Annual Administrative Report

DIRECTORATE OF FORENSIC SCIENCE
Himachal Pradesh
(2016-17)

Website : www.himachal.nic.in/home
Email: sfsl-hp@nic.in
Hon’ble Chief Minister Himachal Pradesh, Sh. Virbhadra Singh, launching “One District One Police Station” (ODPS)-A Pilot Project at Regional Forensic Science Laboratory, Northern Range, Dharamshala on 3rd March, 2013 during winter sojourn.
Foremost mission of the HPFSL is to serve the society in a holistic manner by way of providing quality reports and timely reports in criminal, civil cases and in matters of public interest; create vibrant and intellectual environment in the institution built on trust, commitment to promote good practices and inculcate ethical values and employ modern methods; empowerment of law enforcement agencies, judiciary and enquiry commission with forensics knowledge for proper investigation, and for better understanding, evaluation and appreciation of reports. HPFSL has to emerge as temple of knowledge sharing with other institutions in the development of the state-of-art forensics and to open new vistas.

‘Vigyanane Satya Anveshnnam’

विज्ञान से सत्य की खोज
To dig out truth through science.
Quality reports, timely reports by adopting good practices and protocols with latest know-how conforming to national and international standards form the foundation principles of an institution to emerge it as a premier institution.

Achieve excellence in human resource development through training, by creating congenial, scientific ambiance that encourages team spirit and better professional conduct.

Fostering collaboration and co-operation with universities, research undertaking bodies, promoting R&D programmes so as to generate database and for developing state of the art (infrastructure).

Building Himachal Forensics a professional service, enjoying public faith, exhibiting accountability, transparency and to meet modern challenges of crime. Evolve mechanism whereby forensic service is available in investigation of all heinous crime, and whenever required in situations demanding public interest.

Help in combating corruption, help in protecting environment and endangered species (flora & fauna), help in upholding human rights and help in preventing human trafficking.

Public awareness by disseminating knowledge through media (print, electronic and exhibitions) about the cases solved with the forensic tools and techniques, means of a proactive forensics, which is deterrent to the wrong doers and potential criminals. Also educating public about do’s and don’ts on the spot, drug menace, save oneself from cyber crime and about road safety.

Encouraging use of more forensic inputs to put investigation on the right track in the beginning itself so as to save police man hours and saving public from unwarranted inconveniences.

Promoting ethics in forensics.

I WANT TO MAKE ONE OF THE BEST LAB IN THE COUNTRY.

Virbhadra Singh
PREFACE

India has been witnessing a new thrust in policy and planning in Himachal Forensics since 2014 when the First Five Year Perspective Plan (2014-2019) was approved. The struggle for a separate entity with distinct identity, size and status for Himachal Forensics has been a journey of nearly three decades. The dynamic leadership of its pioneers laid solid unshakeable foundations that enabled Himachal Forensics to take giant leaps towards development in terms of Physical infrastructure: buildings, equipments & vehicles for mobility; as also digital infrastructure: 2 Mbps internet facility to all labs, LAN, Wi-Fi (in pipeline) A First: Expert Testimony through Video Conferencing from FHQ to courts, then new specialties viz. voice analysis, digital forensics, brain mapping and fingerprint bureau (in pipeline), A First: Disaster Victim Identification Cells, Directorate of Forensic Science notified in the Business of the Government of Himachal Pradesh (Allocation) Rules, 1971 besides recruitment of personnel. All this helped in treading the path of success enabling it to emerge as a premier institution with a blazing trail of footprints for others.

First time funds to the tune of Rs. 1.0+0.50 crore from plan and non-plan head were directly sanctioned to augment instrumentation in forensic investigations. Also, the planning department has sanctioned Rs. 23.80 lacs under State Innovation Fund. Likewise, Rs.76.50 lacs were sanctioned under Modernization of Police Forces Scheme (MHA/GOI) after the year 2013 for equipments and scene of crime vehicles.

Quality reports encompass the soul of quality work of an organization. As such the Directorate of Forensic Science, Himachal Pradesh is in the process of accreditation. The DNA specialty of State FSL and Document specialty of RFSL, Dharamshala has successfully participated with Ibero-American Academy of Criminalistics & Forensic Studies (USA) and Asia’s best Govt. Forensic Lab in Hong Kong, respectively for Inter Laboratory Comparison (ILC) exercise.

