Welcome to the Vaccination Design Challenge
Today’s schedule

- Introduction
- Brainstorm and develop initial solution
- Feedback
- Break
- Work time
- Prepare presentation
- Presentations
- Closing
Norms

- Norms for the space
- Norms for the group
The Tech for Global Good is a new initiative that highlights 5 innovators in healthcare, that aims to inspire the next generation of innovators ready to tackle the toughest challenges facing our planet.
In your opinion, what is the greatest medical advancement?
What is a vaccine?

- Everyday our bodies are exposed to bacteria and viruses that could make us sick. Some we never notice because our immune systems have already made antibodies that fight that illness. Others make us very sick, especially if our bodies haven’t experienced them before.

- Scientists created vaccines by isolating dead or weakened diseases (bacterial or viral) to give the body. This lets the body’s immune system develop the antibodies needed to fight the disease, so when the body sees that illness again it can fight the disease right away.

Example: There is a vaccine for smallpox, a disease that causes a red rash and fever. Smallpox killed 35% of the people who got the disease before their immune system could produce the antibodies to fight the disease.
A brief timeline of vaccines

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
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<tbody>
<tr>
<td>1600-1700's</td>
<td>In China Buddhist monks were immunizing themselves with snake venom and cowpox to protect themselves from snake bites and smallpox.</td>
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<tr>
<td>1798</td>
<td>Smallpox vaccine developed.</td>
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<tr>
<td>1950-1985</td>
<td>Polio vaccines developed by Salk and Sabin</td>
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<tr>
<td>1963</td>
<td>Measles vaccine developed. Before this vaccine 3-4 million people would get the disease a year, but now it is much less thanks to vaccinations.</td>
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<tr>
<td>1980</td>
<td>Smallpox is globally eradicated.</td>
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<tr>
<td>1998</td>
<td>MMR immunization safety questioned in a study that was not performed.</td>
</tr>
<tr>
<td>2020</td>
<td>The year the Gates Foundation hopes to eradicate polio and stop the deaths and disabilities created by this disease.</td>
</tr>
</tbody>
</table>
What is Community Immunity?

- Vaccinated
- Susceptible
- Vaccinated but susceptible
- Infected
- Contact with an infected person

NCT PROTECTED

10.0% vax rate

30.0% vax rate

50.0% vax rate

58.5% vax rate, similar to Okanagan County, WA

68.9% vax rate, similar to Thurston County, WA

74.4% vax rate, similar to Island County, WA

83.8% vax rate, similar to Santa Cruz County, CA

86.0% vax rate, similar to Los Angeles County, CA

90.0% vax rate, similar to Orange County, CA

99.7% vax rate, similar to Gadsden County, FL
Resurgence or Eradication of Polio

Resurgence or Eradication of Polio

1988
Countries that have never eliminated polio
Countries that have eliminated polio

2014*
Countries that have never eliminated polio
Countries that have eliminated polio

*As of April 29, 2014

Resurgence

2020
No More Polio!
Eradication
PATH is the leader in global health innovation. An international nonprofit organization, PATH saves lives and improves health, especially among women and children.
You and your team run a pharmaceutical company in San Jose that has developed, tested, and produced a vaccine that can prevent a deadly disease.

Your team will use your skills as communicators, researchers, collaborators, and creative problem-solvers to assist the city governments in developing plans to help immunize their communities.
Vaccination planning in 4 cities

Each team has been given a city. Your team will do a deep dive in exploring how to get your vaccine to that city, overcome barriers to immunization, and protect people from life-threatening diseases.

- Minneapolis, USA
- Rome, Italy
- Cebu City, Philippines
- Kigoma, United Republic of Tanzania
By the end of today, you and your team will:

- Create a poster and talking points to present your solution.
- Please show:
  - The vaccination problem your team has addressed.
  - Your team’s solution.
  - Story of how someone in the city is impacted by your solution.
Brainstorming & Researching

- **Jigsaw reading in booklet**
  - Discuss what was important to you in the reading
  - What questions do you have after your reading
- **Brainstorm**
  - Record your thoughts
    - Through post-it note activity
    - OR
    - Brainstorming Notes portion of your booklet
- **Additional Research**
Brainstorming

Tools:

- Post-it notes
  - 1 idea per note
- Whiteboards
- Your creative brain!
  - Think of wild ideas.
  - Go for quantity over quality.
  - Be creative!
Creating Solutions

● Develop the first iteration of your project:
  ○ The vaccination problem your team has addressed.
  ○ Your team’s solution.
  ○ Story of how someone in the city is impacted by your solution.

● Things to consider:
  ○ What can you combine from your brainstorm?
  ○ What can you incorporate for your research?

● What feedback will you want on these ideas?
  ○ Listen and Help Protocol
Listen and Help

**STEP 1**
- Team A presents their design solution.
  *(3 min)*
  - Team B cannot speak.
  - Team B can take notes.
- Team B writes questions.
  *(1 min)*
  - Quiet minute for thinking.
- Team B asks clarifying questions.
  *(2 min)*
  - Team A can answer.
  - Team A can take notes.
- Team B provides feedback.
  *(2 min)*
  - Team A should take notes.

**STEP 2**
- Team B presents their design solution.
  *(3 min)*
  - Team A cannot speak.
  - Team A can take notes.
- Team A writes questions.
  *(1 min)*
  - Quiet minute of thinking.
- Team A asks clarifying questions.
  *(2 min)*
  - Team B can answer.
  - Team B can take notes.
- Team A provides feedback.
  *(2 min)*
  - Team B should take notes.
For more than 40 years, PATH has been at the forefront of the fight against nearly every major global health challenge.

Once it was ready for distribution, PATH partnered with governments, nonprofits, faith leaders and communities.
Editing your Solution

● Develop the second iteration of your project:
  ○ The vaccination problem your team has addressed.
  ○ Your team’s solution.
  ○ Story of how someone in the city is impacted by your solution.

● Things to consider:
  ○ What can you incorporate from the feedback you received?
  ○ What occurred to you as you presented your idea to another team?
Design a poster presentation

- Create a poster and talking points to present your solution.
- Please show:
  - The vaccination problem your team has addressed.
  - Your team’s solution.
  - Story of how someone in the city is impacted by your solution.
Looking at Presentations

- You will have 15 minutes to look at all half of the poster presentations
- Listen to presentations and look at their posters
- Ask a question or two
- Tell teams what you like about their ideas
- Think about how these solutions could help you iterate your own solution
Closure

- What part of the process did you like most?
- What would you change?
- How did this make you think about how you can impact the world?