COPQ and Brainstorming By
Group 1

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Topics to Cover

- Problem Statement
- Process Flow Chart
- Internal & External Failure
- Cost of Poor Quality (COPQ)
- Fishbone Chart
Problem Statement

The 2019–20 coronavirus outbreak is an ongoing global outbreak of coronavirus disease that has been declared a Public Health Emergency of International Concern.

As of 10 March 2020, more than 113,000 cases have been confirmed, of which 5,800 were classified as serious and 4000 deaths. Over 100 countries and territories have been affected, with major outbreaks in central China, South Korea, Italy, and Iran.
Situation in U.S.

The number of known coronavirus cases in the United States continues to grow rapidly.

As of 3/10 at 8:00 pm EST, at least 1000 people have been confirmed infected in 32 states and Washington, D.C., and at least 28 patients with the virus have died. And 8 have total recovered.
U.S. COVID-19 cases include:

- Imported cases in travelers
- Cases among close contacts of a known case
- Community-acquired cases where the source of the infection is unknown.
Flow Chart

Start

Monitoring Virus

Yes

Detected

No

Keep improving the plan

Plan

Hospital
- Dedicated ward training staff

Police
- Isolation registered infected person

CDC
- Updating information

Government
- Developing the vaccine

Detection
- Purchase and transfer materials

Inspection (Airport, Station)
- Timely detection of new cases

Human activity
- Popularize prevention knowledge

Health habits

Material reserves
- Masks
- Detection reagent

Emergency plans
- Vaccine research group

Rehearse

Solution

End
## Internal & External Failure

<table>
<thead>
<tr>
<th>Internal Failure</th>
<th>External Failure</th>
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<tbody>
<tr>
<td>Failure to discover the virus in time</td>
<td>Lack of medical resources (masks, sanitizer, testing kits, sickrooms)</td>
</tr>
<tr>
<td>Lack of enough knowledge on the virus</td>
<td>Unrestricted nation-wide travel and people-gathering events</td>
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<tr>
<td>Virus mutation</td>
<td>Information released by government is not transparent and real</td>
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<tr>
<td>Low immunity</td>
<td>Lack of enough attention from public</td>
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<td></td>
<td>Mass panic</td>
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<tr>
<td>Process</td>
<td>Internal Failure</td>
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<td>-------------------------------</td>
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<tr>
<td>Signal of epidemic situation</td>
<td>Some people in China eat wildlife trigger the virus spread</td>
</tr>
<tr>
<td>Government</td>
<td>Serious bureaucracy problem and untimely update</td>
</tr>
<tr>
<td>Post-disaster relief</td>
<td>People don’t pay enough attention to the virus</td>
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</tbody>
</table>
Fishbone Chart

Prevent the further infection

Hospital
- Quick response
- Train doctors
- Prepare resources
- Prepare rooms for infected people

Government
- Add fund on Medical Service
- Set detect station of body temperature
- Isolate the infected people
- Cooperate with other gov

CDC
- Popularize the knowledge of COVID-19
- Research on vaccine
- Update the newest information
- Develop the detection reagents

Citizens
- Stay away from crowds
- Healthy habits
- Restore resources
Thank you!