



OVERVIEW

BIG IDEA

Stress is toxic.

OBJECTIVE

12.4: Identify how chronic stress contributes to negative health outcomes.

AGENDA

1. Symptoms of Stress
2. What is Stress?
3. Chronic Stress
4. Chronic Stress & Health Disparities

HOMEWORK

Develop an action plan for managing and reducing stress levels,

LESSON 12.4

Chronic Stress

SUMMARY:

This lesson will present students with some basic background on how stress impacts health and how chronic stress is a burden unequally distributed among citizens of our nation. First, students will identify their own background knowledge by brainstorming stress symptoms. Then they will engage in more brainstorming & discussion with partners. Finally, they will read some background on chronic stress & health disparities from the CDC and Unnatural Causes.

STANDARDS:

IL Learning Standard 22.A.5: Explain the basic principles of health promotion, illness prevention, & safety.



MODULE 12: HEALTH DISPARITIES LESSON 12.4

Chronic Stress

Obj. 12.4: Identify how chronic stress contributes to negative health outcomes.

DO NOW Symptoms of Stress
In the box below, identify possible symptoms of stress.

DISCUSS What is Stress?
With a partner, discuss the following questions:

- (1) What is stress?
- (2) How does it affect health?
- (3) What risk factors increase a person's likelihood to experience high levels of stress?

NEW INFO Chronic Stress

Stress can hit you when you least expect it—before a test, after an accident, or during conflict in a relationship. While everyone experiences stress at times, a prolonged bout of it can affect your health and ability to cope with life. That's why social support and self-care are important. They can help you see your problems in perspective...and the stressful feelings ease up.

Sometimes stress can be good. For instance, it can help you develop skills needed to manage potentially threatening situations in life. However, stress can be harmful when it is severe enough to make you feel overwhelmed and out of control.

DO NOW:
Encourage students to think of as many possible symptoms as they can. Remind them that no set of symptoms appear exactly the same in different individuals. This complicates matters a great deal, but makes perfect sense when you consider the complexities of the body and mind.

DISCUSS:
The answers to these questions are located in the section of text appearing next. Students can come back to their answers to change or add to them as needed.



Strong emotions like fear, sadness, or other symptoms of depression are normal, as long as they are temporary and don't interfere with daily activities. If these emotions last too long or cause other problems, it's a different story.

Symptoms of Stress

Common reactions to a stressful event include:

Physical or emotional tension are often signs of stress. They can be reactions to a situation that causes you to feel threatened or anxious. Stress can be positive (such as planning your wedding) or negative (such as dealing with the effects of a natural disaster).

- Disbelief and shock
- Tension and irritability
- Fear and anxiety about the future
- Difficulty making decisions
- Being numb to one's feelings
- Loss of interest in normal activities
- Loss of appetite
- Nightmares and recurring thoughts about the event
- Anger
- Increased use of alcohol and drugs
- Sadness and other symptoms of depression
- Feeling powerless
- Crying
- Sleep problems
- Headaches, back pains, and stomach problems
- Trouble concentrating

Compare these to the possible symptoms of stress that you listed in the Do Now.

Source: CDC <<http://www.cdc.gov/features/handlingstress/>>



Chronic Stress & Health Disparities

Turn on the stress response for five minutes and it can save your life. But as Stanford biologist Robert Sapolsky observes, turn on the stress response for 30 years, even at a low level, and it can increase your risk for every chronic disease.

Chronic stress, like other conditions that threaten or promote health, is distributed unevenly through society along class and racial lines. Our ability to manage the pressures that might upset our lives is not simply a matter of personality or character; it's tied to our access to power, resources, support networks and opportunities. Both exposures to stressors and access to the resources we need to manage them are tied to our class and social status.

We all experience stress. Our body's stress response is actually a way of protecting us from a perceived danger. In the face of peril, hormones like cortisol and epinephrine increase our heart rate and blood pressure to supply oxygen and glucose to muscles and the brain while shutting down "non-essential" functions like growth and reproduction.

