

# ENHANCING MOTIVATION TO QUIT: CO MONITORS AND OTHER BIOLOGIC TOOLS

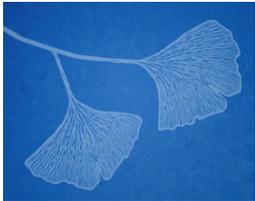


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# Carbon Monoxide Meter

Biologic measurement of the percentage of blood hemoglobin bound to carbon monoxide molecules

- 28 ppm: significant loss of oxygen-carrying blood capability
- 50 ppm: air pollution emergency





# The Stethoscope of Smoking Cessation

- Non-invasive
- Visual motivational tool
- Myth busting
- Judging severity of dependence
- Likelihood of cravings



Bittoun, R. (2008). Carbon monoxide meter: The essential clinical tool — the ‘stethoscope’ — of smoking cessation. *Journal of Smoking Cessation*, 3(2), 69–70. DOI 10.1375/jsc.3.2.69

## What is Carbon Monoxide?

*Carbon monoxide is...*

*a deadly chemical and*

*an odorless and colorless gas*

*found in air pollution, car exhaust*

*and cigarette smoke!*



## How carbon monoxide affects your body

Carbon monoxide takes the place of oxygen in your blood. Your body needs oxygen to survive. Since carbon monoxide makes it harder for your body to get the oxygen it needs, your body works harder to deliver oxygen, placing strain on your heart and body. This strain puts smokers at a greatly increased risk for heart attack and stroke.

## The good news about carbon monoxide

Although it is deadly, carbon monoxide lasts for only a short time in your body. You can eliminate carbon monoxide within two to three days after you stop smoking. The effect of carbon monoxide is reversible! Your carbon monoxide level can be reduced to the same level as somebody who has never smoked.

### Carbon Monoxide Monitoring

*What is carbon monoxide?*

Carbon monoxide is a deadly chemical found in cigarette smoke. It is produced by burning tobacco in the form of cigarettes, cigars, and pipes. Carbon monoxide is an odorless and colorless gas that replaces oxygen in your body. With lowered levels of oxygen, your body needs to work harder, placing strain on your heart. This puts smokers at a higher risk for heart attack and stroke.

The GOOD NEWS about carbon monoxide is it lasts only a short time in your body. Within 2-3 days of quitting smoking, your carbon monoxide levels can return to the same level as a non-smoker.

Measure your carbon monoxide levels:

A carbon monoxide monitor measures the amount of carbon monoxide in your body (in parts per million, or ppm).

My CURRENT carbon monoxide level is: \_\_\_\_\_

0-8 Normal or very low smoker

9-20 Occasional Smoker

21-39 Regular Smoker

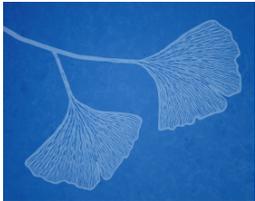
40-78 Heavy Smoker

My goal is to LOWER my carbon monoxide level to: \_\_\_\_\_

# CO Monitor Demonstration

[https://www.dropbox.com/s/3eiecl7ctlsq8fy/  
motivational interview-Clip1.mp4](https://www.dropbox.com/s/3eiecl7ctlsq8fy/motivational%20interview-Clip1.mp4)





# Tips for Use

- When to use
  - Brief counseling and medication management
  - Group sessions
  - Community outreach
- Fear vs. self-efficacy
- Accuracy
- Metabolism differences
- Types of monitors
  - Cost ranges from \$600 to \$1,500
  - Maintenance

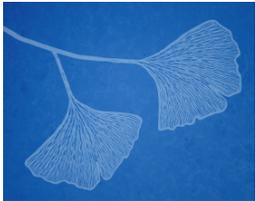




# Biologic Tools: Spirometry

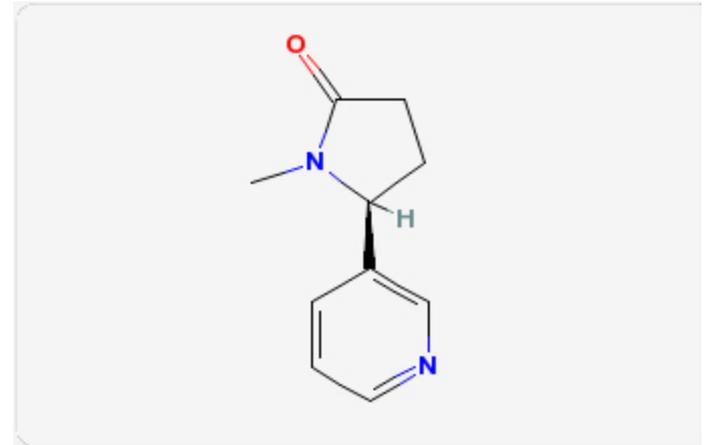
- Measuring lung function
  - Amount (volume) and/or speed (flow) of air that can be inhaled and exhaled
- Assessing conditions such as asthma, pulmonary fibrosis, cystic fibrosis, and COPD





# Biologic Tools: Cotinine

- Primary metabolite of nicotine
- Sample collected by blood, urine, saliva, or hair
- Longer half life than nicotine
- NRT users will test positive

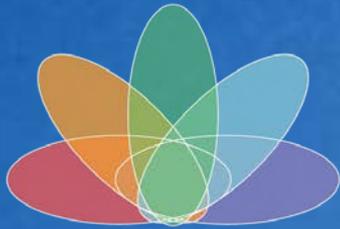




# Biologic Tools: Anabasine

- A metabolite tobacco but not NRT
- There is a test available
- + tests = using tobacco products





# Behavioral Health & Wellness Program

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