



Continuous Alcohol Monitoring: Frequently Asked Questions

[Media Contact](#)

Alison Betts

Director of Marketing & Public Relations

abetts@scramsystems.com

www.scramsystems.com

www.sobering-up.com

- [How does SCRAM Continuous Alcohol Monitoring® \(SCRAM CAM™\) measure alcohol in sweat?](#)
- [What kinds of tests are conducted by the SCRAM CAM Bracelet?](#)
- [Have SCRAM CAM test results been upheld in court challenges?](#)
- [Where in the criminal justice process is SCRAM CAM used?](#)
- [What types of offenders are sentenced to use SCRAM CAM?](#)
- [How does an offender get sentenced to wear the SCRAM CAM Bracelet?](#)
- [How long are offenders sentenced to wear the SCRAM CAM Bracelet?](#)
- [How much does a person have to drink to register a positive test result on SCRAM CAM?](#)
- [How can someone test negative on a urine or breath test just hours after having a confirmed drinking event on SCRAM CAM?](#)
- [How much does SCRAM CAM cost and who pays for it?](#)
- [What is a Service Provider?](#)
- [What is RF/house arrest/home detention monitoring?](#)
- [Is everyone on SCRAM CAM monitored both for alcohol and home detention?](#)
- [When are authorities alerted to an alcohol or house arrest violation?](#)
- [Do alcohol testing results transmit to the data center continuously like house arrest data?](#)

Tampers, Interferants and Obstructions

- [How does the SCRAM CAM Bracelet know if an offender is tampering with the system?](#)
- [What happens to offenders who are caught drinking or tampering with their bracelet?](#)
- [Can putting something between the bracelet and the leg block readings?](#)
- [I heard if you put your ankle/leg in ice water or ice to keep your skin from sweating this will keep the bracelet from detecting drinking.](#)
- [Why is there a list of products containing alcohol that SCRAM CAM clients aren't supposed to use?](#)
- [What happens if a drink or a product containing alcohol is accidentally spilled on the bracelet?](#)
- [I read that hairspray or being in a hair salon can cause false positives.](#)
- [Can kissing or having sex with someone who is drinking cause a false positive?](#)
- [Isn't there a study that shows eating certain baked goods can create a false positive?](#)
- [Can non-alcoholic beer or cold medicine create a false positive? What about mouthwash?](#)
- [Can using hand sanitizers create a false positive?](#)
- [Are there lights, alarms or other signals on the bracelet that notify an offender of an alert?](#)



How does SCRAM Continuous Alcohol Monitoring® (SCRAM CAM™) measure alcohol in sweat?

One percent of everything we consume is expelled through our skin in the form of insensible perspiration. The SCRAM CAM Bracelet uses transdermal analysis, which means it samples and tests the insensible perspiration that is always on your skin. A pump inside the bracelet takes in the sample. Then a fuel cell, just like the kind used in breath test devices, reacts with ethanol to measure for the presence of alcohol. So instead of breathing into the system, the SCRAM CAM Bracelet takes in a sample of perspiration to test for the presence of alcohol.

What kinds of tests are conducted by the SCRAM CAM Bracelet?

TRANSDERMAL ALCOHOL

Once every 30 minutes, the bracelet will sample the insensible perspiration on the offender's skin in order to measure for alcohol consumption.

ANTI-TAMPER

The bracelet includes a number of features to ensure tests are accurate and from the proper subject. Temperature sensors and an infrared sensor that measures the reflective quality of the skin ensure the bracelet is in place and that nothing has been placed between the skin and the bracelet in an attempt to obstruct the alcohol testing. Other strap and battery sensors ensure the bracelet is in place and on the proper subject. The bracelet also continuously conducts diagnostic tests to ensure the unit is functioning properly.

RF/LOCATION

SCRAM CAM includes an optional house arrest feature. When an offender is sentenced to home confinement, during the predetermined times that the offender must be home, the bracelet and base station communicate continuously to ensure that the offender is within the required range. In turn, the base station is continuously communicating to a web-based application where reports and alerts are generated.

Have SCRAM CAM test results been upheld in court challenges?

Yes. The reliability and accuracy of both transdermal alcohol testing and the SCRAM Continuous Alcohol Monitoring technology have been upheld in court challenges in every state where SCRAM CAM is in use, predominantly in probation or bond revocation hearings.

In addition, SCRAM CAM has been upheld in Evidentiary Hearings across the country, where both the technology and the expert testimony provided met the standards of Daubert, Frye or a hybrid standard, depending on the court. In addition, SCRAM CAM technology, testimony and evidence have been upheld as reliable in a state Supreme Court ruling (South Dakota) and an Appellate Court ruling (Indiana). A detailed and up-to-date report of the SCRAM Systems Court Support Program and some transcripts are available from SCRAM Systems media relations staff upon request.

