

Introduction to ArcGIS Pro for Public Health

Overview

Professionals from environmental health, epidemiology, community health, and almost every other sector of public health can use maps to understand the spatial distribution of health determinants. Mapping social and economic patterns, the location of hazardous materials handlers, and sensitive populations assists in preventing and mediating events that could affect public health. GIS software allows you to map your data. It also has powerful tools for analyzing your data by looking at spatial distribution and spatial relationships. For example, are there any elder care facilities within 1000 ft of this retention pond? If this chemical tank leaks, what aquifers would this chemical likely seep in to? Where are the hotspots for this disease and are there any schools nearby? This class teaches participants how to map their data and, at the same time, begin to analyze it.

Audience

This course is for public health professionals who want to create maps and analyze and explore data in ArcGIS.

Topics Covered

Day 1

- Overview of GIS – Understand what GIS is and what it can be used for. (What Is GIS?; What Can GIS Do?; ArcGIS Platform)
- ArcGIS Pro Basics – Learn about the ArcGIS Pro interface and its components. (Starting a Project; Parts of the Interface; Map Navigation Tools)
- Working with Layers – An introduction to the concept of layers, using the Contents pane, and contextual tabs. (GIS Data Layers; Layer Tools)
- Using Symbology to Analyze Data – Learn how to use different symbology methods to analyze data. (Applying Symbology in ArcGIS Pro; Symbology Choices)
- Asking Questions of Your Data – An introduction to the concept of selections and queries. (Making Selections; Interactive Selection; Select By Attribute; Select By Location)

Day 2

- Understanding GIS Data – Become familiar with the different GIS data formats (geodatabases, shapefiles, tables, text files, and raster files), where to find them, and starting a new project from scratch. (GIS Data Types; Understanding the ArcGIS Pro Project; Finding and Adding Data to a Map)
- Connecting to a Portal – Learn about Portal, what it is, where content is stored, and how to share to the cloud. (Portal Access; Finding Content in the Cloud; Sharing to the Cloud)
- Designing Your Map for Presentation – Learn what a map frame is, how to activate and interact with the map frame’s elements, properties, and other enhancements to prepare your map for sharing and presentation. (Working with Map Frames; Working with Elements; Sharing Layouts)
- Geoprocessing – Gain an introductory understanding of GIS analysis. Learn about some of the popular geoprocessing tools, where to find them, and how to use them. (Geographic Analysis; Running Tools)
- Beginner Editing – Understand the basics of editing GIS data, create your own data, and make changes to existing data. (Getting Started with Editing; Creating and Modifying Features; Editing Attributes; The Editing Environment)

Format

In-person instruction with hands-on practice, and course materials you can keep.

Prerequisites and Recommendations

Students should have knowledge of Microsoft Windows® and Microsoft Office®.