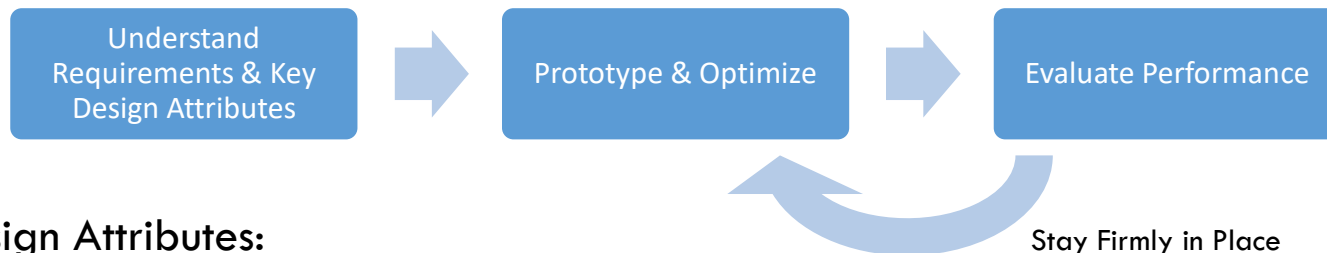


# DIY Girl Scout Face Shield Design Challenge

Using materials that are readily available in your home or from a local craft store

## What is a Face Shield?

*Personal Protective Equipment (PPE) that Protects HealthCare Providers from droplet spread to eyes during patient care*



## Key Design Attributes:

### Visibility

- Can you see through the shield?

### Prevent Droplet Spread

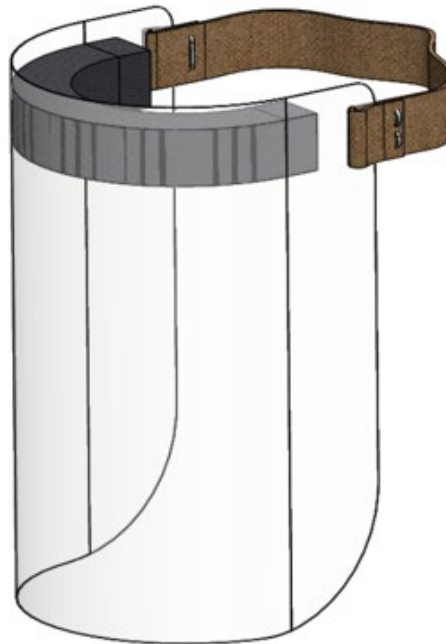
- Will the shield protect your face from droplets?

### Conformability

- Will the shield bend to conform around the face?

### Cleanability

- Could the face shield be cleaned and therefore used multiple times?



### Stay Firmly in Place

- How will the head strap attach to the shield?
- What should the strap material & dimensions (length, width) be so the face shield can feel secure?

### Compatibility with other PPE

- Is the shield far enough from the face that other PPE can be worn and still provides drop spread protection?

### Comfort

- Can someone wear the shield for hours?

### Easy to Don & Doff

- Can someone easily put on or take off the shield? Should the straps be adjustable or elastic?

Steps for Evaluating Face Shield Performance	Evaluating Questions to answer	1st Prototype (Yes/No)	What will you change to improve performance?	2nd Prototype (Yes/No)	What will you change to improve performance?	3rd Prototype (Yes/No)	What will you change to improve performance?
1. Put on a face mask and other typical PPE worn under face-shields 2. Put on face shield over your PPE and adjust for proper fit until it feels comfortable 3. DO NOT touch the face-shield to adjust it after you get it fit properly	Can you see with the face-shield on?						
	Is there a gap between the top of shield foam and your forehead?						
	Does the Face Shield fog up?						
4. Perform CPR compressions on a dummy for 1 minute (or anything that can be used to simulate ball/balloon)	Stay in place after CPR?						
	Does the Face Shield fog up?						
5. Run alongside an imaginary patient on a gurney for (100m, length of football field)	Does the Face-shield stay in place?						
	Is the face-shield comfortable while wearing?						
6. Take off the face-shield and set it aside	Does the face-shield come off in one piece?						
	Do you think you would be able to use a stethoscope if needed with the face-shield?						
	Do you think this face-shield could be worn for extended periods, hours rather than 15-20 minutes?						
	Do you think this face-shield would protect your eyes, nose, mouth from splashes, sprays, spatter, and body fluids?						