

# DESIGN A HELMET



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# HELMET PARTS

- Hard Shell
- Crushable Liner
- Layer of Padding
- Strap System
- Vents



# Consumer Product Safety Commission



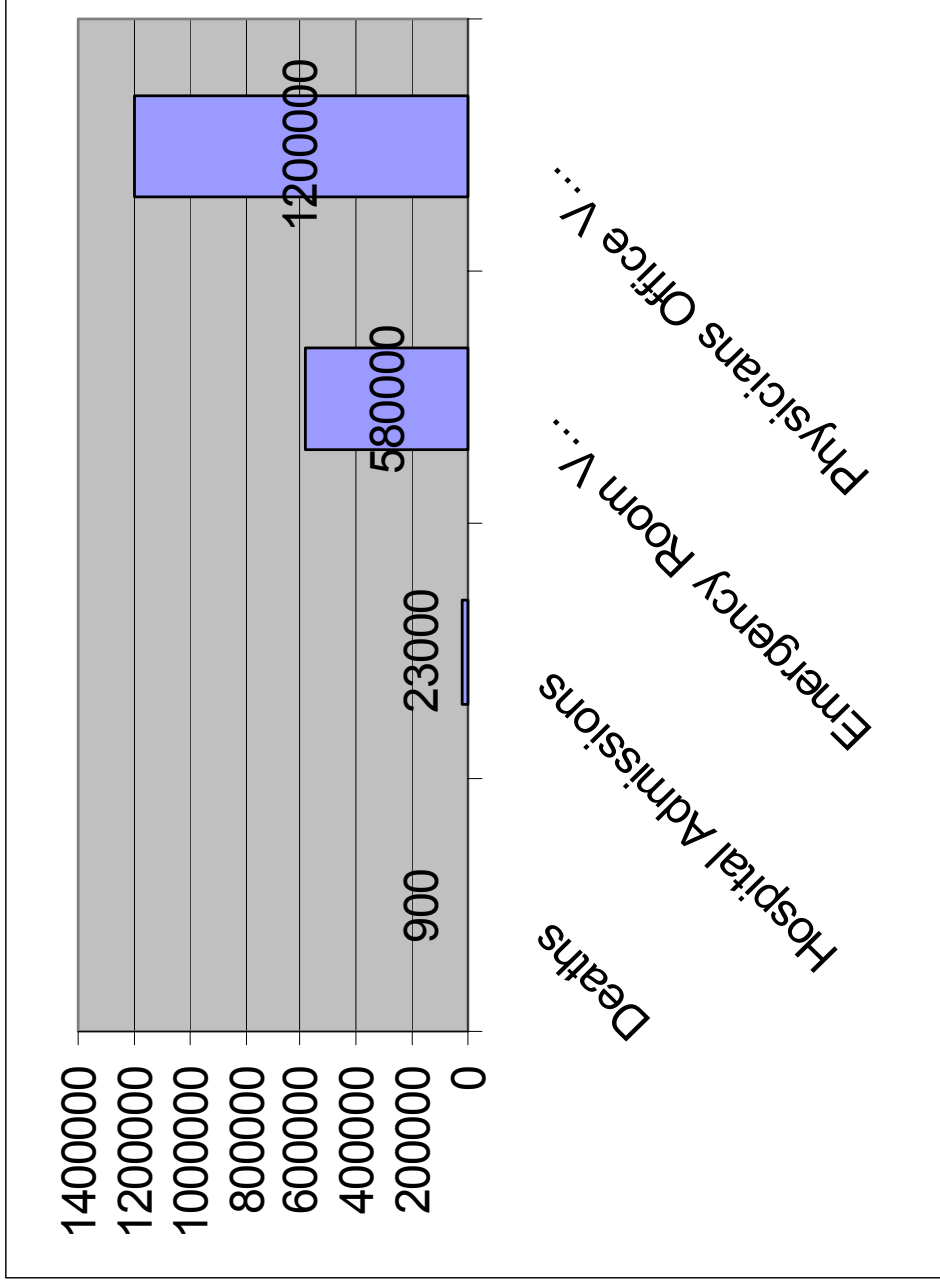
- Stickers
- Testing
  - a. Helmet strength
  - b. Strap strength
- Blue Snell sticker -  
much more stringent  
testing

# DID YOU KNOW?



- What percent of bicycle accidents involve a motor vehicle?
- How much do helmets decrease the likelihood of severe brain injury?
- When a helmet is damaged in an accident, where is it most likely to show damage?

# ANNUAL BICYCLE STATISTICS



# RISK OF HEAD INJURY

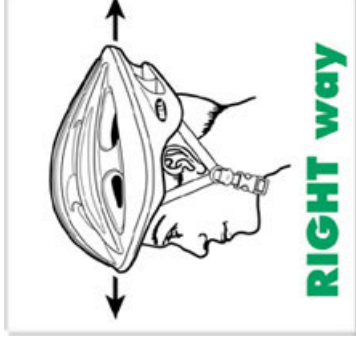
## *FACTORS??*

- Positioning on head (center)
- Adjustable foam pads (custom fit)
- Comfort
- Adjustability of straps
- Whether helmet covers forehead
- Whether helmet could be removed while the strap was fastened



# STEPS IN DETERMINING HELMET FIT

- Measurement
- Try-on
- Horizontal and vertical movement check
- Retention check
- Pressure point check
- Confirming proper fit



# GROUP PROJECTS

- People with long hair (red)
- Bald people (blue)
- Children aged 5-7 (green)
- Teen-aged riders (yellow)
- Bicycle commuter (orange)
- Bicycle motocross racers BMX (purple)





# DESIGNING & MARKETING



## A HELMET



- Identify the group your product will be designed for
- What are the specific needs of the people in the group?
- How should the basic helmet design be changed to meet the needs of the individuals in this group?
- How can you convince the people in this group to use or buy your bicycle helmet?

# GROUP GOALS

- Design a poster that defines the:
  1. Problem Statement
  2. Needs
  3. Marketing
  4. Design Changes
- Illustrate - draw a picture of your helmet
- Oral Presentation - 2 minutes



# EVALUATION KEY

- 3 - SUPERIOR



- 2 - GOOD



- 1 - NEEDS IMPROVEMENT

