Topic: Analyzing Data		
Learning Objective/Outcome:		
• Analyze infectious disease and vaccination data using the mathematical calculations:		
mean, median, mode, and range.		
• Analyze data to formulate conclusions and predict trends related to vaccinations and		
infectious diseases.		
Keywords/Questions	Notes	
What does it mean to	To study or examine the information in a methodical way	
analyze data?		
How do you analyze data?	By making observations about the information and answering questions or looking for patterns and/or relationships	
What can help draw more accurate conclusions and make better predictions?	Related data	
What questions should you ask about the data?	Are the data specific? Are the data reliable? Are the data accurate? Does the data include anomalies?	
What do the questions answer?	What the data includes. What is the source of the information or how the information was obtained. Are there other data that is similar? Are there anomalies?	
What is anomaly?	Something that deviates from what is normal or expected Can result from experimental or reporting errors, and might not be included in the conclusions	
What trends do you look for in a pie chart?	The largest and smallest sections of the chart	
What trends do you look for in a bar graph?	Increases and decreases in the heights or bars	
What trends do you look for in a line graph?	Slope of the line on a line graph	
What will help to make predictions about future sets of data?	Recognizing trends in data	

What are statistics?		
	Using data in mathematical calculations	
What is the mean?		
	Average of a set of numbers	
How do you find the		
mean?	By adding all the numbers together and dividing by how many numbers are present.	
What is the median?		
	The middle value between the smallest and largest of a set of numbers.	
How do you find the		
median?	First, sort the numbers from least to greatest, then find the number in the middle, or the average of the two middle numbers	
What is the mode?		
	The number that appears most often in a data set.	
How do you find the		
mode?	Find the number that occurs most often.	
What is the range?		
what is the fallge!	The difference between the largest and smallest numbers in a set of	
	numbers	
How do you find the		
range?	Subtract the smallest number in the data set from the largest number in	
	the data set	
What is a conclusion?		
	A statement based on observations	
What are conclusions		
used for?	Can summarize the data or answer questions about the relationship	
	between the variables.	
Summary		
To analyze data, one must look at numerous factors, such as: questions and considerations of data,		

To analyze data, one must look at numerous factors, such as: questions and considerations of data trends in graphs, and statistics. One may also make predictions and draw conclusions based on findings within the data.