

I. Background

By all accounts, the 2014-2015 flu season in the United States was a disaster. The season's vaccines did not match the predominant strain of virus seen in the US, and influenza-related hospitalizations were up, especially for senior citizens. The subject of harsh criticism, the Centers for Disease Control and Prevention (CDC) admitted to making mistakes. As a result, the CDC updated the vaccines for the 2015-2016, 2016-2017, and 2017-2018 seasons to reflect new predictions for predominant strains.

II. Problem

Unfortunately, a strain of avian flu (H7N9) has mutated, making it more easily transmissible between humans. Scarily, it appears to have much higher rates of pathogenicity than other flu strains, including H1N1 and H3N2 viruses. In addition, initial mortality rates indicate that the mutated strain is much more fatal than other flus, with the potential to fall between 10-15%. Doctors are even reporting deaths among relatively healthy and young individuals (ages 18-49), in addition to high rates among infants, children, and the elderly, similar to the H1N1 pandemic in 2009. The R_0 is estimated to be 4, and epidemiologists believe that Americans are at the high end of the typical range of influenza infection, with 1 in 20 Americans likely to get sick. Public health agencies around the world are beginning to report cases as well. Complicating matters is the early surge of cases; flu season usually peaks between December and March. Experts are already comparing the potential of this outbreak to the 1918 Spanish flu pandemic. The CDC must act quickly to avoid a global pandemic.

III. Project

As a team of public health experts for the CDC, you are responsible for creating a proposal detailing the actions that the American government should take to protect public health in the face of a major flu pandemic. For the proposal, you are provided with general categories to consider, but it will be the responsibility of the team to determine the necessary specifics to be included. Teams must stay within the parameters of the assignment guidelines, but are encouraged to "think outside the box" in terms of solutions. After completing the proposal, each team will pitch their ideas in a 10 minute presentation to "policymakers." The policymakers will have the opportunity to ask questions of each team. Then, the policymakers will complete an evaluation of each presented proposal to determine which one gets funding.

IV. Timeline

Tuesday, September 26:	Team formation, brainstorming session.
Tuesday, October 3:	Proposal draft due.
Tuesday, October 10:	Final proposals due, proposal presentations.