



VIRGINIA DEPARTMENT OF FORENSIC SCIENCE
EVIDENCE HANDLING & LABORATORY
CAPABILITIES GUIDE
CONTROLLED SUBSTANCES

Contact Information

If you have any questions concerning the Controlled Substances laboratory examination capabilities or evidence handling procedures, please call the Training Section or the Controlled Substances Section at the Forensic Laboratory that services your area.

<u>Laboratory</u>	<u>Section Contact</u>	<u>Phone Number</u>
Central	John Przybylski	(804) 588-4154
Eastern	Brian Meinweiser	(757) 355-5958
Northern	Jeana Rodenas	(703) 334-9736
Western	Chris Bryant	(540) 283-5927

OVERVIEW

Examiners in the Controlled Substances Section test materials for the presence of controlled substances or marijuana. Illegal drugs may be presented in powders, solid material, liquids or LSD blotter paper, as well as in plants and mushrooms. The section also examines pharmaceutical preparations (e.g., tablets, capsules and injectables).

Drugs are classified both legally and pharmacologically. Legally, drugs are listed in the Code of Virginia in Schedules based on their medical use and potential for abuse and dependency. The “highest” schedule is Schedule I (drugs with no accepted medical use and a high potential for abuse and dependency) and the “lowest” schedule is Schedule VI (drugs that require a prescription but have a very low potential for abuse). The following table lists common drugs along with their pharmacological category and schedule. Schedule VI controlled substances require a prescription to legally possess but are not listed by name in the Code.

Drug	Pharmacological Category	Schedule
Alprazolam (Xanax)	Depressants	IV
Amphetamine	Stimulants	II
Caffeine (look-a-like)	Stimulants	OTC
Cocaine (forms include salt and base (crack))	Stimulants	II
Codeine	Narcotics	II, III, V
Diazepam (Valium)	Depressants	IV
Fentanyl	Narcotics	II
GHB (gamma-butyrolactone)	Depressants	I
Heroin	Narcotics	I
Hydromorphone (Dilaudid)	Narcotics	II
LSD (Lysergic Acid Diethylamide)	Hallucinogens	I
MDMA (Ecstasy)	Hallucinogens	I
Meperidine (Demerol)	Narcotics	II
Mescaline (usually found in peyote cactus)	Hallucinogens	I
Methadone	Narcotics	II
Methamphetamine	Stimulants	II

Methylphenidate (Ritalin)	Stimulants	II
Morphine	Narcotics	II
Nandrolone	Anabolic Steroids	III
Opium	Narcotics	II
Oxycodone	Narcotics	II
PCP (Phencyclidine)	Hallucinogens	II
Psilocybin or Psilocyn (usually found in mushrooms)	Hallucinogens	I
Salvinorin A (usually found in <i>Salvia Divinorum</i>)	Hallucinogens	I
Secobarbital	Depressants	II
Testosterone	Anabolic Steroids	III

In the Commonwealth, marijuana is not listed as a controlled substance or scheduled in the Code of Virginia.

- Marijuana is defined in [§ 54.1-3401](#) as "any part of a plant of the genus Cannabis, whether growing or not, its seeds or resin; and every compound, manufacture, salt, derivative, mixture, or preparation of such plant, its seeds, its resin, or any extract containing one or more cannabinoids. Marijuana does not include the mature stalks of such plant, fiber produced from such stalk, oil or cake made from the seed of such plant, unless such stalks, fiber, oil or cake is combined with other parts of plants of the genus Cannabis. Marijuana does not include (i) industrial hemp, as defined in [§ 3.2-4112](#), that is possessed by a person registered pursuant to subsection A of [§ 3.2-4115](#) or his agent or (ii) a hemp product, as defined in [§ 3.2-4112](#), containing a tetrahydrocannabinol concentration of no greater than 0.3 percent that is derived from industrial hemp, as defined in [§ 3.2-4112](#), that is grown, dealt, or processed in compliance with state or federal law."
- Industrial hemp is defined in [§ 3.2-4112](#) as "any part of the plant Cannabis sativa, including seeds thereof and any derivative, extract, cannabinoid, isomer, acid, salt, or salt of an isomer, whether growing or not, with a concentration of tetrahydrocannabinol that is no greater than that allowed by federal law."
- Cannabimimetic agents such as JWH-018 and CP 47,497 are Schedule I controlled substances as defined in the Code of Virginia, [§ 54.1-3446 \(6\)](#).
- Cannabimimetic agents that are not listed specifically, but fit into defined structural classes, are Schedule I controlled substances (Code of Virginia, [§ 54.1-3446 \(6\)](#)).