The scene of crime is a treasure of clues and by embracing application of modern forensic tools and techniques, the forensic intelligence helps in understanding etiology of crime including blind cases. The famous case of a missing child of the capital city (a blind murder case) was exclusively solved by forensic intelligence and forensic tools & techniques even after a period of two years where the investigation agencies were clueless and groping in the dark. And the message that has percolated down the society is that perpetrators of crime seldom go unpunished when forensic interventions are used timely & effectively. Likewise, a challenging blind case of homicide-cum-sexual assault in broad day light in a sub-divisional
level town was solved by forensics (by examination and reconstruction at the scene of crime and by analysis of clues in the lab). A First: helicopter service was used in a case of missing foreign national to reach the scene of occurrence which otherwise was inaccessible.

A case of National Investigation Agency (MHA/GOI) was accepted for analysis which was in consonance with the State FSL and RFSLs having been recognized as centers for analysis of crime cases of the NIA. Also, the Central Bureau of Investigation (MHA/GOI) in the recent past had associated Forensic Experts from the DFS/HP for investigation of CBI cases.

The pilot project “One District-One Police Station” (ODPS) was expanded to include PS Sadar Chamba in Northern Range and PS Sadar Mandi in Central Range with a view to ensure delivery of forensic reports within fifteen days to fast-track justice delivery system.

Similarly, for hassle free entry of specially abled persons, traction elevators in both the range lab buildings were made available by incurring expenditure about Rs 45.0 lacs and the traction elevator facility was inaugurated by the Hon’ble Chief Minister, Himachal Pradesh.

Teaching and training to students as well stakeholders was regularly imparted. A seminar on DNA Technology for 35 GOs of different wings of criminal justice delivery system viz. officers from judiciary, police ,prosecution, forensics and medical was organized and top faculty from outside was also associated. Also, the forensic officers were deputed from time to time to national conferences to update knowledge as well as to present research papers.

The syllabus of Departmental Examination (for Gazetted Officers of the department) conducted by HIPA, Shimla (prepared in 1999) was revised to incorporate topics Cyber Forensics, DNA and Voice Identification etc. The Govt. and Department Examination Board has approved the revision of syllabus of technical paper. Likewise, the H.P. Document and Finger Print Examiner Rules- 2017 were prepared and got approved from the Govt.

Himachal Forensics is committed to provide responsive and efficient forensic service to the investigation agency, to the courts and to the people of the state and ensure a balanced development of the institution as well as the personnel working there in.

(Dr. Arun Sharma)
Director Forensic Science
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DIRECTORATE OF FORENSIC SCIENCE

INTRODUCTION:

State Forensic Science Laboratory, Himachal Pradesh was created on 13-12-1988 at Police Headquarters, Shimla. State FSL primarily caters to the needs of investigative agencies viz. Police, Vigilance, CID. Also, rendering service to the judiciary, universities, boards, banks, enquiry commissions and other Government Departments. Before State FSL came into existence, the said departments were dependent on central government institutions: Central Forensic Science Laboratories, Government Examiner of Questioned Documents and Serologist to the Government of India, Kolkata. State FSL started functioning from barracks of Police complex Bharari, Shimla with two divisions encompassing four specialities namely Biology & Serology and Chemistry & Toxicology. State FSL moved to Junga in 1996 and started functioning from the premises of Police Training School. Two more divisions encompassing four specialities viz. Documents & Photography and Physics & Ballistics were created in 1997 and became functional in the year 2000. In the year 2006, two more divisions viz. DNA and NDPS were created in State FSL, Junga. In order to ensure independent functioning of an investigating agency working on scientific principles, the State FSL was placed directly under Home & Vigilance department in the year 2005. To give a fillip to the investigation, two Regional FSLs were created at Dharamshala & Mandi in 2006 and have been housed in newly constructed complexes in 2012 and 2013. Further, for more administrative and financial autonomy, the Director, State FSL was declared Head of the Department in the year 2009 and included in the government Civil List in 2014.

A First: Disaster Victim Identification cells were established in State FSL & RFSLs in 2014-15 as per Interpol guidelines. The new nomenclature Directorate of Forensic Science (DFS) has been approved by the Govt. in accordance with the HP Police Act, 2007 and notified in the Business of the Govt. of Himachal Pradesh (Allocation) Rules, 1971 in the year 2015-16.

