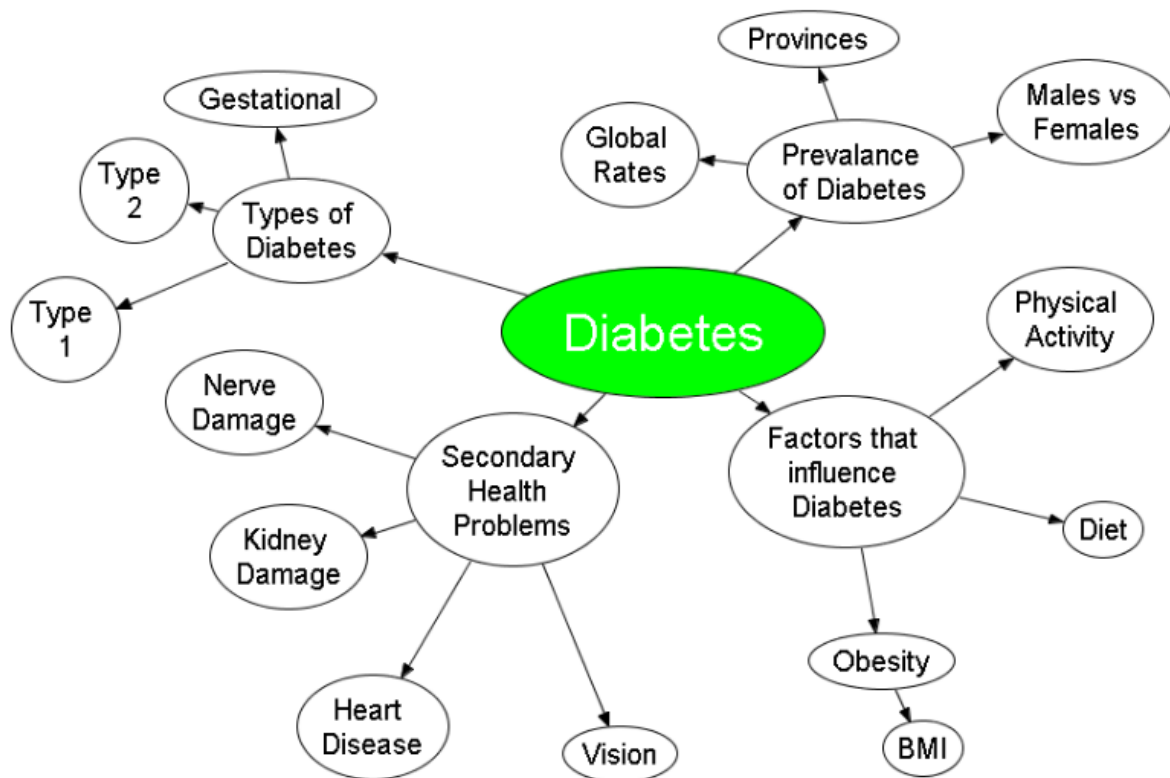


Lesson 1: Introduction of Statistics

2.1.1: Diabetes Mind Map Exemplar



2.1.2: Searching for the Data in Diabetes

For the article you were assigned, focus only on the information related to Diabetes. You may not be able to answer all of the following questions.

Guiding Questions

1. What is the title of the article and who is the author? Why is it important to know who wrote the article?
2. If your article contains a graph or table related to diabetes, what does the graph or table tell you?
3. How is the data in the article presented? (numbers, percentages, graphs, etc...) What are the claims being made?
4. Does your article offer an opinion? If so, what is the stance the article has taken?
5. Does the article make any predictions? If so, what claims are being made?
6. Does the article give information regarding the source of the data?
7. Does the article give information on the reliability of the data? If so, how is it presented?
8. There are many factors that may influence the rate of diabetes, what factors are mentioned in the article? Think of other factors that may be important to examine.
9. Do the conclusions in the articles agree with the statistics presented or disagree? Explain.
10. Is there any other important information presented in your article that you believe would be required for a statistical study on diabetes?

2.1.2: Searching for the Data in Diabetes (continued)

Other Diabetes Articles from Statistics Canada.

Articles showing analysis of the diabetes data from this survey 2.1

<http://www.statcan.ca/bsolc/english/bsolc?catno=82-621-X20060029224>

This article presents diabetes prevalence by age, sex, and province or territory for the population aged 12 and over, using data from the 2005 Canadian Community Health Survey. The article also examines questions related to specific health care received by individuals who have been diagnosed with diabetes. These questions are part of a module introduced in the survey to respond to a lack of data in regards to detailed information on health care required to the prevention of serious complications resulting from diabetes.

Smoking and Diabetes Care: Results from the CCHS Cycle 3.1 (2005)

<http://www.statcan.ca/bsolc/english/bsolc?catno=82-621-X2006002>

This issue examines smoking trends from 2000/01 to 2005 for the population aged 12 or older, using data from the Canadian Community Health Survey. This issue also presents diabetes prevalence by age, sex, and province or territory for the population aged 12 and over, using data from the 2005 Canadian Community Health Survey.

Health State Descriptions for Canadians: Diabetes

<http://www.statcan.ca/bsolc/english/bsolc?catno=82-619-M2005002>

This document examines the functional limitations—physical, emotional and social—related to the most common types of diabetes and the conditions that result from the disease. These functional limitations are described and classified using the Classification and Measurement System (CLAMES) of Functional Health.

These descriptions and classifications are the first step in a new approach to measuring the health of Canadians that examines what factors are adversely affecting population health and how to address them. This document also provides health professionals, advocacy groups, and individual Canadians with an overview of how living with diabetes affects day-to-day functioning.

Health Indicators

<http://www.statcan.ca/bsolc/english/bsolc?catno=82-221-X>

Over 80 indicators (including data on diabetes) measure the health of the Canadian population and the effectiveness of the health care system. Designed to provide comparable information at the health region and provincial/territorial levels, these data are produced from a wide range of the most recently available sources. This Internet publication is produced by Statistics Canada and the Canadian Institute for Health Information.

2.1.3 Stages of Statistics

STAGES OF STATISTICS

1. DATA COLLECTION	2. ORGANIZATION	3. ANALYSIS	4. INTERPRETATION	5. PRESENTATION
Primary Sources <ul style="list-style-type: none"> • Census • Surveys • Questionnaires • Polls • Experiments Secondary Sources <ul style="list-style-type: none"> • E-Stat • Electronic Media • Print Media 	Tables/Charts Graphs	One-Variable <ul style="list-style-type: none"> • Measures of Central Tendency • Measures of Spread • Outliers (Anomalies) Two-Variable <ul style="list-style-type: none"> • Correlation • Regression models • Extrapolations 	Causal Relationships Investigating Outliers Trends Further Investigation	Summarizing Findings Publication of Report Oral/Visual Presentation
<ul style="list-style-type: none"> • Population vs Sample • Sampling Techniques • Bias • Discrete vs Continuous • Qualitative vs Quantitative 	<ul style="list-style-type: none"> • Frequency Distributions • Circle Graphs • Bar Graphs • Histograms • Stem-and-Leaf Plots • Box-and-Whisker Plots • Line Graphs • Scatterplots 	<ul style="list-style-type: none"> • Mean, Median, Mode • Standard Deviation and Variance • Quartiles and InterQuartile Range • Percentile • Correlation Coefficient • Coefficient of Determination 	<ul style="list-style-type: none"> • Research to support conclusions • Question the validity of findings • Making Predictions • Extraneous Variables 	