

## FAQs

### **How do I turn the product on?**

ISIS turns on when you buckle your helmet chin straps. The indicator light on the bike turns green and ISIS emits a short beep.

### **How do I know ISIS is going to call 911?**

The speaker plays an alert message indicating that a call will be made.

### **What if ISIS detects an impact but there is no emergency?**

You can cancel the call at any time within 40 seconds of impact.

### **Can I use ISIS to reach 911 manually?**

Yes, there is a one-touch green call button on the bike component.

### **Will ISIS go off if I drop my helmet?**

The device only calls if the helmet is on and under a high impact. Normal biking will not initiate a call.

### **How long does the product last?**

AAA Batteries in the helmet last for 400 hours or ~2 years of riding.

## Business Model & The Future



- License to companies specializing in both helmet and bike accessories
- Adapt for children, motorcyclists, adventure bikers, skiers, snowboarders



### The Team

Mark Barineau, Neha Batra, Katherine Binder, Katrina Ellison, Melissa Kaufman, Jeremy Kuempel, Minhee Sung, Eric Guffey, Corey Harris, Mary Hong, Joseph Khoury, Maria Prus, Cody Rebholz, Erika Sandford, Joseph Silverman, James White

For more info, reach us at:  
[2009orange@mit.edu](mailto:2009orange@mit.edu)



*A bicycle safety product for long-distance cyclists*

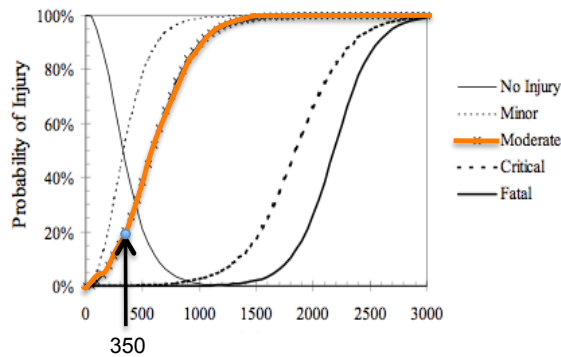
### **ISIS calls 911 when you can't**

- Automatic crash detection
- No cell phone necessary

## What is ISIS?

ISIS is a 2-part cycling safety product. The helmet sensor detects a bike crash and alerts the bike module to call 911 and send your location.

## Head Injury Probability for HIC Score



## Head Impact Severity

ISIS measures head impact severity using the Head Injury Criterion (HIC) score, which accounts for both acceleration and duration of an impact.

Under normal riding, HIC scores rarely exceed 5. At 350, ISIS's alert threshold, cyclists have a 20% chance of sustaining a moderate injury – defined by skull trauma with brief loss of consciousness.

## HOW IT WORKS



1. Buckle Sensor turns on ISIS

2. 3-axis accelerometer assembly detects impact



3. Transponder alerts bike module

5. GPS / Cell phone unit attempts to make connection



(Wait 45 seconds)

7. Device calls 911, sends accident GPS location

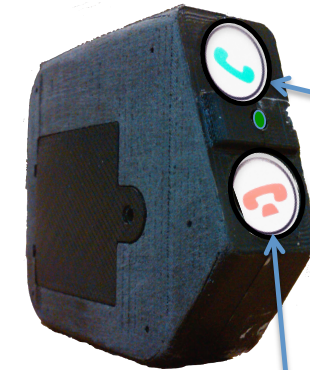


6. Speaker alerts user: impact detected, call pending



## USER INTERFACE

Call/Call Cancel Buttons



Manually Calls 911



Cancels 911 call



Indicator Light

- Green: ON
- Flashing Yellow: Battery low
- Flashing Red: Call pending
- Constant Red: Call dialing

## Target Market

Our product targets the five million avid cyclists in the US, particularly long distance cyclists who often ride alone or without a cell phone.