Rockefeller University's Bruce McEwen and UCLA's Teresa Seeman are among those studying how long-term or chronic stress throws our body out of balance, especially our neuro-endocrine, immune and cardiovascular systems. McEwen calls the measurable wear and tear of persistent "micro-insults" to the body *allostatic load*. He and other researchers are demonstrating how chronic stress increases the risk of metabolic syndrome, obesity, diabetes, hypertension, heart and artery disease, stroke, depression, auto-immune diseases, impaired memory, even failure to ovulate in females

NEW INFO:

More information on chronic stress can be found at a variety of sources compiled here: http://www.unnaturalcauses.org/resources.php?topic_id=2

The CDC website also has a brief section on managing stress. This could be a resource for students as they complete the homework assignment.

READ:

Courtesy of *UNNATURAL CAUSES: Is Inequality Making Us Sick?* Produced by California Newsreel with Vital Pictures. Presented by the National Minority Consortia. www.unnaturalcauses.org; www.newsreel.org



and erectile dysfunction in males.

There's also increasing evidence that repeated activation of the stress response early in life can literally affect the wiring of the brain, inhibit children's ability to develop "resilience," and increase the chances they will develop helplessness, anger and depression later in life and become more susceptible to obesity and illness.

All of us face pressures in our lives, but our ability to cope - and consequently stay healthy or not - depends on our position on the class pyramid. It's not CEOs who are dropping dead of heart attacks, it's their subordinates. Why? Because those with access to power, resources, support and opportunity have more control over the forces that impinge upon their lives and are better able to manage or escape the demands placed upon them.

People who are lower on the socioeconomic pyramid tend to be exposed to more formidable and ongoing stressors, e.g., job insecurity, unpaid bills, inadequate childcare, underperforming schools, and dangerous or toxic living conditions, crowded homes, even noisy streets. They are also less likely to have access to the money, power, status, knowledge, social connections and other resources they need to gain control over these many tempests that threaten to upset their lives.

But it's not only those at the bottom of the pyramid harmed by stress. So are many middle managers, working people and especially people of color, whose aspirations to succeed are often thwarted by interpersonal and institutional barriers over which they have little control, including prejudice and racism. High demand / low control jobs are particularly stressful.

Today, chronic stress is widely recognized as a health threat. But suggested solutions usually are limited to individually based interventions like taking vitamin supplements, practicing yoga, or meditating. Although these are helpful, they aren't the whole picture. We also need strategies that challenge the underlying economic and social conditions that imperil our chances for health in the first place.

Social policies like living wage jobs, greater autonomy and control at work, safe, walkable neighborhoods, efficient public transportation, good schools, and quality, affordable housing and paid vacations are all effective ways to reduce stress, though they require a political commitment, not just a personal one. But political engagement is an effective remedy in more ways than one: while improving social conditions improves health, research suggests that the very act of engagement can also be empowering and thus stress reducing. That's a double victory.

Source: Courtesy of INNATURAL CAUSES: Is Inequality Making Us Sick? Produced by California Newsreel with Vital



The Role of Chronic Stress

1. What is chronic stress?
2. Who is most at risk of being affected by chronic stress?
3. What health consequences can chronic stress have?



Managing Stress

Develop an action plan for managing and reducing your stress. First, figure out a way to identify your current level of stress. (Can you come up with a way to track your stress level?) Then, brainstorm at least two different specific action steps for managing and /or reducing the the stress in your life. (Are these action steps SMART--specific, measurable, ambitious, realistic, & timely?) Record your data and your action and write a final summary about the anecdotal evidence you have gathered.

HOMWORK:

The purpose of this homework assignment is to connect the topic to students own lives. Allow students to keep their work confidential and private, if desired. Also, preface the assignment with an encouragement to talk to a trusted adult if the activity makes them feel overwhelmed about their sources or levels of stress.