Lesson Plan: Smokerlyzer / Carbon Monoxide Monitor

Learning Objective:

The participants will be able to describe how carbon monoxide from smoking harms the body.

What is the Carbon Monoxide Monitor?

The “Smokerlyzer” is a breath analysis education tool that gives people a reading of how much carbon monoxide (CO) is in their body. Carbon monoxide is a gas produced from smoking that harms the body. Use the Smokerlyzer to **educate** people on the impact of smoking on their body, **motivate** people to quit smoking and track **progress** in quitting. **It is not a diagnostic tool.**

Target Group for the Carbon Monoxide Monitor:

The “Smokerlyzer” is best used with smokers or those who are exposed to second-hand smoke. Use it in individual or group sessions (classrooms, at community health groups, or one-on-one sessions) to show the health impacts of smoking.

Materials:

- Smokerlyzer/Carbon monoxide monitor
- Plastic D-piece
- SteriBreath plastic mouthpieces (enough for everybody to be tested)

Preparation:

- Review “Health Effects of Smoking” and “What is Second-Hand Smoke?” Handouts (available on nuquits.ca under Resources).
- Take the Introductory Tobacco Cessation Course (available on nuquits.ca under Resources/Healthcare Providers).
- Remove the “Smokerlyzer” from the box and carrying case.
- Test the “Smokerlyzer” on yourself as per instructions below.
- NOTE: If the machine is due for calibration, an extra screen will appear. Send the machine to the Tobacco Reduction Program for calibration (PO Box 1000, Station 1000, Iqaluit, NU, X0A 0H0).

Instructions:

1. Turn on the monitor with 1 long press of the power button on the top right side of the machine.
2. Attach the plastic D-piece into the hole below and put a new SteriBreath plastic mouth piece in it.
3. Press the breath test symbol on the screen. To cancel the breath test, press the home symbol.
4. The person taking the test should breathe in and hold their breath for 15 seconds while the Smokerlyzer counts down.
5. The monitor will beep during the last 3 seconds of the countdown. The person should blow slowly into the mouthpiece. If they cannot hold their breath for the full 15 seconds, they should hold it for as long as they can and then breathe into the mouthpiece. They should empty their lungs completely.
6. The monitor will show the CO rating. Look at the table on the next page of the lesson plan to interpret the participant's reading.
7. Remove the D-piece between tests to allow fresh air to flow around the sensor. To repeat the test, hit the home button and continue from step 3.
8. Turn off the Smokerlyzer with 1 long press of the power button on the top right side of the machine. The monitor will also turn off after 2 minutes with no activity.

Tips to Make Your Presentation Work:

- Make use of the chart below to provide greater meaning of the individual ratings from the Smokerlyzer.
- If using the Smokerlyzer in a group, ask for a volunteer first to demonstrate in front of the group. Then have other interested volunteers line up to try the Smokerlyzer.
- In a large group, it is helpful to have a partner with a second Smokerlyzer, or who can interpret the results for the participant while you are testing the next group member.

Meaning of the Readings from the Smokerlyzer:

Light color					Description	Adult reading	Youth reading
Green					This is where a person really wants to be with less than 2% Carbon Monoxide (CO) in their blood. Most people have a small amount of CO in their breath, this is due to the air quality around them.	0 – 6	0 – 4
Yellow					Having a reading in this zone would indicate a light smoker or a non-smoker breathing in poor air quality or second-hand smoke. There are things that can be done to reduce this reading down to the target “Green Zone”.	7 – 10	5 – 6
1 Red					Having a reading in the red zone indicates the person may well be a regular smoker with higher levels of CO in their blood. They need not despair! Help is at hand to help reduce or give up smoking in order to reduce the reading down into the target “Green Zone”.	11 – 15	7 – 10
2 Reds						16 – 25	11 – 15
3 Reds						26 – 35	16 – 25
4 Reds						36 – 50	26 – 35
4 Reds flashing						51+	36+

Key Facts

- Carbon Monoxide (CO) is a poisonous gas that you cannot see or smell. It is formed by the incomplete burning of any combustible product.
- CO gets into the blood stream and binds with blood cells that should be carrying oxygen through the body.
- High levels of CO can lead to heart disease, circulation problems and high blood pressure.
- High levels of CO are caused by smoking as CO is inhaled with every puff.
- Second-hand smoke contains 5 times more CO than the smoke being inhaled by a smoker.
- Breathing in CO from exhaust fumes or leaking gas appliances can also cause a high level of CO in the body.
- A false high level of CO can occur when a person has alcohol on their breath or when they have bad gas.

Key Messages:

- Smoking causes carbon monoxide levels in the body to increase.
- Carbon monoxide can harm us.
- Carbon monoxide levels can return quickly to normal by reducing and quitting smoking.
- Make homes and amautiits smoke-free.
- Nicotine Replacement Therapy (NRT) and quit medications, like Champix™ and Zyban™, double your chances of quitting successfully.
- NRTs and quit medications are available at no cost at your local health centre.