Where in the criminal justice process is SCRAM CAM used?

- Pretrial supervision, as a condition of bond.
- As a supervision tool for an offender sentenced to adult probation.

- 
- As part of a specialty court program, such as a DUI, Domestic Violence, Drug Court or Veterans Court.
 - Treatment Court.
 - As a condition of parole for offenders released early due to jail or prison overcrowding.
 - To support offender re-entry programs, where intensive community supervision is a condition of parole.
 - As a sanction and assessment tool for misdemeanor underage drinking violators.

What types of offenders are sentenced to use SCRAM CAM?

SCRAM CAM programs are being used to support treatment and to enhance supervision for:

- First-time and multiple-time drunk driving offenders.
- Domestic violence offenders when alcohol is considered to be a contributing factor in their offense.
- Family Court, either to enforce a parent's sobriety or to assess the level of a parent's alcohol problem. Often Continuous Alcohol Monitoring is required as a condition of custody or visitation.
- Underage drinking offenders, as a method to assess and deter drinkers under the age of 21 from re-offending.
- Drug Court offenders, who often turn to alcohol once they are being actively tested for drugs.
- Veterans Court offenders, who are often dealing with addiction issues related to their military service.

How does an offender get sentenced to wear the SCRAM CAM Bracelet?

- A requirement to wear the bracelet is generally a result of a judge's ruling—either as a direct order to place an offender on SCRAM CAM, or as an order for an offender to enter a treatment or supervision program where Continuous Alcohol Monitoring is a component.
- Parole and probation may also assess an offender and determine that SCRAM CAM is appropriate for an offender and make monitoring a component of their supervision program.
- An offender may opt to use SCRAM CAM before trial in an effort to demonstrate to the court that they have taken their offense—and their alcohol misuse—seriously and are making a good faith effort to address that problem. SCRAM CAM can provide an offender with an evidence-based way to demonstrate their sobriety to the court.

How long are offenders sentenced to wear the SCRAM CAM Bracelet?

To-date, sentences have ranged from two weeks for misdemeanor underage drinkers who were caught drinking on a college campus to ten years for an offender convicted of killing a child in an alcohol-related traffic accident. The most common type of program requires an offender to complete an average of 90 consecutive days of compliance (no drinking or tamper events) in order to successfully complete the CAM component of their program.



How much does a person have to drink to register a positive test result on SCRAM CAM?

The SCRAM CAM Bracelet will detect very low-level drinking events. The fuel cell technology used to test for ethanol is the same fuel cell technology that's become an industry standard in Breathalyzers. As such, the standard for confirming an alcohol consumption event, for either a Breathalyzer or SCRAM CAM, is a minimum 0.02 Blood Alcohol Concentration (BAC). As a reference point, that might be the general equivalent of a 180-pound man consuming less than 2 drinks (a drink defined as 1.5 ounces of hard liquor) on an empty stomach in less than an hour. Should an offender drink to a level lower than 0.02 BAC, while SCRAM CAM will likely register it, and a probation officer may opt to address that with an offender, SCRAM Systems considers it to be a positive consumption violation once it surpasses the 0.02 BAC threshold.

How can someone test negative on a urine or breath test just hours after having a confirmed drinking event on CAM?

It is not only possible but probable that a person can drink and test negative for alcohol just hours later using breath, blood or urine testing. Some specific types of urine tests can see residual indicators of alcohol several hours after a standard urine test would be negative for alcohol; however, this is possible only for very high level drinking events and not with a consistent level of accuracy that can prove to the courts that the person was not drinking alcohol.

Breath, blood and urine testing are accurate and reliable for determining the level of intoxication for on-the-spot alcohol testing, such as a roadside sobriety test. But the body metabolizes alcohol very quickly, and once the process is complete, there are virtually no trace elements left in the body to facilitate detection. While drugs leave residual indicators in the body that are fairly easy to test for hours, days or even weeks later, alcohol does not. As such, long-term monitoring programs that test for alcohol consumption either randomly or even one to two times a day are very easy to circumvent.

How much does SCRAM CAM cost and who pays for it?

The offender pays an initial installation fee ranging from \$50 to \$100. The average monitoring fee nationwide for Continuous Alcohol Monitoring only is \$10-\$12 per day. The average monitoring fee nationwide for combined Continuous Alcohol Monitoring with house arrest monitoring is \$13-\$15 per day. A number of factors are used when determining the daily monitoring fee in a particular area, including, but not limited to, the offender's wage, court-related fees and fines, the monitoring period and whether there is a service provider in that area.

