Smokerlyzer[®] breath carbon monoxide (CO) monitors



Helping people to stop smoking, one breath at a time www.covita.net | (800) 707-5751

What is carbon monoxide (CO)?

CO is a poisonous gas that you cannot smell or see. It is formed by combustion and is produced in car exhaust fumes, faulty gas boilers and tobacco smoke.

- When you inhale smoke from a cigarette, CO is absorbed into your blood through the lungs.
- Oxygen is carried around the body by red blood cells.
- CO binds with haemoglobin in the red blood cells to form carboxyhaemoglobin. (COHb), preventing red blood cells from carrying oxygen.
- CO binds with haemoglobin 200 times more readily than oxygen.
- A very heavy smoker may have 10% of their blood cells taken up by CO, depriving the body of oxygen.

What CO does to your body

Heart:

To compensate for the shortage of oxygen, the heart has to work harder (beat faster) to get enough oxygen to all parts of the body. The heart itself receives less oxygen, increasing the risk of heart damage.

Circulation:

COHb causes the blood to thicken and arteries become coated with a thick, fatty substance. This causes circulation problems and high blood pressure, with increased risk of a heart attack and stroke. Hands and feet can become colder as less blood circulates to the extremities.

Breathing:

The reduced supply of oxygen means you can easily become out of breath when exercising, because there is little oxygen available for the increased demand. A lack of oxygen can also cause tiredness and a lack of concentration.

Pregnancy:

Oxygen is required by a foetus for healthy growth, but the supply of vital oxygen is reduced when the mother smokes. This increases the risk of low birthweight, birth defects and even Sudden Infant Death Syndrome. A recent clinical study established a direct link between an expectant mother's breath CO level and the amount of COHb in their unborn baby's blood¹.

Why monitor CO?

CO testing is a quick, non-invasive and cost-effective means of validating the smoking status of a significant number of clients².

Smoking is the single greatest avoidable risk factor for cancer. In the UK, it is the cause of over a quarter (29%) of all deaths from cancer and has killed an estimated six million people over the last 50 years³. Smoking can be attributed to 90% of all deaths from lung cancer, chronic bronchitis and emphysema, showing that if everyone quit the habit, these types of death could be almost completely eradicated⁴.

Carbon monoxide monitors offer tobacco treatment specialists an independent clinical tool which provides valuable evidence in identifying, educating, assessing and treating tobacco-dependent patient⁵.

Monitoring patients' CO levels helps to work out their level of nicotine dependence: the more they smoke, the higher their reading will be, indicating a higher dependence on nicotine.

What is a Smokerlyzer®?

Smokerlyzers are a range of breath CO monitors and testers which measure the small amounts of CO in exhaled breath. The more you smoke, the higher your CO reading will be.

The reading is given in ppm, which is the number of CO molecules in a million parts of air. The ppm reading can also tell you how much CO is in the blood (the %COHb) reading). %COHb is the percentage of red blood cells carrying CO instead of oxygen. The amount of CO in an unborn baby's blood is referred to as %FCOHb (percentage of foetal carboxyhaemoglobin). Some of the Smokerlyzer range can analyse %FCOHb as an incentive to stop smoking and comply with new NICE guidelines for smoking in pregnancy.



Micro⁺ Smokerlyzer[®] One CO monitor for all your testing needs

Micro+ Smokerluze

Baby's CO Level

Automatic conversion to %FCOHb at your fingertips

Color touch screen

Quick and easy use, with visual prompts for patients during each test to ensure correct results every time

> 5 Year Warranty



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ABS body

for secure grip and easy cleaning, allowing optimal infection control in every test Ideal for research/clinical trials and for in-depth stop smoking advice delivered at:

- Stop smoking services
- Specialist clinics
- Smoking in pregnancy services
- General practice
- Schools
- Pharmacies
- Wellness & Substance Abuse

Features and Benefits

- Instant results shown in exact ppm, %COHb and %FCOHb make recording and interpreting patient's results quick and easy
- Automatic calibration and D-piece renewal reminders to prolong the life of your monitor, ensure accurate readings, and increase infection control
- ABS body for secure grip and easy cleaning, allowing optimal infection control in every test
- Familiar green, amber and red traffic light system, making CO levels instantly identifiable to patients
- · Adult and adolescent profiles to ensure maximum motivation to stop smoking
- Uses D-pieces to filter out 99.9% of airborne bacteria and single-use Steribreath[™] mouthpieces for excellent, low cost infection control²
- PC interactive with COdata⁺ software, free with Micro⁺ Smokerlyzer®

Technical Specification

Concentration range:	0–500ppm
Range displayed:	0-500ppm
Display:	Color touch screen with 1ppm increments
Detection principle:	Electrochemical sensor
Accuracy (repeatability of reading):	±2% or ±2ppm (whichever is greater)
Hydrogen cross-sensitivity:	<5%
Batteries:	3 × AA (LR6 or equivalent) alkaline batteries
Response time:	Typically <20 seconds to 90% FSD
Operating temperature range:	0-40°C (storage 0-50°C)
Operating humidity:	10-90% (storage 0-95%) non-condensing
Sensor operating life:	5 year (5 year warranty including sensor)
Sensor sensitivity:	1ppm
Dimensions:	Approx. 44 × 77 × 138mm
Weight:	Approx. 250g including batteries
Construction:	Body: Polycarbonate/ABS blend with elastomeric overmould D-piece: Polypropylene

COdata⁺

•COdata⁺ is for use with the piCO⁺ and the Micro⁺ smokerlyzer. It is a breath carbon monoxide (CO) monitoring software with a fully integrated patient database.

•The user friendly environment will enable any clinician to keep up-to-date records on patients who have given breath carbon monoxide samples.

•COdata⁺ is supplied on CD and once installed can be connected to your monitor using a USB cable.

•COdata⁺ also allows you to print reports, save pdf reports, email results, and export to Microsoft Excel.



Consumables

SteriBreathTM Mouthpieces

NEW SteriBreath[™] Mouthpieces: SteriBreath[™] mouthpieces are the most cost effective and compact mouthpieces. They are Individually sealed for optimum infection control. Condensation in tube confirms accurate breath sample.

Order code: STERIBREATH-MP (250 per box)

D-Piece[™]: A D-piece is used to attach Flatpak[™] mouthpieces or SteriBreath[™] to the monitor. The D-piece incorporates a one-way valve and an infection control filter, which are proven to remove and trap >99.9% of airborne bacteria¹. The D-piece should be changed every four weeks, or more often if visibly soiled. An automatic reminder will appear on the screen every 28 days.

Order code: D-PIECE (12 month supply) D-PIECE-6 (6 month supply)

Infection Control: Free from alcohol, ensuring the continued performance of your monitor. Products containing alcohol cannot be used on any of the Smokerlyzer range. Order Code: WIPES (pack of 50) | Order Code: PURE - Hand Santiizer (8oz or 600 Uses)

Calibration Kits & Replacement Cans: The Smokerlyzer range requires calibration every 6 months with coVita | bedfont calibration gas. Our calibration kits require no fine tuning or technical knowledge. Calibration Kit: CO-CALIB-34-50 (Includes can, tubing, regulator) | CAN ONLY: CO-CAN-34-50



Contact coVita to learn more about our Smokerlyzer® range of monitors and accessories.

www.covita.net Tel: (800) 707-5751 Email: info@covita.net

breath analysis is the new blood test

coVita

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