Our innovation is a system that can detect, notify, provide insight to where infectious respiratory diseases are, and show how they will likely spread. We achieve this in two parts, first with small devices called B.O.A.R.D.Ds that can detect positive coughs for respiratory disease using sound data and machine learning algorithms. The second part of our system is the server software that processes the data from the B.O.A.R.D.Ds and creates powerful visual displays of the data on an interactive website.

Strengths:

* High accuracy & low latency data
* No other system like it
* Allows for disease tracking on a similar level of how well the weather is tracked

Opportunities:

* To find and predict new and emerging infectious respiratory diseases
* Applying a machine learning algorithm to help predict spread based on B.O.R.A.D.D data
* To provide accurate warnings to where the diseases are and will be

Weaknesses:

* Bad name
* Not very effective unless used on a large scale
* The accuracy is less than perfect

Threats:

* Server downtime
* People believing it is too much surveillance and a violation of privacy
* Devices becoming damaged by elements/people/stuff.