SCRAM CAM, like many electronic monitoring programs, generally uses an offender-pay model, meaning that offenders pay either all or a significant portion of the cost for the equipment and daily monitoring fees. If there are costs above and beyond what an offender can pay, then generally, some type of government funding subsidizes the daily cost. In some instances, the local SCRAM Systems Authorized Service Partner will make a small portion of its SCRAM CAM inventory available to indigent offenders at no cost.



What is a Service Provider?

It is common in community corrections for jurisdictions to outsource services such as drug and alcohol testing, polygraphs, classes and GPS or home arrest monitoring. It is often more cost-effective to outsource these functions than to support them with internal staff and resources. A SCRAM Systems Authorized Service Partner may focus only on providing SCRAM CAM program management or they may offer a menu of corrections services to the local courts.

What is RF/house arrest/home detention monitoring?

The SCRAM CAM Bracelet includes an optional house arrest feature. **House arrest is not to be confused with GPS monitoring.** While GPS (Global Positioning System) functionality can be used to track the precise location of an individual, a vehicle or a cell phone, “house arrest” generally refers to home confinement. House arrest can also be referred to as “home detention,” “curfew monitoring,” “RF” (Radio Frequency) or the general category term of “electronic monitoring.”

With house arrest, a person is confined to their residence on a pre-approved schedule that generally allows for some time outside the home for approved purposes (such as work, school, medical or legal appointments or AA meetings) and restricts the offender to the home during all other times. House arrest may also be used to confine an offender 24/7 at the discretion of the court.

Is everyone on SCRAM CAM monitored both for alcohol and home confinement?

No. SCRAM Systems estimates that between 10 and 15 percent of their monitored clients each day are on both house arrest and CAM.

When are authorities alerted to an alcohol or house arrest violation?

The alcohol testing data is generally uploaded once each day. Alerts are reviewed and confirmed and authorities are notified of a confirmed violation within 24 hours.

House arrest notifications can be customized by the supervising authority to either be real-time, where immediate notification (termed Priority Notification) of a violation is made to an assigned officer, or on the notification schedule of their choice. Priority Notifications can be sent via fax, email, text or online alerts. The most common notification protocol is daily reporting, with the ability to log on any time to see a full event log for any individual offender.

Do alcohol testing results transmit to the data center continuously like house arrest data?

No. Because of the size and complexity of alcohol testing data, and because all alerts are confirmed based on results from an entire drinking event, not just a single test result, the data is generally downloaded once each day. In some instances, for higher risk offenders, an agency might require downloads of the alcohol data as often as six times a day.



Tampers, Interferants and Obstructions

How does the SCRAM CAM Bracelet know if an offender is tampering with the system?

- Temperature sensors monitor the ambient temperature around the bracelet, which verifies that the subject has not removed the bracelet or tried to do something to modify the body temperature and prevent “sweating.”
- An infrared (IR) sensor measures the reflective quality of the skin to ensure the bracelet is in place and that nothing has been placed between it and the skin in an attempt to obstruct the alcohol testing.
- A number of strap and battery sensors ensure the bracelet is in place and on the proper subject.
- The bracelet also continuously conducts diagnostic tests to confirm the unit is functioning properly.

What happens to offenders who are caught drinking or tampering with their SCRAM CAM Bracelet?

Consequences for drinking or tampering with the bracelet are determined by the supervising agency. Generally, progressive sanctions are implemented, ultimately resulting with revocation of bond or probation and possibly incarceration. The type of punishment for violations and how quickly it escalates to incarceration depends on the laws and programs of that offender’s supervising agency, the severity of their offense and the orders of the court. Some programs deal very aggressively with any kind of tamper violation, while others may provide more leniencies with tamper violations in comparison to a confirmed drinking event.

Can putting something between the bracelet and the leg block readings?

At installation, the infrared (IR) sensor takes a baseline reading by sending an IR beam to the skin and measuring the reflective quality of what bounces back. If anything is placed between the bracelet and the skin or there’s any alteration to the baseline IR sensor, SCRAM CAM will generate an Obstruction Alert. Most of the time, SCRAM CAM is able to sense both the drinking and the obstruction. AMS has tested hundreds of products over the years and conducts ongoing field testing to ensure the bracelet is able to detect obstructions.

I heard if you put your ankle/leg in ice water or ice to keep your skin from sweating this will keep the bracelet from detecting drinking.

Not only will the temperature sensor register an alert, but this tactic does not prevent the bracelet from taking transdermal readings. In addition, submerging the bracelet in water is prohibited and would result in a violation.



Why is there a list of products containing alcohol that SCRAM clients aren't supposed to use on or near the CAM bracelet?

Someone who drinks while wearing the SCRAM CAM bracelet may try to “mask” a drinking event by “spiking” the bracelet. This can be done by spraying or applying a product with alcohol, then claiming the alert was caused by exposure to a product rather than drinking. To avoid these situations, offenders sign an agreement at the time of installation that prohibits them from using products containing alcohol on or around the bracelet.