New specialities like Voice Analysis & Digital Forensics were sanctioned for State FSL, DNA facilities at RFSLs and first District Mobile Forensic Unit (DMFU) at Bilaspur in 2015-16. For disposal of Bio-Medical Waste, the scientific and pollution free method was adopted in accordance with Biomedical Waste Rules. With the aim to create all modern facilities under one roof required in crime investigation, a polygraph machine was transferred by the PHQ to the DFS/HP, and the proposals for creation of Forensic Psychology division and integration of Finger Print Bureau with the DFS/HP is under active consideration of the govt. Also, the State FSL and RFSLs are the approved centres for crime exhibits analysis of National Investigation Agency (NIA).
MANDATE

- **Analysis of Crime Exhibits/Clues in the Lab**
- **Scene of Crime Examination & Reconstruction**
- **Forensic Intelligence/Lead**
  - (to put investigation on the right track in the beginning itself)
- **Expert Testimony in Courts/Enquiry Commissions**
- **Teaching, Training and Public Awareness**
- **Research & Development in Forensics**

His Excellency Acharya Dev Vrat, Governor Himachal Pradesh in Forensics Exhibition during 49th Annual Police and Sports Duty Meet at Dharamshala on 15.11.16.
DUTIES AND RESPONSIBILITIES

Director

- Examination, evaluation, comparison of clue materials and to submit scientific reports.
- To testify or give evidence before Judicial/Semi-judicial/Inquiry authority as and when required.
- Examination of scene of crime and submission of reports.
- Research in Forensic Science and related fields.
- Teaching and training of IOs/NGOs of Police Prosecution and Judiciary in Forensic Science.
- Any other scientific and Administrative work assigned by the, senior officers /Government.
- Besides above duties, he is the head of the department as well as Controlling Officer and has to perform duties related to it. He has to manage all the scientific matters for the overall scientific development of the Institution for the incorporation of new technology.

Deputy Director

- Examination, evaluation, comparison of clue materials and to submit scientific reports.
- To testify or give evidence before Judicial/Semi-judicial/Inquiry authority as and when required.
- Examination of scene of crime and submission of reports.
- Research in Forensic Science and related fields.
- Teaching and training of personnel’s in Forensic Science and related fields.
- He/she will be responsible for efficient working of the division(s) and expeditious disposal of work/cases pertaining to the division(s) by giving quality reports.
- He/she will render all assistance to the D/FSL in updating and introducing new technologies in the division(s).
- Any other work related to scientific or administrative nature assigned to him by the Director FSL/Government.
- Besides above duties, he is required to assist the Director, FSL in the matters of scientific and administrative nature. He is the supervisory officer and Divisional in-charge of at least two Divisions and has to guide the Scientists working under him. Management of Scientific and Administrative work has also to be looked after by him under the guidance of Director, State FSL, HP.

Assistant Director

- Examination, evaluation, comparison of clue materials and to submit scientific reports.
- To testify or give evidence before Judicial/Semi-judicial/Inquiry authority as and when required.
- Examination of scene of crime and submission of reports.
- Research in Forensic Science and related fields.
- Teaching and training of personals in Forensic Science and related fields.
- He/she will be responsible for efficient working of the division(s) and expeditious disposal of work/cases pertaining to the division(s) by giving quality reports.
- He/she will render all assistance to the D/FSL in updating and introducing new technologies in the division.
- Any other work assigned by senior officers/Govt.
- He/she is Divisional in-charge of his/her division. He also supervises and guide the scientific and technical staff of his division concerned in Administrative and scientific matters.
Scientific Officer
- Examination, evaluation, comparison of clue materials and to submit scientific reports.
- To testify or give evidence before Judicial/Semi-judicial/Inquiry authority as and when required.
- Examination of scene of crime and submission of reports.
- Research in Forensic Science and related fields.
- Teaching and training of personals in Forensic Science and related fields.
- He/she will be responsible for efficient working of the division(s) and expeditious disposal of work/cases pertaining to the division(s) by giving quality reports.
- He/she will render all assistance to the D/FSL in updating and introducing new technologies in the division.
- Any other work assigned by senior officers/Govt.
- He/she is also in-charge scientific unit of staff working under him/her and also has to guide and supervisor the Unit.

