19 ACTION PLAN**

CONTAINMENT PLAN

TREATMENT PLAN

LONG TERM PLAN