DESIGN&PITCH CHALLENGE

OPERATION LIFELINE: CHALLENGE STATEMENT

Summary:

During natural disasters, delivering essential supplies is a race against time. This challenge becomes even harder when the medications must be kept cold. Although solutions exist for this problem, there are opportunities to develop better ones. In this Design & Pitch Challenge, you will design a solution that makes it easier for emergency responders to deliver medicine and keep it from spoiling.

Scenario:

Natural disasters can be devastating for communities. In 2018 Hurricane Michael slammed into Florida, causing widespread power outages and flooding. Weeks after the hurricane, the community was still struggling to recover.

When a natural disaster strikes, roads can be destroyed and the usual methods for transporting refrigerated goods are not an option. This can be a life-threatening problem for people who rely on medication that must be kept cold. Given advances in science and engineering, methods for delivering life-saving medications in times of disaster need to be updated.

Challenge:

In times of disaster, people are often the best resource. Your challenge is to **design a medical** pack that can be used to deliver refrigerated medications in times of natural disasters. Your medical pack should:

- 1. Meet the needs of emergency responders.
- 2. Be able to be delivered to any location in the affected region.
- 3. Keep medications cold for the duration of the delivery without freezing them.
- 4. Hold as much medication as possible while not being too heavy to deliver.
- 5. Be sturdy enough to prevent the medication containers from being damaged during delivery.

Your final submission should include a detailed sketch of your pack. Visit the <u>Prepare</u> page to learn about <u>TinkerCAD</u>, a free program for creating 3D sketches.



