## **LESSON 1:** Root Causes

#### Overview:

In this lesson, students will use their research and their own expertise to examine to the root causes of their issue. Students learn to use a Root Cause Tree as a model for framing an issue's causes and symptoms.

## **Student Objectives:**

- Analyze an issue in terms of its symptoms and causes
- Understand what root causes are and how to identify them

#### **Materials:**

- Butcher paper
- Root Cause Tree (on butcher paper)
- Markers/colored pencils
- · Root Cause Tree worksheet

#### Assessment:

· Root Cause Tree

# Common Core State Standards

#### CCSS.ELA-LITERACY.SL.11-12.1.B

Work with peers to promote civil, democratic discussions and decision-making, set clear goals and deadlines, and establish individual roles as needed.



# **BELL-RINGER: Looking at symptoms (5 minutes)**

Have students respond the following prompt: How do you know when someone has a cold?



## **BEFORE: Root cause model (15 minutes)**

Explain to students that the signs or indications of a cold are the symptoms. We can tell that someone has a cold if they are sneezing a lot. Draw a large root cause tree on the board (leave plenty of room for roots) and solicit student responses to the bell-ringer. If they are in fact symptoms, put them in the top of the tree. If a student gives you a cause, don't write it down yet. (A model of a root cause tree for the issue of the common cold is provided in the handouts for your reference)

Explain that while a symptom indicates that someone might have a cold, it does not help us avoid getting a cold. To avoid getting a cold, we need to look at what causes a cold. Ask students to give you some causes of a cold and write those in the roots of the tree.

**SYMPTOM**: a sign or indication of something

**CAUSE**: the producer of an effect

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Explain that it is difficult to cut a tree down at the trunk (and to solve a problem completely or cure the common cold) but if we can choke out and kill a root (a cause), we can weaken the tree. If we can continue to kill roots, eventually the tree will die. Similarly, if we just focus on the symptoms, and not the causes, all we will do is trim branches but keep the integrity of the tree intact. When it comes to our issue, we need to look at the root causes, not the symptoms. We also need to break down the big issue into the many causes that make it such a problem. Each root cause, in turn, can be broken down into more causes and so on.

**ROOT CAUSE:** the fundamental, basic cause for why an issue happens



## **DURING: Diagramming root causes (10 minutes)**

Have students complete a root cause tree on butcher paper for the class's issue. It might be easier for students to partner up on this activity so they can brainstorm ideas. The purpose here is to have them practice what you just modeled for them with the cold example on their own issue. Enourage them to both go deep and wide with their roots. You may need multiple sheets of paper.



## **AFTER: Root cause forest (10 minutes)**

Have students hang their trees around the room and conduct a Gallery Walk. Students should view the different root cause trees and note similarities and differences.

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## **CLOSER: Compilation (5 minutes)**

Solicit student responses to create a root cause tree on chart paper (that you can save) that compiles the symptoms and causes from the various trees. We recommend using sticky notes or writing in pencil so you can swap out ideas in the future.

After class, create a document of all the students' roots and symptoms for distribution the following day of class for the Ecological Model exercise.



## **ENRICHMENT**

If you want to take this concept deeper or if your students are struggling with their root causes, you can try using the "Five Levels of Why" activity explained below.

Divide students into small groups and give each group a piece of butcher paper. Have them choose one root cause (or they can even choose their main issue if they are struggling with developing root causes) and write down a "why" question about the issue (e.g., Why is there violence at our school?). They should provide an answer below the question. They then take the answer and turn it into their next question. Use the models below to explain the process with your students.

#### Example 1:

**Level 1 why question:** Why is the rate of STDs rising in Chicago teens?

**Answer:** Because teens are having unprotected sex.

**Level 2 why question:** Why are teens having unprotected sex?

**Answer:** Because they believe they don't have an STD.

Level 3 why question: Why don't they know if they have an STD or not?

**Answer:** Because they don't get tested.

**Level 4 why question:** Why don't they get tested?

**Answer:** Because testing is not easily accessible.

**Level 5 why question:** Why isn't testing easily accessible?

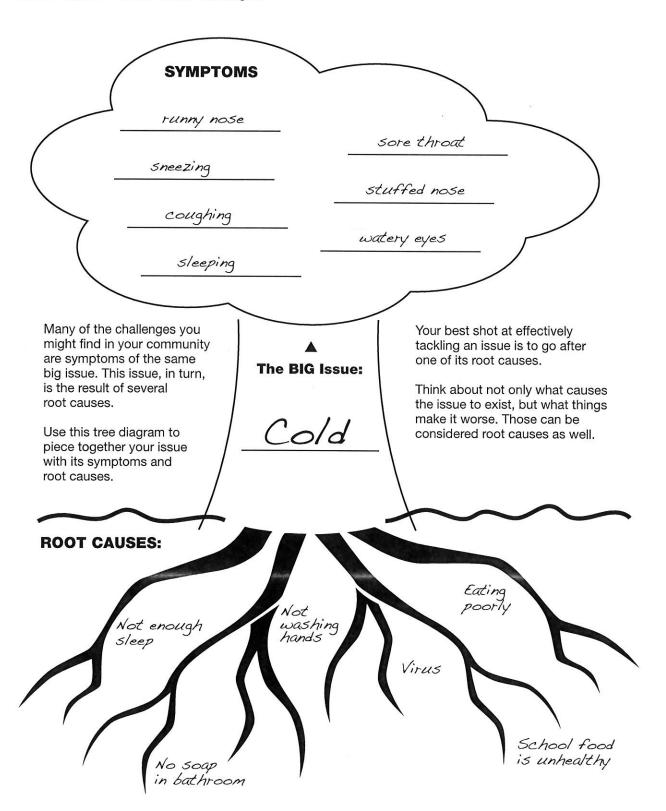
**Answer:** Because they usually have to travel outside of their neighborhood to get it.

**Root Cause:** STD testing is neither convenient nor easily accessible for students.

**Solution:** Have a testing day at school to make getting tested easier for teens.

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## **Root Cause Tree: Cold Example**



NAME:	DATE:	

#### **Student Handout: Root Cause Tree**

