



31 Forensic Drive
Macleod 3085
Victoria, Australia
Telephone: (61 3) 9450 3444
Web: www.police.vic.gov.au

VICTORIA POLICE FORENSIC SERVICES DEPARTMENT

The Victoria Police Forensic Services Department is led by the Executive Director, who reports to the Deputy Commissioner, Specialist Operations, Victoria Police. The three Divisions who provide the examination and scene services are led by the Director-Forensic Operations.

It is located at;

- The Victoria Police Forensic Services Centre (VPFSC) at Macleod
(The main facility for most units and laboratory facilities)
- City West Police Complex, 313 Spencer Street, Docklands
(The main office for Criminal Identification and Audio-Visual units), and
- Four Victorian regional offices for Fingerprints and/or Crime Scene;
(Western Region Fingerprint, Eastern Region Fingerprint, Northern Region Fingerprint and Wangaratta Major Crime Scene)

The word “forensic” means pertaining to the Courts, so forensic science is not a particular branch of science but the application of science to legal purposes.

Our statement of strategic intent is:

“The Forensic Services Department will deliver an excellent integrated forensic service to Victoria Police, the judicial system and the community”

The Forensic Services Department has 3 main roles:

- Providing operational tactical intelligence to assist police investigations and provide avenues of enquiry (for example, providing a name of a person whose fingerprints were found at a crime scene)
- Providing evidence for the Courts (written reports as statements or certificates and also oral evidence if required)
- Providing a response in disasters and emergency management events, i.e. terrorism events and mass fatalities (analysis and scene examination and phase 1 of Disaster Victim Identification)

It can be perceived that forensic science is only to help police but in fact, the scientific results can give a more complete picture as to what may or may not have occurred and assists the investigator and eventually the Court. This often can exclude a suspect as being the source of the physical evidence.

There are other forensic services in Victoria; the Victorian Institute of Forensic Medicine (VIFM) provides forensic services related to forensic medicine including forensic pathology including autopsies, and clinical forensic medicine (see list of websites at the end of this document)

What forensic science services are provided by the Forensic Services Department?

Audio Visual: extraction, recovery, repair, enhancement and analysis of audio and video recordings including CCTV and images;

Ballistics: examination of crime scenes involving firearms; firearms, ammunition and component examination and comparison; firearms identification safety and function, striated toolmark comparison;

Biological Sciences: detection and identification of biological material such as blood, semen and hair; bloodstain pattern analysis on exhibits and at scenes; DNA profiling of samples and comparison of profiles from victims, suspects, convicted offenders, scenes and comparisons to the National DNA database;

Botany: botanical identification of plant material including cannabis and opium poppies; yield estimates of cannabis crops for usable material; examination of trace botanical material from crimes; identification of poisonous/psycho active plants,

Chemical, Biological and Radiological/Disaster Victim Identification: processing crime scenes of a chemical, biological or radiological incident; locate, photograph, record and collect human remains at scenes with a number of deceased with questioned identity;

Chemical Trace: identification and/or comparison of materials such as glass, paint, plastics, fibres, and chemical irritants (e.g. pepper spray); sampling persons, scenes and items for gunshot residue and subsequent analysis;

Clandestine Laboratories: analysis and interpretation of chemicals and equipment from illegal drug laboratories;

Collision Reconstruction and Mechanical Investigation Unit: provide specialist support to police investigators around fatal and serious injury collisions involving serious criminality (culpable driving).

Criminal Identification: preparation of facial composites based on witness descriptions; cranio-facial reconstructions; assistance with preparation of interactive graphic presentations of evidence;

DNA Management Unit: management of collection of DNA samples throughout Victoria; sharing DNA information nationally and internationally; notification to investigators of DNA links to unsolved crimes; co-ordination of Ante-Mortem collection from relatives of long-term missing persons;

Document Examination: handwriting and signature comparisons; examination of machine generated documents; examination of documents for alterations, obliterations and indentations;

Drug Analysis: identification of drugs and poisons; determining the quantity of the drug; reporting of chemical drugs intelligence data;

Fingerprints: development of latent fingerprints and comparison to the NAFIS fingerprint database and to fingerprints taken from persons of interest;

Fire and Explosion Investigation: investigation of fires and explosions through scene examinations and laboratory analyses of exhibits, to determine the cause of the fire or explosion;

Major Crime Scene: at major crime scenes, scene searching, collection of exhibits and recording the scenes using photography and video; recording, enhancement and comparison of shoe, tyre and tool impressions;

Photographic Processing: production of prints for Court for Victoria Police;

Vehicle Examination: examination of suspect vehicles and other items to establish original identity;

Office of the Chief Forensic Scientist: management of the research, development and innovation (RD&I) and education and training strategies of the Forensic Services Department.