CAPABILITIES AND SERVICES

Analysis

The Controlled Substances Section analyzes evidence submitted by law enforcement agencies for the presence or absence of controlled substances and/or marijuana.

In the laboratory, evidence is routinely screened using color tests and thin layer chromatography (TLC) with identification by gas chromatography/mass spectrometry (GC/MS). Additional instrumental techniques such as infrared spectrophotometry (FTIR), gas chromatography with flame ionization detector (GC/FID), and direct analysis in real time/time of flight mass spectrometry (DART/TOF) may also be used.

Quantitative analyses are not necessary in most situations and are only performed at the request of the Commonwealth's Attorney.

The original Certificate of Analysis (CoA) is prepared and sent directly to the Office of the Commonwealth's Attorney with a copy sent to the investigating officer.

Drug Item Reduction Policy

In 1988, the Controlled Substances Section implemented the Drug Item Reduction Policy (DIRP). The aim of this program was to increase the number of cases worked by having the examiners analyze only the most important items in a case in terms of quantity and schedule. Typically, residue items are not analyzed when accompanied by items containing a weighable quantity of drugs. Exceptions to this are cases where an item with residue is the only item connected to a particular suspect, the residue is likely a higher schedule than the weighable material, or the item with residue is the probable cause for a search. For these exceptions to be granted, information should be specifically noted by the item in question on the Request for Laboratory Examination form (RFLE).

If, during the pretrial process, it becomes apparent that items that were not analyzed are necessary for successful prosecution then, upon resubmission, those items will receive top priority at the laboratory.

Reversals

The Department of Forensic Science (DFS) will assist law enforcement agencies with preparation of materials to be used in drug reversals, buy/bust operations and "show and tell" drugs. In all instances, the requesting agency must assume full responsibility for distribution of these materials. Contact a Controlled Substances Section Supervisor for further information.

Training

The Controlled Substances section also provides training for user agencies. This includes training police officers about current drug abuse practices and trends to teaching them how to recognize, collect, properly preserve, and submit various drug evidence and paraphernalia to DFS for analysis. This section also has the unique opportunity to assist attorneys, legislators and law enforcement officers in understanding the scientific meaning of analytical results as they pertain to the Virginia Drug Control Act and the Controlled Substances Act.

Field Test Approval

The Controlled Substances Section is primarily responsible for the regulation and approval of field tests used by police officers for the field detection of drugs in the Commonwealth.

Field tests can be used for two purposes in Virginia as listed in [§ 19.2-188.1](#). First, § 19.2-188.1 (A) allows officers using an approved field test to offer testimony as to the results he/she obtained in any preliminary hearing on many drug related offenses. This statute has been in place since 1991. Additionally, in July 2006, the legislature enacted § 19.2-188.1 (B) which allows for the results of marijuana field test kits to be used in trial of simple possession offenses. [Effective January 1, 2015](#), DFS discontinued the routine analysis of marijuana plant material in simple possession cases without a court order, however, there are exceptions to this policy including the felony possession by prisoners, cases involving juveniles and inconclusive field test kit results. Please contact the laboratory if you have questions regarding evidence submissions.

The two separate but related statutes each have associated regulations which describe the approval process. Once tests have been approved, DFS publishes separate lists of these approved tests in the Virginia Register of Regulations. Care must be taken to make sure that tests used in the field are for the appropriate purpose.

