Nuestra Familia Sana
Lay Educator Program

Educator’s Lesson Plan
Secondhand Smoke Education Program
### Lesson Plan

#### Lesson 1

**Lesson**  
Secondhand Smoke

**Time duration**  
45-60 Minutes

**Objective**  
At the end of the lesson, participants will be able to:

1. Explain what secondhand smoke is
2. Understand health effects caused by secondhand smoke
3. Describe basic concepts of a cell
4. Describe basic concepts of DNA and genes
5. Explain how secondhand smoke can lead to cancer
6. Describe ways to reduce exposure to secondhand smoke

**Materials**  
Have all materials ready before starting the lesson

1. Tablet with Secondhand Smoke Video
2. Secondhand Smoke Flipchart
3. Microscope with camera
4. Cell slides
5. DNA model with additional segment
6. Instructions for microscope and cell slides
7. Participant packet
8. Pens
Starting Out

Assessment

- Have you ever heard the phrase secondhand smoke? If so, what does it mean to you?

Activity

- Show participants the Secondhand Smoke Video on the tablet.

Background

Transitional question

- After viewing the video about Jorge and Carolina and their family, how would you describe secondhand smoke?

Flipchart

- Review flipchart section “What Is Secondhand Smoke?” with participants.

Health Effects

Transitional question

- Carolina was concerned about how secondhand smoke might harm Juanito. What health effects concern you the most about secondhand smoke?

Flipchart

- Review section “What Are the Health Effects of Secondhand Smoke?” with participants.

Learning Science

Cells

Transitional question

- Carolina showed Carlos a video during the story. What did Carlos learn about cells?

Flipchart

- Review Secondhand Smoke Flipchart “What Is a Cell?” with participants.

Activity

- Begin by mounting the cheek cell slide. Identify a good view of cells with the microscope.
- Show the participants the cells through the tablet.
- Explain that they are looking at a cluster of cells from inside the cheek.
- Ask participants to point out a single cell. If they cannot point out a single cell, point one out again. Ask participants again to point out a single cell (not the one you pointed out).
- Then, ask participants to point out the nucleus in the cell they identified.
- Encourage participants to ask questions.
- Repeat all previous steps for the nerve cell slide.
DNA and Genes

Flipchart
- Review Flipchart section “DNA, Genes, and Me” with participants.

Activity
- Next, use the DNA model to explain to participants what a very small piece of DNA looks like. Allow participants to hold the model and to ask questions.
- Ask participants how many colors they see in the middle section of the DNA.
  - They should say they see 4 different colors.
- Explain: The small parts in DNA are called bases. Each color represents a specific base. There are just 4 types of bases in DNA.

Cancer

Transitional statement
- The video that Carolina played for Carlos showed how exposure to secondhand smoke or smoke residues could lead to health issues such as cancer. Let’s learn more about how that happens.

Flipchart
- Review Secondhand Smoke Flipchart “How Can Secondhand Smoke and Residues Lead to Cancer?” with participants.

Activity
- Ask participants to remove the DNA segment that is attached with velcro.
- Give the participant the different piece. Point out that it has different colors.
- Ask participants to attach the new piece into the model. Explain that this small change in the DNA chain is a mutation. Mutations can change the cell’s instructions. This change may lead to cancer.

Behavior Change

Transitional question
- During the video, Carolina and Jorge were concerned about Juanito being exposed to Carlos’ smoke. What did Jorge and Carolina do to protect their family from secondhand smoke?

Flipchart
- Review Secondhand Smoke Flipchart section “What Can I Do to Protect My Family?”

Note: At the end of the lesson, ask if there are any questions. If you do not know the answer, tell the participants you will try to get an answer for them. Give participants the packet for this lesson. Schedule the next session. After the lesson, fill out the Activity Form. Collect all the materials used in this lesson.