Is Forensic Science really like the television show CSI?

How is it similar?

Some of the scientific techniques are based on reality and the close-ups of items are usually realistic.

How is it different?

TV also shows other techniques and results that are not common or realistic: it has been estimated that only 60% of the tests are based on reality. Real forensic staff are specialists in one area, (i.e. they are not experts in every field as seen on TV). The real analysis time is often longer than depicted on television and can take from hours to days. The duties as shown on “CSI” are a combination of different specialists as performed in Victoria.

Role 1 Detective A detective (not the crime scene examiner) is really the investigator in a case. The detective will be the first called to a scene by the Uniform member. Detectives then call out the appropriate forensic and other services (e.g. Dog Squad). The forensic callout services include:

- Major Crime Scene
- Ballistics
- Microscopy (Gunshot Residue)
- Fingerprints
- Bloodstain Pattern Analysis
- Clandestine Drug Laboratories
- Fire and Explosion Investigation
- Botany Unit (Cannabis crops)
- Biology
- CBR/Disaster Victim Identification

The detective investigates the case using information from any forensic services and also from interviewing of witnesses, victims and suspects and following lines of enquiry.

Role 2 Major Crime Scene Examiner For a complex and serious scene, one or more Major Crime Scene Examiners record, search, interpret the scene and collect items for examination. The scene is recorded using notes, sketches, photos, videorecording and scale drawings. They may also request other forensic experts to attend.

Role 3 Crime Scene Officer For non-complex and less serious scenes, a Crime Scene Officer who is attached to the local police region can process the scene, including photography, development and recording of fingerprints and collecting exhibits.

Role 4 Property officers If collected by police who are not forensic staff, the exhibits are logged and stored at the police station and then delivered to FSD for examination. If collected by FSD staff, the items are logged and allocated to the relevant specialist areas for examination and analysis. Only a few (such as shoeprints) would be retained for examination by the Major Crime Scene Examiner

Role 4 Forensic Scientist The forensic scientist will ascertain the appropriate tests and perform these and provide the results to the police member who is the investigator for the case. Depending on the circumstances some scientists may also attend the initial crime scene.

Overall

Television shows like CSI have raised the profile of forensic science and its use and importance in crime investigation. However (unfortunately!) there are no jobs available in Australia like those depicted on CSI.

What are the educational requirements for a forensic science position?

Forensic Officer and Victoria Public Service positions

The majority of the public service staff in the Forensic Services Department are Forensic Officers with a science qualification. The following outlines the requirements for these positions:

The number in brackets is the approximate number of current employees to provide an idea of the number of job opportunities

Scientists (approx. 200 staff)

The advertised position will have a mandatory qualification of a science degree and the relevant major study, e.g. for most positions in the Chemistry Division, a Chemistry major is required: for a Biological Sciences Group position, a Molecular Biology, Genetics major or similar is required. There are only a few positions for scientists with Botany, Materials Science or other specialities. It is not a requirement that an applicant has any forensic training. On the job training is provided so general scientific knowledge can be applied to specialised forensic examinations and analyses and on legal aspects and giving evidence in Court.

Audio Visual Examiners (approx 6 staff)

The positions are for experts including those with science degrees (Physics or Computing), Arts/Humanities degrees (Media or Linguistics) or those with extensive telecommunication or broadcast audio video experience.

Fingerprint staff (approx. 70 staff)

Although there is no prerequisite qualification, there are usually so many applicants for a position that successful applicants usually have a relevant degree (either science or criminal justice). Once employed, the staff member must complete the Advanced Diploma of Forensic Investigation and the Graduate Certificate in Forensic Fingerprint Investigation.

Criminal Identification staff (approx 13 staff)

Some of these staff are sworn police and some are public service staff with graphic design backgrounds.

Vehicle Examiners (approx 5 staff)

Motor mechanics and panel beaters are employed to perform examinations on vehicles of questioned identity i.e. where it is suspected the identifying features have been altered.

Technical Support staff (approx 10 staff)

FSD also has support staff in the laboratories and some photographic processing staff. These people may have some scientific qualification (such as a Certificate) or may have been trained on the job.

Other support staff: There are also a number of staff who assist the in the daily operational activities including those in Finance, HR, Education, Quality, Facilities, Security, Exhibit Management and those who provide administrative support to scientific staff etc.

Sworn Police positions (50 positions)

There is no prerequisite qualification such as a science degree. The positions are generally for Senior Constables, which is generally achieved after a few years in operational duties (i.e. at a Police Station). Staff are expected to complete an Advanced Diploma of Public Safety (Forensic investigation - Crime scene examination) after they commence. The majority of advertised positions for sworn Police are in the Crime Scene Division, mainly in Major Crime Scene and Chemical, Biological and Radiological/Disaster Victim Identification although positions in Ballistics become available from time to time.

