# Assignment 1: Descriptive Epidemiology of a Public Health Problem

## Background

Module 2 discusses identifying and measuring public health problems. Module 3 discusses public health surveillance systems and descriptive epidemiology. Both of these modules should be helpful for completing this assignment. The purpose of this assignment is to give you an opportunity to practice locating public health data, accessing it, and presenting a descriptive epidemiology of a public health problem. This is an individual assignment. The product you submit must be your own written work.

### Assignment

For this assignment, imagine that you work for the Maryland Department of Health and I am your supervisor. We are updating the state's list of public health priorities and I am asking everyone in our division to research and report on a different public health issue. I am asking you to produce an issue brief on the public health significance of EITHER obesity OR smoking for the state of Maryland. This is part 1 of a 3-part assignment. I need you to become an expert on the issue, so you must stay with the same issue (obesity OR smoking) for all three parts of the assignment.

Specifically, I want your report to include:

- A description of the health consequences of obesity/smoking.
  - What health conditions are strongly associated with obesity/smoking and how serious or severe do the outcomes of those conditions tend to be?
  - Does managing these conditions tend to require utilization of a lot of healthcare services (doctor visits, hospitalizations, prescription medications, etc.)?
  - Do these conditions typically limit a person's ability to function, or reduce their "quality of life"?
  - Do these conditions tend to reduce longevity (result in early death)?
- A description of the public health magnitude of obesity/smoking in Maryland today (or in very recent years) and geographic and sociodemographic patterns.
  - What is the prevalence of obesity/smoking in the state, overall?
  - Is it higher/lower in certain parts of the state? Which parts of the state are most affected?
  - Is it higher/lower for certain sub-groups of the state population? Which sub-groups are most affected?
- A comparative assessment of obesity/smoking in Maryland for context
  - How does the prevalence of obesity/smoking compare to the prevalence of other health concerns in Maryland today?

 Has the prevalence of obesity/smoking been increasing or decreasing over time in Maryland?

#### Conclusions

• Given the evidence you cite in this report, how would you characterize obesity/smoking and associated health outcomes in Maryland today? In other words, is this a "public health problem" according to the definition we have been using? Why or why not?

### **Format**

Your assignment should be in the form of a brief report, or "issue brief." A good brief presents information clearly and concisely. Headings and sub-headings are used liberally to organize the material. Data are largely presented in tables, graphs, or other figures that the reader can interpret quickly and easily. Accompanying text verbalizes the "story" that the data are telling, according to your interpretation. It is important to have both graphics and text—the report should not be only tables and figures, nor should it be only text. As a reader, I want to see the data summarized visually AND I want you to tell me the most important insights you think they reveal.

Under Assignment 1 in Canvas you will find several examples of issue briefs as well as a link to CDC guidance on writing briefs. These resources are provided to give you a general sense of what these types of reports tend to look like, not a blueprint that you must follow exactly. This assignment deliberately gives you freedom to make your own decisions about exactly what information to include and how to present it. I do not expect your issue briefs to all look the same.

Please single-space your assignment and place the tables and figures thoughtfully, for maximum clarity and a smooth flow of ideas. Make the tables and figures large enough to read comfortably—don't make the reader squint to see them! You may "copy and paste" tables/figures into your report as long as they appear clear and easy to read. If they are blurry when you paste them in, you should instead re-create them so they are clear and easy to read. If you *copy* a whole table/figure *cite the source of the table/figure*. If you *reproduce* a table/figure *or create an original* one yourself, *cite the source of the data*.

Content is more important than length. Let me say that again: content is more important than length. As a guide, I would expect your report to be approximately 4-5 pages, including tables/figures, but excluding the reference list. If your report is only 2 pages, it is likely missing something important. If it is 8 pages, it likely contains unnecessary information or could be presented more concisely.

## Citing Sources

Proper citations pinpoint the source of <u>each piece of information</u> in your report in such a way that <u>the reader of your report can find that information in its original location</u>. It is important to attribute information and ideas to their original source to 1) maintain scientific integrity, 2) demonstrate your ability to locate appropriate sources and synthesize information, and 3) avoid plagiarism. Please see the excerpts from *Doing Honest Work in College* on Canvas for more information about using proper citation and avoiding plagiarism.

For this assignment, please cite all of your sources and provide full bibliographic references for all sources you cite. Please use the American Medical Association (AMA) style **for formatting your references** (not your whole report), including both in-text citations and a list of full references at the end of your assignment. For online sources, please include the source's URL and the date you accessed it. Note that a URL by itself is not a complete reference. You can access the AMA Manual of Style through the Sheridan Libraries web site, under the research guide for public health (you will need to be logged in with your JHED):

https://guides.library.jhu.edu/c.php?g=202470&p=1461530

# Rubric

Grade	Criterion
Satisfactory	All of the following:
(100%)	Report includes all components specified in the assignment instructions
	Data are from reliable sources
	All sources are cited appropriately
	Data illustrate the public health magnitude and significance of the problem and associated health outcomes
	Unit of analysis presented is small enough to reveal any disparities that might exist between population groups/regions
	Data are communicated clearly and presented in an impactful way
	Data are interpreted accurately, including meaningful nuances
	Statements are insightful and thoughts are explained fully
	All statements are supported by data or other information from credible sources
	If any assumptions are made, they are stated explicitly
	Conclusions follow logically from the evidence presented
Needs	Any of the following:
Revision (0%)	One or more components is missing
	Data are from questionable sources
	One or more sources is not cited appropriately
	Data do not convey the magnitude or significance of the problem
	Data are for whole state only, not specific enough to reveal disparities that might exist between population groups/regions
	Data are not presented clearly or are presented in such a way that meaningful information is
	not immediately obvious
	Data are not interpreted accurately, key interpretation(s) missing
	Discussion of the evidence is shallow or cursory
	Statements are unsupported
	Conclusions are based on assumptions that have not been made explicit
	Conclusions do not reflect the evidence presented