Scientific Assistant
- Examination, evaluation, comparison of clue materials and to submit scientific reports.
- To assist the officers/Experts in examination of scene of crime and the exhibits in the laboratory.
- Assistance in research in Forensic Science and related fields under the supervision of experts.
- Assistance in practical demonstration during teaching and training.
- Any other work assigned by the senior officers.
- He/she will also be assist in keeping the laboratory and equipments in order for scientific examination and shall help in expeditious disposal of work/cases pertaining to the division and also to help in the preparation of quality reports.
- He/she will also render all assistance to the senior officers in the division in updating and introducing new technology in the division.

Laboratory Assistant
- He/she is required to assist SA/SO/AD/DD and Director in examination evaluation and comparison of clue material especially for systematic arranging of exhibits and reagents.
- To maintain register of the division concerned for making entries of the exhibits/cases received in the division. He/she also has to maintain all the records of chemical, glassware and equipments and to prepare date whenever required.
- To perform another duties assigned by senior officers.

Laboratory Attendant
- To clean the laboratory tables / apparatus sinks, shelves, furniture and other items in the division.
- To hold and carry exhibits, glass-apparatus, reagents from where required.
- To cut open /seal the exhibits of the Division in the presence of experts and to carry them from one Division to another or to Crime branch.
- To perform any other duties assigned by senior officers for the cleanliness of the laboratory as a whole and for carrying materials and other items for the functioning of the laboratory.
HIMACHAL PRADESH FORENSIC SCIENCE DEVELOPMENT BOARD


NOTIFICATION

The Governor, Himachal Pradesh, is pleased to constitute the Himachal Pradesh Forensic Science Development Board in the following manner in order to encourage the development and use of Forensic Science for investigation of crime in the State:-

Hon’ble Chief Minister, Himachal Pradesh. (Chairman)
Chief Secretary to the Govt. of H.P. (Vice-Chairman)
Advocate General, Himachal Pradesh, Shimla. (Member)
Addl. Chief Secretary/Pr. Secretary (Finance) to the Govt. of Himachal Pradesh. (Member)
Pr. Secretary (Home) to the Govt. of H.P. (Member)
Director General of Police, Himachal Pradesh. (Member)
Director-cum—Chief Forensic Scientist, Directorate of Forensic Science, MHA, GOI, New Delhi or Regional Forensic Science Lab. Chandigarh. (Member)
Director, Vigilance, Himachal Pradesh. (Member)
Director, Prosecution Govt. of Himachal Pradesh. (Member)
Director, State Forensic Science Lab. H.P. (Member Secretary)
Addl. Director General (APT), H.P. Shimla. (Member)
Professor & Head, Deptt. Of Forensic Medicine, IGMC, Shimla. (Member)

The Vice Chairman shall preside over meetings of the Board in the absence of the Chairman. The Board may co-opt experts for any meeting of the Board. TA/DA of members and experts, if any, shall be borne by parent organization. The Board will be serviced from the Forensic Science Lab. Junga.

The Board shall meet quarterly to monitor the development proper functioning and progress of the Forensic Science set-up in Himachal Pradesh and shall approve a five year Perspective Plan as well as Annual Plans of Action for induction of Forensics into investigation and prosecution.

Terms of reference:

The terms of reference of the Board shall be as under:-

1. To lay down the basic policies in application of Forensic Science to crime investigation and to ensure progressive development of Forensic Science services in the State in a time bound manner.
3. To ensure autonomy, transparency, impartiality and credibility of the Forensic Science reports in the State and that of the Forensic Science institutions.
4. To identify needs for creation of different specialties/facilities in Forensic Science set-up in the State and providing facilities for the same. This will include creation of Regional Forensic Science Laboratories with mobile units at Range headquarters in Himachal Pradesh for providing quick response Forensic Science at the scene of crime.
5. To ensure that forensic inputs are effectively utilized in investigation and prosecution and to lay down training and communications policies for the purpose.
6. To analyze important cases of investigation/prosecution failure to identify additional forensic inputs that may be necessary to raise the success rate of conviction.