What courses are available in Forensic Science?

As far as is known, there is only one course in Forensic Science available in Victoria: the *Bachelor of Forensic Science* at Deakin University (Geelong Campus).

Completion of this does not lead automatically to employment with the FSD as, in any one year; there are more graduates than the combined number of forensic science vacancies in Victoria.

For employment as a Forensic Officer at FSD, it is not a pre-requisite to have completed a forensic course or any forensic training. Many successful applicants have no forensic science training as the first requirement is for applicants to have the appropriate technical background or relevant major in their science degree. After this, other aspects are considered, such as any forensic studies, communication skills and work experience.

How many forensic science positions are advertised each year?

Public Service (Forensic Officers and Victoria Public service positions)

There are perhaps 10-15 in a year, and some of these are for short term contract. For each vacancy advertised, there are many interested applicants, sometimes as many as 60-70.

Sworn staff (police)

There are perhaps six vacancies advertised each year.

I am still interested in a forensic science career, what do I do now?

Firstly, work out which of these careers most interest you: a Science career or a Police career?

Now research these thoroughly, looking at training, working conditions, pay, advancement etc. Some information to get you started is;

- Police career: 30 weeks training, may work in vehicles or outdoors, shift work, team work, physically deal with difficult people, may attend unpleasant scenes, good promotion opportunities and specialisation available, good pay rates
If you are more interested in coordinating the overall investigation, interviewing people, following leads and collecting all the evidence for court, then these are more the tasks of a sworn Police member including detectives.

Unclassified

- Science career: 3 yrs University degree, laboratory based, mostly office hours, may work as individual or as part of a team, limited promotion opportunities, may specialise further
For a science career, you can also look at websites like Seek to see details of actual positions so you can see what the work involves.

Secondly, once you have chosen from science or policing, you can then regard forensic science as one of many areas that you may be able to specialise in later, if the opportunity arises. Don't limit yourself to this speciality now; it's like someone wanting to join the police just to ride horses in the Mounted Branch! Instead you need to be prepared to take on all that the career involves. Forensic Science is one very small area of specialisation and employment in this field is limited.

Victoria Police Recruiting also advises applicants to not focus on one particular area of interest, but look at an overall career in Policing. There are over 500 different types of positions within Victoria Police.
<http://www.policecareer.vic.gov.au/>

Please note; this advice is general, so may not apply to you.

How do I find vacancies at the Forensic Services Department?

FSD public service vacancies are advertised on: <http://www.careers.vic.gov.au> All Victorian Public Service (VPS and Forensic Officer (FO)) positions are advertised here. Interested persons can also register for email alerts if a position of interest is posted.

Who are the other forensic science employers?

Victorian Institute of Forensic Medicine (VIFM)

VIFM provides forensic medical services in Victoria as part of the Coronial Services Centre. One function of the VIFM is to determine the medical cause of death. Autopsies are performed by doctors who have specialised in Pathology, and samples from the body are analysed by scientists (toxicologists and biologists). VIFM also performs civil paternity testing for the courts and has doctors who specialise in clinical forensic medicine. <http://www.vifm.org>

Victoria Police

- Major Collision Investigation Group: investigate most fatal and life threatening vehicle collisions
- e-Crime Squad: digital forensic analysis
- Road Policing Drug and Alcohol Section; Random breath and drug tests, maintenance calibration and training for police in use of test devices

Other employers

- Environment Protection Authority,
- Department of Environment and Primary Industries,
- State Chemistry Laboratory
- Private companies performing forensic testing

Further Information

1. The **Victorian Job Guide** <http://www.jobguide.thegoodguides.com.au> has information for “Forensic Scientist”, “Laboratory Technician”, “Police Officer” and in the general category of Scientific Jobs.
2. **National Institute of Forensic Science (NIFS) Australia**
<https://www.anzpaa.org.au/nifs/forensic-sciences/education-and-career-information>
3. **Forensic Services Department, Victoria Police**
http://www.police.vic.gov.au/content.asp?Document_ID=695
4. **Police recruiting**
http://www.police.vic.gov.au/content.asp?Document_ID=33038
5. **A simplified guide to Forensic Science**
This guide has been created by the National Forensic Science Technology Centre (USA)
<http://www.forensicsciencesimplified.org/index.htm>
6. The **Victorian Institute of Forensic Medicine (VIFM)** provides forensic services related to forensic medicine including forensic pathology including autopsies, and clinical forensic medicine
www.vifm.org
7. VIFM also provide **VIFM Careers Information sessions for secondary students** twice a year during the school holidays. These sessions includes presentations from the Victoria Police Forensic Services Department, see the website for bookings:
<http://www.vifm.org/about-us/careers-at-vifm/>