TEST

Breath alcohol test

A breath alcohol test measures alcohol in exhaled breath to estimate the amount in your blood.

WHAT IT MEASURES
Alcohol in exhaled breath, used to estimate blood alcohol

SAMPLE
Deep-lung exhaled breath

FASTING NEEDED?
No

HOW LONG IT TAKES
Usually a few minutes

RESULTS IN
Usually immediate; confirmation timing follows local procedure

USED FOR
Screening, legal testing, workplace testing, and clinical assessment

MAIN LIMITATION
Mouth alcohol can falsely raise a recent reading

Overview

A breath alcohol test measures alcohol in the air you breathe out. It is often called a breathalyser test, although Breathalyzer was originally a brand name.

Alcohol passes from the blood into air in the lungs. The device measures alcohol in a deep breath and uses the result to estimate the amount in your blood. This is called the breath alcohol concentration, or BrAC.

Some devices provide a number, while others show positive, negative, pass, or fail. Police and workplace programmes may use an initial screening device followed by a controlled evidential test.

A breath test does not directly measure impairment or prove that you are safe to drive, operate machinery, or make important decisions. People can be affected differently at the same alcohol level.

Why the test is ordered

A breath alcohol test may be used to detect alcohol and estimate how much is present at the time of testing.

Common reasons include:

The result applies to the time the sample was collected. It cannot reliably show how much you drank, exactly when you drank it, or your alcohol level at an earlier time.

- Roadside or police testing
- Workplace or safety-related testing
- Monitoring required by a treatment, court, or employment programme
- Clinical assessment after possible alcohol use
- Checking whether someone can provide an alcohol-free sample

Who should have the test

You may be asked to take this test under road traffic law, workplace policy, a monitoring agreement, or a clinical care plan. Rules about consent, confirmation, and challenging a result vary by location and setting.

Clinicians may use breath testing when recent alcohol use could affect symptoms, treatment, or safety. They will consider the result alongside your condition, medicines, and other possible explanations.

Home devices provide estimates and should not be used to decide whether it is safe to drive. They may not meet the calibration and quality standards required for legal testing.

Possible alcohol poisoning requires medical assessment, not reliance on a home breath result. This is especially important for a child or anyone who is difficult to wake.

How to prepare

Fasting is not usually needed. Follow the testing organisation's instructions because formal procedures differ.

Controlled testing usually includes an observation period before a confirmatory sample. During this time, you may be told not to:

These steps prevent alcohol left in the mouth from raising the result. Tell the tester if you recently vomited, used an alcohol-containing product, or drank immediately before the test.

Bring medicine details if requested. Do not stop prescribed medicine solely for this test unless your prescriber tells you to.

- Eat or drink
- Smoke or vape
- Use mouthwash, breath spray, or chewing gum
- Put anything in your mouth
- Burp, regurgitate, or vomit

What happens during the test

The tester may check the device, attach a disposable mouthpiece, and explain how to provide the sample.

You take a deep breath and blow steadily until the device has enough air. A brief, interrupted, or too-small sample may need to be repeated.

The result usually appears within seconds. If a screening result meets the programme's threshold, another test may follow after a set waiting period. Evidential devices may require duplicate samples or use safeguards to detect mouth alcohol, inconsistent samples, or instrument problems.

Understanding your results

Results may be reported as an alcohol concentration in breath or an estimated blood alcohol concentration. Units vary, so do not compare numbers unless the units are the same.

There is no healthy reference range in the usual laboratory sense. Legal thresholds differ between locations, and being below a legal threshold does not prove that a safety-sensitive activity is safe.

A zero or negative result means the device did not detect alcohol above its reporting limit at that time. It does not rule out earlier alcohol use, another substance, or a medical cause of unusual behaviour.

A positive result means alcohol was detected. Depending on the setting, a screening result may require confirmation before legal, workplace, or clinical decisions are made.

Age, sex, pregnancy, medicines, timing, the device, and the clinical or legal setting can affect interpretation. Pregnancy changes the health advice associated with alcohol exposure rather

than the instrument reading itself.

What affects the results

The main avoidable problem is alcohol remaining in the mouth. A recent drink, alcohol-containing mouthwash, breath spray, liquid medicine, or some foods can briefly raise a result.

Burping, reflux, regurgitation, or vomiting can return alcohol from the stomach to the mouth. An observation period and repeat sample reduce this problem.

Other factors include:

Dental work, dentures, and oral piercings do not create alcohol, but may briefly retain recently consumed alcohol.

Coffee, cold showers, exercise, and fresh air do not remove alcohol quickly. They may make you feel more alert without meaningfully lowering the concentration.

- Testing while alcohol is still being absorbed or much later as it falls
- An incomplete or incorrectly collected breath
- Poor device calibration, maintenance, or storage
- Alcohol vapour from cleaning products or nearby air
- Temperature and variation in how alcohol moves between blood and breath
- Ketones or other chemicals interfering with less-specific devices

Accuracy and limitations

Approved evidential instruments can be reliable when calibrated, maintained, operated correctly, and used with required observation and confirmation procedures. Accuracy is less certain with inexpensive or overdue-for-calibration consumer devices.

False high results may result from mouth alcohol, environmental vapour, chemical interference, or instrument problems. False low results may occur with an inadequate sample, testing before alcohol has been fully absorbed, or unreliable detection of low concentrations.

Breath alcohol is an estimate, not a direct blood measurement. The relationship between breath and blood alcohol varies between people and over time.

A blood ethanol test may be more appropriate when a precise clinical or forensic result is needed, you cannot provide a breath sample, or the breath result conflicts with the

circumstances. Blood testing also has limitations, including delays before collection.

Risks and complications

Breath testing is non-invasive and has no significant physical risks for most people. Forceful or repeated blowing may briefly cause light-headedness.

Disposable mouthpieces reduce contact between users. Tell the tester if a breathing condition makes a long, steady breath difficult.

What happens next

The result may be recorded immediately. A negative screening result may end the process, while a positive, invalid, or inconsistent result may lead to another breath test or a blood test.

In clinical care, the result may be assessed with symptoms, vital signs, medicines, and other tests. Follow-up may be needed if the result is unexpected or alcohol use is affecting treatment or safety.

Seek emergency help now if someone who may have consumed alcohol:

Do not leave the person alone or assume they can "sleep it off." If they are breathing but unconscious, place them on their side if safe and follow emergency service instructions. These symptoms require urgent attention regardless of the breath result.

- Cannot be woken or stay awake
- Has slow, irregular, or stopped breathing
- Has a seizure
- Is repeatedly vomiting or choking
- Has pale, blue, grey, or clammy skin
- Has collapsed or sustained a head injury

Common questions

Can I drink coffee before a breath alcohol test?

Coffee does not speed alcohol removal and may breach a formal observation period. Follow the tester's instructions.

Do I need to fast?

Usually not. You may need to avoid food, drinks, smoking, vaping, gum, and oral products briefly before a controlled test.

Does the time of day matter?

The clock time does not matter, but the time since your last drink does. Alcohol may still be entering your blood or may already be falling.

Can I exercise beforehand?

Exercise does not reliably lower alcohol concentration. Heavy breathing may affect sample collection, so rest and follow instructions.

Can mouthwash make the test positive?

Alcohol-containing mouthwash can temporarily raise a reading. An observation period and repeat test help distinguish mouth alcohol from deep-lung alcohol.

How long after drinking will my result be zero?

There is no reliable calculation for everyone. It depends on the amount and timing of alcohol, absorption, metabolism, and the device's reporting limit. Do not use an estimated clearance time to decide whether to drive.

Sources

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