(BY ORDER)
Chief Secretary
to the Government of Himachal Pradesh

First time Five Years Perspective Plan 2014-2019 was approved in 8th meeting of HP Forensic Science Development Board held on 22.07.14. The major targets of the 1st year (2014-2015) of the approved perspective plan were achieved and have even exceeded the planned targets e.g. first time the department was included in business of the Govt. of Himachal Pradesh (Allocation) Rule 1971 and the Chief Minister Forensic Modernization scheme for purchase of major equipments was approved.

Sh. Prabodh Sexena, Pr. Secy. (Home & Vigilance) at RFSL, NR, Dharamshala
PURCHASE OF STORES

There is no separate wing to effect purchases in the department. In order to bring transparency, the Government vide notification No. Home-C(C)14-1/2 dated 13.03.2007 constituted a committee to have all major purchases in Machinery & Equipment and Material & Supply budget head through the purchase committee. The composition of the committee is as under:

NOTIFICATION

In supersession to this department notification of even number dated 27.2.2007, the Governor, Himachal Pradesh is pleased to re-constitute a purchase committee consisting of following delegates in the office of State Forensic Science laboratory, Junga to effect purchases and authorization of expenditure in Machinery and Equipments/Material and Supplies from sources as required/necessitated in view of provisions contained in H.P. Financial Rules, 1971:-

1. Director, FSL  
   Chairman
2. Commandant/Asstt. Commandant  
   Police Battalion at Junga.  
   Member
3. Assistant Director/Scientific Officer  
   of concerned Division of SFSL.  
   Member
4. S.O. (Accts.), PHQ  
   Member

(BY ORDER)

Pr. Secretary (Home)  
to the Government of Himachal Pradesh.

A view of Polygraph Machine
STATE FORENSIC SCIENCE LABORATORY

INTRODUCTION:

Headquarters of Himachal Pradesh Forensics Services and State FSL are located at Jungra. Junga remained capital of erstwhile princely state Keonthal ruled by Chandrabansi dynasty. HH Hitender Sen, 77th Raja, was the last ruler of Keonthal state. Junga is strategically located at the centre of the triangle formed by Shimla, Chail and Kufri, famous tourist destinations, at an elevation of 5350ft. State FSL is located at a distance of 25 km from the state capital of Himachal Pradesh, where the second oldest forensic institution in the world ‘GEQD Shimla’ was established in 1904. The weather at Junga remains pleasant throughout the year.

The State FSL complex comprises of an administrative block, laboratory blocks and residential blocks. The covered floor area of administrative & laboratories blocks is about 33000 square feet. The State FSL received cases for examination from the districts of southern range viz. Shimla, Kinnaur, Solan and Sirmour. For DNA analysis and NDPS cases, the State FSL caters to the needs of all twelve districts of Himachal Pradesh. Analysis of crime exhibits and research problems require consultation of literature. Accordingly, a library with books and journals is available. To keep pace with international scenario, the institution subscribes to journals and is on the mailing list of Royal Canadian Mount Police Journal (RCMP) and FBI bulletin (U.S.A) since 2013.

The construction work of Forensics Headquarters complex-cum-Super-Speciality block with an estimated cost of Rs.11 crores has been started and is in full swing. There will be multi-storey complex with lift facility and car parking and will house new specialities, conference hall etc. A First: Expert testimony through Video Conferencing facility was established at Forensics Headquarters and inaugurated by Hon’ble Chief Minister, HP which is being utilized to save man hours in transit as well as state exchequer on TA/DA. The State FSL is being modernised with advanced instrumentation.

WORKING:

There are six scientific Divisions. Two new divisions* were sanctioned. Acquisition of manpower and equipment is in progress for new specialties :
- Biology & Serology Division
- Chemistry & Toxicology Division
- Physics & Ballistics Division
- Documents and Photo Division
- NDPS Division
- DNA Division
- Voice Analysis Division*
- Digital Forensics Division*

* Expert Testimony through Video Conferencing from Forensic Headquarters.
Evidences of biological origin play a vital role in cases of homicide, suicide or accidental death, sexual assaults and in cases of wildlife (flora and fauna) besides ante-mortem or postmortem drowning. The clues are examined for the purpose of identification and comparison with control samples. Types of evidences examined are given as under:

