NEWS BREAK

Article: Study: Heart-attack risk rises on Christmas Eve

Section: MAIN, A5

Sunday’s News Break selects an article from Sunday, December 16, 2018 of The Seattle Times print replica for an in-depth reading of the news. Read the selected article and answer the attached study questions.

You are encouraged to modify this lesson to fit the needs of your students. For example, some classrooms may be able to use this as a worksheet and others might need to ask and answer the questions in a small group or larger, class discussion.

*Please be sure to preview all NIE content before using it in your classroom to ensure it is appropriate for all of your students.

Standards:

CCSS.ELA-Literacy.RI.4.1

- Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.

CCSS.ELA-Literacy.RI.4.2

- Determine the main idea of a text and explain how it is supported by key details; summarize the text.

Objectives:

Students will learn about a new medical study out of Sweden, linking higher rates of heart attack to stressful holidays. Students will talk about whether they see the adults around them getting more stressed before holidays or big events. They’ll talk about what holidays or events make adults more stressed and whether they are more stressed during these times, as well. They’ll discuss why they think people are more stressed during these times and how stress impacts our overall health.
Pre-Reading Discussion:

- What do you think the article will be about?
- Are there clues in the picture?
- What can you infer?

Vocabulary Building:

Read this sentence, what do you think the highlighted words mean using context clues? A context clue is a word or words that are hints and refers to the sources of information outside of words that readers may use to predict the identities and meanings of unknown words.

“Mohammad and his co-authors said they didn’t know why people would be more prone to heart attacks on Christmas Eve. Previous studies have linked “acute experiences of anger, anxiety, sadness, grief, and stress” with an elevated risk.”

Write your guess and then look up the definition and write it below your guess. How close did you come to the correct definition?

Acute Guess:

Acute Definition:

Comprehension Questions:

1. If you think of the night before Christmas as a time for hot cocoa, cozy fires and Bing Crosby albums, a new discovery by Swedish researchers may well break your heart. What are the increased health risks on Christmas Eve?
2. How many cases did the study look at? What medical journal was it published in?
3. What events have scientists documented that heart attacks are more likely to occur after?

4. On Dec. 24, the risk of a heart attack is _____ percent higher than normal, the researchers found. On Christmas itself, the increase in risk dips to _____ percent. Even on Boxing Day, the day after Christmas, it’s still 21 percent above normal levels.

5. For the sake of comparison, ______________ are known to be a time of increased heart-attack risk.

6. Was the BMJ study the first to report an association between the holiday season and myocardial mayhem?

7. To examine heart-attack risk on Christmas Eve, what did the researchers do?

Discussion Questions (small/large groups), Journal Prompts or Essay Questions:

- Do you see the adults around you getting more stressed before holidays or big events?
- What holidays or events make your parents more stressed?
- Are you more stressed during these times, as well? Why or why not?
- Why do you think people are more stressed during these times?
- What surprised you the most in this article?
- How does stress impact your own health?
- How do you feel when you’re stressed?

Swedish researchers say heart-attack risk is 37 percent higher on Dec. 24.

On average, Swedes suffered 50.3 heart attacks per day during the baseline period, and 69.1 per day on Dec.24.

With a little math, they determined that the risk of a heart attack was 37 percent higher on Christmas Eve. They were even able to pinpoint the hour of maximum risk: 10 p.m.

- Why do you think heart attacks happen 37% higher (in Sweden) on Dec. 24? Why at 10pm?
- Do you think we’d find the same statistics in America? Why or why not?

Mohammad and his co-authors said they didn’t know why people would be more prone to heart attacks on Christmas Eve. Previous studies have linked “acute experiences of anger, anxiety, sadness, grief, and stress” with an elevated risk. Of these, the team wrote that stress is the emotion most likely to come into play on Christmas Eve.

But medical researchers shouldn’t be content to simply guess, the authors wrote — they should conduct further studies to see what’s really going on.
“Understanding what factors, activities, and emotions precede these myocardial infarctions and how they differ from myocardial infarctions experienced on other days could help develop a strategy to manage and reduce the number of these events,” they wrote.

- What factors do you think play a role in heart attacks? Do you think emotions play a role, or was it going to happen anyway? Why or why not?
Newsbreak Answer Key: December 16, 2018

Pre-Reading Discussion:

Answers will vary

Vocabulary Building:

**Acute:** (of a bad, difficult, or unwelcome situation or phenomenon) present or experienced to a severe or intense degree. "An acute housing shortage,"

**synonyms:** severe · critical · drastic · dire · dreadful · terrible · awful · grave · bad

Comprehension Answers:

1. The risk of suffering a heart attack spikes on Christmas Eve.

2. That finding is based on a comprehensive database of hospital statistics that includes 283,014 cases of heart attacks over a period of 16 years. It was published last week in the BMJ (formerly the British Medical Journal).

3. The study would appear to put Christmas Eve in the same category as earthquakes, hurricanes, stock market crashes, wars and high-stakes World Cup soccer matches — after all of these events, scientists have documented that heart attacks are more likely to occur.

4. 37%; 29%

5. Mondays

6. No, other studies have been done.

7. They tallied the number of myocardial infarctions (the medical term for a heart attack) on every Dec. 24 between 1998 and 2013, as well as for the two weeks before and after the holiday, to provide a baseline.

Discussion Questions (small/large groups), Journal Prompts or Essay Questions: Answers will vary