

Public Health and Clinical Research

1. Public Health

- a. CDC Flu Surveillance: <http://www.cdc.gov/flu/weekly/index.htm>
 - i. Go to this site and see if you see a trend.
 - Could this same approach be used for other conditions?
 - What other conditions that are monitored as part of syndromic surveillance would be appropriate using this approach?
- b. HealthMap: www.healthmap.org
 - i. Go to this site and type in "Zika" to see what is going on in the United States.
 - Is there a pattern emerging? Type in your zip code (use 46223) and check if there any disease alerts near you.
- c. Much of public health informatics involves the application of disease surveillance and monitoring systems. These systems collect and provide data for epidemiologists, biostatisticians and other public health professionals to analyze to get a better picture of public health status. Partners in Information Access for the Public Health Workforce http://phpartners.org/health_stats.html is a collaborative of local, state, territorial, national and private partners that provides up-to-date resources and information for public health professionals. There is a list of many of the widely used surveillance systems, databases, reports and tools in the field compiled by the collaborative.
 - i. Browse several of the links in each subheading (Tools for Data Collection and Planning, GIS, etc.).
 - How do these tools and data help health professionals and the public?
 - What do we gain from analyzing this data?
 - What if we didn't have these tools available today?

2. Clinical Research

- a. There are many research tools (clinical trial research tools) available for eClinical research. REDCap is a tool available at IU researchers and students. It has the capacity to develop electronic forms for data capture and is a robust survey instrument. Have a look at two of the open source tools available, [OpenClinica \(Links to an external site.\)](#) and [REDCap \(Links to an external site.\)](#).
 - i. Compare and contrast the two resources.
 - How could these resources aid clinical research projects, or your student research projects?
- b. Clinical researchers are constantly looking for research participants who either have specific disease conditions or are healthy volunteers. There are several websites that match patients to studies. Visit either [ResearchMatch \(Links to an external site.\)](#) or [TrialX \(Links to an external site.\)](#).
 - i. Compare and contrast them with [Clinical Trials.gov \(Links to an external site.\)](#).
- c. The website for local studies in Indianapolis is managed by the [CTSI at Indiana University \(Links to an external site.\)](#).
 - i. Have a look at the current trials and see if there is an ongoing study for a disease that you are interested in or a study for healthy volunteers that you might qualify for.
 - How could this resource be integrated with the EHR to recruit research participants?