This does not mean the alcohol that is present will be interpreted as consumption. A product with alcohol will cause a “spike” because the readings will go up much faster than the body could ever consume alcohol, and will also evaporate/burn off much faster than the body could ever metabolize alcohol. The process for confirming an event as actual consumption includes human analysis and the application of mathematical algorithms that ensure any confirmed drinking event was actually consumption, not environmental alcohol. So while SCRAM CAM can distinguish between consumed and environmental alcohol, the offender agreement prohibiting use of alcohol-containing products is intended to discourage spiking the bracelet. That type of tampering is considered a violation and is addressed with graduated sanctions by the court or monitoring authority.

What happens if a drink or a product containing alcohol is accidentally spilled on the bracelet?

SCRAM CAM could get an alert for alcohol spilled on the bracelet; however, the system is designed to distinguish between exposure to alcohol around the bracelet and consumed alcohol that metabolizes through the skin. Spilling a drink or a product with alcohol (hairspray, perfume) creates a rapid spike much faster than the body would ever consume alcohol; it also evaporates and burns off much faster than the body can metabolize alcohol. Our confirmation process includes an analysis that ensures that any confirmed event is consumed alcohol. AMS has tested hundreds of products over the years to ensure that nothing can mimic the results of consumed alcohol, including this scenario.

I read that hairspray or being in a hair salon can cause false positives.

Just like exposure to any other product with alcohol, it is definitely possible that the SCRAM CAM Bracelet would issue an alcohol alert if exposed to hairspray. However, hairspray or being in a hair salon is no different than any other product. The system is designed to distinguish between environmental exposure to alcohol and actual consumed alcohol that has metabolized in the body. SCRAM Systems has tested exposure to hairspray and hundreds of other alcohol-containing products to ensure the bracelet does not mimic a drinking event or create a false confirmed positive.

Can kissing or having sex with someone who is drinking cause a false positive?

No. The presence of substantial alcohol on or around the bracelet might cause an alcohol alert, but the system is designed to distinguish between alcohol consumed and metabolized by the person wearing the bracelet and exposure to something around the bracelet that contains alcohol.



Isn't there a study that shows that eating certain baked goods can create a false positive?

No. This rumor started on the Internet many years ago after a Michigan judge misunderstood testimony about a scientific study. The peer-reviewed study in question evaluated whether consuming certain baked goods could create false positives on breath tests. The study concluded that some baked goods when consumed could create what's called "mouth alcohol" that lingers for several minutes in the mouth and can potentially create a false positive on a breath test. The results underscored the importance of proper wait times before a breath test, something that is standard in every jurisdiction in the country. However, consumption of these foods would have no impact on urine, blood or transdermal testing.

This Internet myth is now known as The Chocolate Donut Theory. Per the analysis of baked goods in the study, the conclusion is that to register positive for alcohol on a urine, blood or transdermal test after eating baked goods, in **one hour** a person would have to consume:

- 274 chocolate cake donuts
- 207 chocolate raised donuts
- 43.48 pounds of Sun Maid® Raisin Bread
- 29.96 pounds of Thomas® Sourdough English Muffins
- 7.24 pounds of Kentucky bourbon cake
- 25.52 pounds of Home Pride® Wheat Bread

Can non-alcoholic beer or cold medicine create a false positive? What about mouthwash?

These types of products have no impact on the results of urine, blood or transdermal tests unless used in such large quantities that they actually create intoxication. As with any product that contains alcohol, if an individual would consume enough of one of these products to become intoxicated, they are intoxicated. Whether the alcohol comes from hard liquor, wine, vanilla extract, or mouthwash, it is alcohol and can create intoxication.

While there are some reports that people are wrongly accused of drinking after consuming cold medicine or used mouthwash, in reality those products, when used as directed, might create false positives with breath testing if proper test protocols are not followed. Consuming products with alcohol can leave residual alcohol in the mouth. When a breath test is taken, "mouth" alcohol can generate a false positive if proper protocols and wait times are not employed for the breath test. However, when proper protocols are followed, these products do not create false positives.

Can using hand sanitizers create a false positive?

No. In 2008 the U.S. Substance Abuse and Mental Health Services Administration (SAMHSA) issued a warning that hand sanitizers had been shown to create false positive results on EtG urine tests. If someone got hand sanitizer near the bracelet and it created an alcohol alert, SCRAM CAM would be able to distinguish between the sanitizer and actual consumed alcohol that's been metabolized in the body.



Are there lights, alarms or other signals on the bracelet that notify an offender of an alert?

No. There is no indication of any kind, on either the SCRAM CAM Bracelet or the Base Station, when there is an alert. The first indication of an alert will be at the data center, where all alerts are generated and analyzed before sending a confirmation to the supervising court or agency.