

Ethanol or EtG?

When testing an oral fluid specimen for alcohol, ethanol appears strong and lasts longer than EtG. The presence of ethanol in oral fluid appears within minutes of alcohol consumption, while EtG appears about two hours post alcohol consumption. Both ethanol and EtG remain detectable for up to 12 hours post alcohol consumption.

THE SCIENCE

EtG is formed by the liver as the body processes consumed alcohol. This results in an EtG urine concentration that is more than 100x greater than the EtG oral fluid concentration.

IN CONCLUSION

Ethanol is the preferred bio marker when testing oral fluid for alcohol consumption.





WINDOW OF DETECTION

Ethanol is detected within minutes of consuming alcohol. EtG is formed as the body processes consumed alcohol, which is why EtG takes longer to appear in oral fluid. After about twelve hours neither ethanol or EtG will remain detectable in oral fluid while EtG can remain detectable in urine for up to 80 hours.

Comparison of Ethanol and EtG in Oral Fluid v. Urine				
	Oral Fluid (EtG)	Oral Fluid (Ethanol)	Urine (EtG)	Urine (Ethanol)
Window of Detection	Detected 2 hours post consumption and up to 12 hours	Detected within minutes post consumption and up to 12 hours	Up to 80 hours	Up to 12 hours
Concentration Level	Low	High	High	High
Yeast Infection Causes Positive Result	No	No	No	Yes

Høiseth, G., Yttredal, B., Karinen, R., Gjerde, H., Mørland, J., & Christophersen, A. (2010). Ethyl glucuronide concentrations in oral fluid, blood, and urine after volunteers drank 0.5 and 1.0 g/kg doses of ethanol. Journal of Analytical Toxicology, 34(6), 319–324. https://doi.org/10.1093/jat/34.6.319