

Smokerlyzer® breath carbon monoxide (CO) monitors



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Helping people to stop smoking, one breath at a time.

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What is carbon monoxide (CO)?

Carbon monoxide (CO), known as the silent killer, is a colourless, odourless, highly poisonous gas that is produced when fuels are burned incompletely. It is produced in car exhaust fumes, faulty gas boilers and tobacco smoke¹.

Oxygen is carried around the body by red blood cells and when you inhale smoke from a cigarette, the CO is absorbed into your blood through the lungs because CO binds with haemoglobin 200 times more readily than oxygen².

The CO binds with haemoglobin in the red blood cells to form carboxyhaemoglobin (COHb), preventing red blood cells from carrying oxygen².

A very heavy smoker may have 15% of their blood cells taken up by CO, depriving the body of oxygen³.

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 damage⁴.

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 also become colder as less blood circulates to the extremities⁵.

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 concentration⁶.

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 blood⁷.

Why monitor CO?

CO testing is a quick, non-invasive and cost-effective means of validating the smoking status of a significant number of clients⁸.

Smoking is the single greatest avoidable risk factor for cancer. Tobacco smoking causes an estimated 27% of all cancer deaths in the UK⁹ and is responsible for around 80% of deaths from lung cancer, around 80% of deaths from bronchitis and emphysema, and about 14% of deaths from heart disease^{10,11}.

Carbon monoxide monitors offer tobacco treatment specialists an independent clinical tool which provides valuable evidence in identifying, educating, assessing and treating tobacco-dependent patients¹².

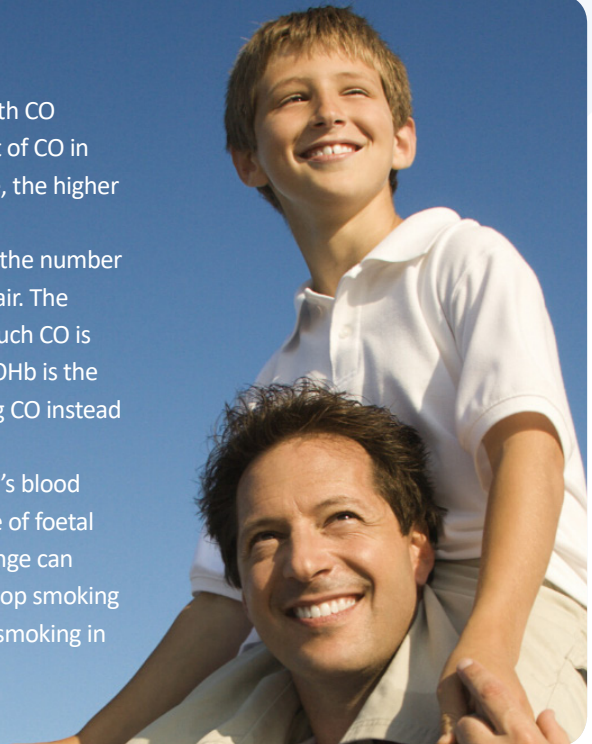
Monitoring patients' CO levels helps to work out their level of nicotine dependence; the more they smoke, the higher their reading will be, indicating a higher dependence on nicotine.

What is a Smokerlyzer®?

The Smokerlyzers are a range of breath CO monitors which measure the amount 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 COHb). Some of the Smokerlyzer® range can analyse %FCOHb as an incentive to stop smoking and comply with NICE guidelines for smoking in pregnancy.



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For more information on this product call us n

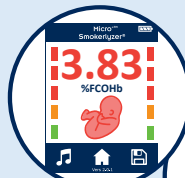
Micro⁺™ Smokerlyzer®

One CO monitor for all your testing needs



Ideal for research, clinical trials and in-depth stop smoking advice delivered by:

- Stop smoking services
- General practices
- Schools
- Pharmacies
- Health Visitors
- Midwives
- Researchers



Automatic %FCO_{Hb} conversion



Create and save patient details



For ambient levels of CO

Features and benefits

- Automatic conversion to %FCOHb
- Easy to use interface
- Create and store patient details
- Large touchscreen
- SteriTouch® technology for improved infection control
- Familiar green, amber and red traffic light system, making CO levels instantly identifiable to patients
- Ambient CO monitoring
- Uses D-pieces to filter out 99.9% of airborne bacteria¹³
- Single-use SteriBreath™ mouthpieces for excellent, low cost infection control
- PC interactive with COdata+™ software, free with the Micro+™ Smokerlyzer®