Links to both the regulations and the current list of approved field test kits are available on our website:

Document	Website
Regulations for Field Tests	http://www.dfs.virginia.gov/field-test-kits/field-test-kit-evaluation/ §19.2-188.1 (A) – for preliminary hearings only §19.2-188.1 (B) – for simple possession of marijuana plant material
Approved Drug Field Tests	http://www.dfs.virginia.gov/field-test-kits/field-test-kit-evaluation/preliminary-hearing-drug-field-test-kits/ §19.2-188.1 (A) – for preliminary hearings only
Approved Marijuana Field Tests	http://www.dfs.virginia.gov/field-test-kits/field-test-kit-evaluation/marijuana-field-test-kits/ §19.2-188.1 (B) – for simple possession of marijuana plant material

Clandestine Laboratories.

The “Best Practices Protocol for use by law enforcement and emergency response agencies regarding the clean-up of abandoned and deactivated methamphetamine production sites and the retention and handling of the byproducts of methamphetamine production” addresses the entire process of taking down a lab and is located at the following web address:

<http://www.dfs.virginia.gov/laboratory-forensic-services/controlled-substances/meth-labs/>

Key points in this document include:

Local Law Enforcement (LLE) entities without Certified Clandestine Lab Response teams and adopted Safety and Health Programs will notify Certified Clandestine Lab Response Personnel from the Virginia State Police (VSP) or Drug Enforcement Agency (DEA). To contact VSP personnel, please utilize the appropriate Division number below:

Appomattox (800) 552-0962

Chesapeake (800) 582-8350

Culpeper (800) 572-2260

Fairfax (800) 572-4510

Richmond (800) 552-9965

Salem (800) 542-5959

Wytheville (800) 542-8716

No individual or agency will intentionally enter or authorize entry into a suspected clandestine laboratory without adoption of an entity-specific Standard Operating Procedure (SOP) that provides for a Safety and Health Program as required by the Virginia Occupational Safety and Health (VOSH) Program and in compliance with 16 VAC 25-90-1910.120 (HAZWOPER) Standards and/or Safety and Health Program as required by OSHA and Federal Regulation 29 CFR 1910.120 (HAZWOPER) Standards.

Evidence from clandestine laboratories requires special handling and packaging in order to be submitted to the laboratory. An excerpt from this “Best Practices Protocol” relates specifically to evidence submission and packing to the laboratory for analysis. The “Collection and Submission of Meth Labs Materials to DFS” is shown below:

Collection and Submission of Meth Lab Materials to DFS

An Excerpt from

Best Practices protocol for use by law enforcement and emergency response agencies regarding the clean-up of abandoned and deactivated methamphetamine production sites and the retention and handling of the byproducts of methamphetamine production

5. Safe packaging of evidentiary samples

- Only Certified Clandestine Lab Response Personnel shall collect samples from clandestine laboratories.
- A representative sample shall be removed from those precursor items, chemicals, and reaction vessels requiring analysis. Bulk items should not be submitted for analysis. Appropriate size samples of items shall be collected in a bottle assembly

that is needed, in order to eliminate the need to contact the investigating officer when a discrepancy arises.

SUBMISSION REMINDERS

When a case becomes inactive, either through refusal to charge, dismissal or plea agreement, it is the responsibility of the primary officer and/or the assigned Commonwealth's Attorney to notify DFS of that status. Analysis will cease, DFS will terminate the case and submissions will be returned to the submitting agency.

Exclusive possession is the ultimate goal. Therefore, if the substance is located in a common area, consider requesting latent fingerprints and handle evidence accordingly to preserve potential latent fingerprints.

A secure seal is necessary for chain-of-custody. HOWEVER, it is not necessary to tape excessively, or "mummify", because this makes evidence handling in the laboratory more difficult.

Items which establish probable cause should be clearly marked and noted as such on the RFLE.

Items that need to be tested separately should be packaged separately.

USE DISCRETION: Submit only necessary items in need of analysis. Eliminate trash and ashes from ashtray submissions. Items that do not need to be tested should not be submitted (e.g., drivers license, cigarette rolling papers).

Make sure the packaging size is suitable for your evidence. Small objects (such as a "rock" of cocaine) may become lost or crushed in a large bag. Please make sure that the final bag or package is at least 5" x 7". Small items should be packaged in a suitable envelope and THEN placed in a 5" x 7" container. This assures security of the evidence and allows the analyst room to re-package and secure the evidence without breaking your seal.