

Encouraging people to take control

Many people find it useful to keep reminding themselves that they have a choice about their smoking: 'I am choosing not to smoke for the time being - I can change my mind in the future if I want'. This can reduce the anxiety that many smokers feel at the thought of stopping.

Once people acknowledge that they have a choice about smoking, they can begin to take responsibility for their own quitting. For many, this leads to an increased sense of control and self-confidence.

Remember: People are most likely to stop smoking successfully when they feel good about themselves and confident in their ability to quit!

The Carbon Monoxide Monitor

Carbon monoxide (CO) is released into the air when any organic material is burned.

A certain amount of CO exists 'normally' in the air around us (2 parts per million - ppm - approx), but high levels are usually caused by cigarette smoke, car exhaust fumes and the incomplete burning of industrial waste.

The greatest increase in individual levels of CO (i.e. in the breath or bloodstream) are from the inhalation of tobacco smoke by smokers and those around them. The CO monitor is used to measure their CO levels. It is an effective way of raising awareness about the harmful effects of smoking and second hand smoking (passive smoking).

When a smoker stops smoking, their CO level drops to that of a non-smoker just 24 hours after their last cigarette. This can be a positive short term goal for quitters and demonstrates an almost immediate health gain.

How to use a CO monitor

Familiarise yourself with the effects of CO on the body so that you can explain them - and what the CO monitor readings mean - to your client. Familiarise yourself with the CO monitor itself.

Use a new cardboard tube for each client. Explain the whole procedure to your client before you begin.

Turn the CO monitor on.

A background reading will show (usually 0-3ppm).

Press 'zero' button (even if the background reading is 0)

Monitor shows 'go'.

Ask your client to take a deep breath and hold it for 15 seconds.

Press 'go' as your client takes his/her deep breath.

Monitor counts down 15 seconds to 0.

As soon as 0 is reached, client seals lips around cardboard tube and blows slowly out through the tube, emptying the lungs of as much air as possible.

Monitor counts up to reading.

Wait for the reading on the monitor to peak - the highest number reached is your client's reading in parts per million. The percentage of the client's blood which is carrying CO instead of oxygen can be seen if required by pressing % button.

Explain what the readings mean.

Turn the CO monitor off when finished and between clients.

A rough guide to readings

0-5ppm	Non-smoker
5-10ppm	Light smoker
10-20ppm	Medium smoker
20-30ppm	Heavy smoker

What the readings mean

People smoke and metabolise CO differently so analysis of readings cannot be exact. There is no average or normal level of CO for smokers. The body has a self-regulating mechanism so that the CO reading of a 60 a day smoker may not be twice that of a 30 a day smoker. All readings measure CO encountered over the last 24 hours.

A non-smoker can have a reading up to around 9ppm but will usually have 0-4ppm.

Anything over 10ppm is considered a health risk, although there is no 'safe' level.

A level of 25ppm has harmful effects (in addition to thickening the blood and narrowing the arteries) ranging from headache, fatigue and drowsiness to respiratory failure and coma.

CO builds up cumulatively; each cigarette smoked adds 5-10ppm.

Factors influencing readings include:

- Type of cigarette smoked - 'low tar' brands, herbal and menthol cigarettes tend to produce more CO. Hand rolled cigarettes yield less CO (but more tar).
- Number of cigarettes smoked and depth of inhalation. Readings tend to climb as the day progresses. (People don't smoke while asleep).
- Time of last cigarette - smoking regularly over a longer period produces lower readings than the same number smoked in quick succession.
- Smoking pipes and cigars can produce high readings due to less complete combustion of tobacco.
- Where people work - eg a garage mechanic could have a higher than expected reading.
- Health status - people who are unwell may have inaccurately low readings because they are unable to exhale sufficiently. Very few medical conditions cause higher than expected readings.
- Age - young people sometimes do not inhale.
- Exercise/activity level - people who are more physically active eliminate CO more rapidly.