Technical specification

Concentration range	0-500ppm
Display	Full colour touchscreen
Detection Principle	Electrochemical sensor
Repeatability	≤±5%
Accuracy	≤±2ppm /5% *
Power	3 x AA (LR6 or equivalent) - up to 1000 minutes 1 x CR2032 Lithium coin cell
T ₉₀ response time	<30 seconds
Operating temperature	15-40°C
Storage/transport temperature	0-50°C
Operating/storage/transport pressure	Atmospheric ±10%
Operating humidity	15-90% (non-condensing)
Storage/transport humidity	0-95% (non-condensing)
Sensor operating life	5 years
Sensor sensitivity	1ppm
Sensor drift	<5% per annum
Dimensions	Approx. 37x 77 x 140mm
Weight	Approx. 215g (including batteries)
Materials	Case: polycarbonate/ABS blend with SteriTouch® anti-microbial additive D-piece™: polypropylene SteriBreath™: polypropylene
H ₂ cross interference	≤6%

8 *Whichever is greater

piCO™ Smokerlyzer®

CO monitoring made easy

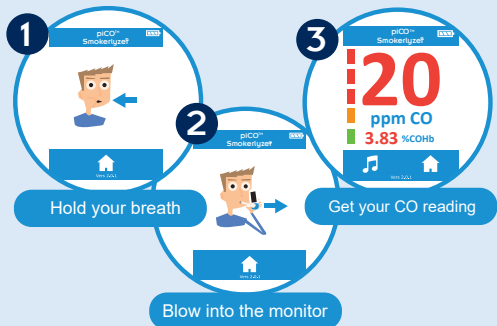


FREE
COdata⁺™
software

Ideal for in-depth stop smoking advice delivered by:

- Stop smoking services
- General practice
- Schools
- Pharmacies
- Health visitors

As easy as:



Features and benefits

- Easy to use interface
- Large touchscreen
- SteriTouch® technology for improved infection control
- Familiar green, amber and red traffic light system, making CO levels instantly identifiable to patients
- Uses D-pieces to filter out 99.9% of airborne bacteria¹³
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Technical specification

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Weight	Approx. 215g (including batteries)
Materials	Case: polycarbonate/ABS blend with SteriTouch® anti-microbial additive D-piece™: polypropylene SteriBreath™: polypropylene
H ₂ cross interference	≤6%

*Whichever is greater

piCO^{baby}™ Smokerlyzer®

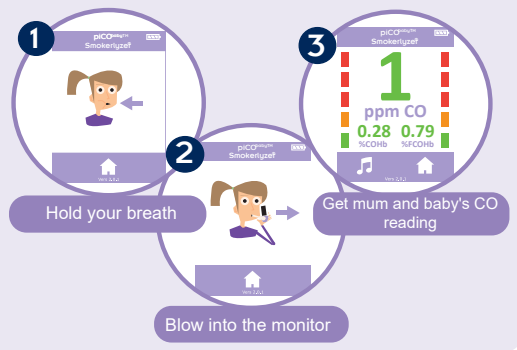
CO monitoring for maternity made easy



Ideal for in-depth stop smoking advice delivered by:

- Midwives
- Stop smoking services
- General practice
- Schools
- Pharmacies
- Health visitors

Tan sencillo como:



Features and benefits

- Easy to use interface
- Large touchscreen
- Automatic conversion to %FCOHb
- Familiar green, amber and red traffic light system, making CO levels instantly identifiable to patients
- Uses D-pieces to filter out 99.9% of airborne bacteria¹³
- Single-use SteriBreath™ mouthpieces for excellent, low cost infection control
- PC interactive with COdata⁺™ software, free with the piCObaby™ Smokerlyzer®

Technical Specification

Concentration range	0-150ppm
Display	Full colour touchscreen
Detection Principle	Electrochemical sensor
Repeatability	≤±5%
Accuracy	≤±2ppm /5% *
Power	3 x AA (LR6 or equivalent) - up to 1000 minutes 1 x CR2032 Lithium coin cell
T ₉₀ response time	<30 seconds
Operating temperature	15-40°C
Storage/transport temperature	0-50°C
Operating/storage/transport pressure	Atmospheric ±10%
Operating humidity	15-90% (non-condensing)
Storage/transport humidity	0-95% (non-condensing)
Sensor operating life	5 years
Sensor sensitivity	1ppm
Sensor drift	<5% per annum
Dimensions	Approx. 37x 77 x 140mm
Weight	Approx. 215g (including batteries)
Materials	Case: polycarbonate/ABS blend with SteriTouch® anti-microbial additive D-piece™: polypropylene SteriBreath™: polypropylene
H ₂ cross interference	≤6%

*Whichever is greater

Personal
use

iCO™ Smokerlyzer®

*The world's first Smokerlyzer® breath CO monitor that
connects to your smartphone*



Características y ventajas

- Your personal CO monitor
- The only Smokerlyzer® you can fit in your pocket
- Connects to the Smokerlyzer® app on your phone or tablet
- Send your results to your doctor, smoking cessation advisor, family member or friend
- Send your results to your doctor, smoking cessation advisor, family member or friend

Monitors your progress, encouraging you to quit smoking.

INSTANTLY
see your
personal
CO results

Ideal para:

- Personal use¹¹
- Health professionals
- Pharmaceutical companies
- App developers
- Insurance companies

Technical specification

Concentration range	0-150ppm
Detection principle	Electrochemical sensor
Repetability	<±5%
Accuracy	≤±3ppm/15%*
T ₉₀ response time	<30 seconds
Operating temperature	15-35°C
Storage/transport temperature	0-40°C
Operating/storage/transport pressure	Atmospheric ±10%
Operating humidity	15-90% HR (non-condensing)
Storage/transport humidity	0-95% HR (non-condensing)
Sensor operating life	Approx. 200 tests /3 years**
Sensor sensitivity	1ppm
Sensor drift	<5% per annum
Dimensions	Approx. 28mm diameter x 115mm long
Weight	Approx. 35g
Materials	Polycarbonate/ ABS blend
H ₂ cross interference	≤6%

*el que sea mayor

**lo que sea que venga primero

Consumables for piCO™, piCObaby™ and Micro+™

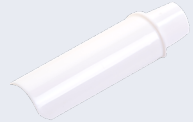
SteriBreath™ mouthpieces: SteriBreath™ mouthpieces are both cost effective and compact. They are individually sealed for optimum infection control, whilst condensation in the tube confirms an accurate breath sample.

Order code: STERIBREATH-MP (250 per box)



D-piece™: The D-piece™ is used to attach a SteriBreath™ mouthpiece 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 bacteria¹³. The D-piece™ should be changed every four weeks, an automatic reminder will appear on the screen every 28 days.

Order code: D-PIECE-3 (12 per box)



OneBreath™ mouthpieces: The OneBreath™ mouthpiece is a single-use bacterial filter mouthpiece and can be attached directly to the monitor to take a breath sample. The OneBreath™ incorporates a one-way valve and an infection control filter, which are proven to remove and trap <99.9% of airborne bacteria¹³.

Order code: ONEBREATH-MP (250 per box)



Monitor cleaning wipes: Free from alcohol to ensure continued performance of your monitor. Products containing alcohol cannot be used on any of the Smokerlyzer® range.

Order code: WIPE-V (pack of 50)



COdata+™

COdata+™ is for use with the piCO™, piCObaby™ and Micro+™ Smokerlyzer®. It is a breath carbon monoxide (CO) monitoring software with a fully integrated patient database, enabling clinicians to keep up-to-date records on patients who have given breath CO samples. COdata+™ can be connected to your monitor using a USB cable and allows you to print reports, save PDF reports, email results and export data to Microsoft Excel.



We also provide a range of calibration kits and replacement canisters at very competitive prices - please call for more information.





Contact Bedfont® or one of our worldwide **Smokerlyzer®** distributors for a free demonstration.

www.bedfont.com
Tel: +44 (0)1622 851122
Email: ask@bedfont.com

Our family, innovating health, for yours.

Bedfont® Scientific Ltd
Station Road, Harrietsham, Maidstone,
Kent, ME17 1JA England
Tel: +44 (0)1622 851122 Fax: +44 (0)1622 854860
Email: ask@bedfont.com
www.bedfont.com

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