- Blood, semen and saliva
- Vomit, faecal matter
- Tissues and skin in partially burnt bodies/dowry deaths/hanging cases
- Bone (animal and human) age, sex in respect of human bones
- Hair (animal & human), fibre, feather
- Maggots (Forensic Indicators)
- Wood and plant identification
- Wildlife Cases (examination of animal skin, blood, flesh)
- Diatom from bones

### CASE STATISTICS

![Bar chart showing case receipt and disposal from 2012-13 to 2016-17](chart1.png)

**District wise case receipt 2016-17**

- Shimla: 98
- Solan: 86
- Sirmaur: 76
- Kinnaur: 8
- Kullu: 17
- Bilaspur: 5
- Mandi: 2
- Kangra: 1
- Una: 3
- Chamba: 1

![Pie chart showing districtwise case receipt](chart2.png)
CHEMISTRY & TOXICOLOGY DIVISION

Himachal Pradesh is known as fruit bowl and insecticides and pesticides are widely used. That makes the poisons’ accessibility easy to the common man and cases of deaths due to poisons are more. In addition more than one thousand deaths are reported on the roads per annum due to road accidents in Himachal Pradesh thereby contributing towards viscera analysis workload. The division undertakes examination of clue materials such as:

- Chemical identification of unknown substances
- Poisons of various types
- Petroleum products residues in arson, dowry deaths & in adulteration cases
- Determination of drunkenness from blood and urine
- Acid and alkali attacks
- Grease, Wax, natural oils and resins
- Trap cases
- Hooch tragedy cases
- Cosmetics and organic dyes
- Liquor cases

CASE STATISTICS

District wise case receipt 2016-17

- Solan
- Shimla
- Sirmaur
- Kinnaur
- Una
- Bilaspur
- Mandi
- Kangra

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PHYSICS & BALLISTICS DIVISION

The founder Director examined and reported physics & ballistics cases till September 1993 when he demitted the office. Examination work stopped and commenced again when new staff was posted in 1999. The physics & ballistics division undertakes examination of clue materials such as:

- Tool marks & telephone cables
- Footprints, shoe prints & tyre marks
- Paint and glass
- Building materials & bitumen
- Paper & fiber
- Metal adulteration in jewellery
- Soil, sand & grit
- Shining globule formation in electric short circuiting
- Resuscitation of number of stolen vehicle chassis and firearms
- Firearms, ammunition & gunshot residues etc
- Photo comparison
- Facial

CASE STATISTICS

Distri

b wise case receipt 2016-17

- Solan
- Shimla
- Sirmour
- Kinnaur
- Kangra
- Una
- Mandi
- Chamba
- Kullu
- Bilaspur
- Hamirpur
The founder Director examined and reported cases of handwritings, frauds & forgery, alteration, obliteration, additions, substitutions etc., till September 1993. Examination work stopped and commenced again when new staff was posted in the year 1999. In 2010, with new initiative, cases pertaining to computer forensics which include analysis of hard disks, pen drives, memory cards, floppies, compact disks, digital video recorder, etc. commenced. In 2013, cell phone forensics became operational. The division undertakes examination of:

- Handwritings, signatures, type writings, computer print outs & printed materials
- Additions, Alteration, obliteration, substitutions, erasures
- Stamps & seals, counterfeit currency
- Security documents, currency, passports, credit & debit cards
- Burnt & soiled documents, paper and ink analysis
- Scene of crime photography
- Inter and intra division photography

**CASE STATISTICS**

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NDPS DIVISION

With the rise in the number of Narcotic drugs and psychotropic substances cases in Himachal Pradesh due to influx of foreign nationals for world famous MALANA cream (hashish derived from the flower of female cannabis ‘Bhang’ plant), the Government of Himachal Pradesh established dedicated NDPS division in 2006. There was substantial increase in the receipt of cases due to special drive launched against drug abuse by the investigation agencies. This division noted an increase in the amount of high potency drugs such as LSD, amphetamine (MDA) & methamphetamine (MDMA) submitted during the period. The division undertakes examination of the followings:

- Opium, poppy straw, heroin/smack/brown sugar
- Charas, ganja, bhang & hashish oil
- Cocaine
- LSD, amphetamines & methamphetamines
- Benzodiazepines & pharmaceutical preparations containing NDPS drugs
- Manufactured & Designer drugs

CASE STATISTICS
With the rise in offences against body like sexual assaults, homicides etc, there was a need to provide better linking evidence. The government of Himachal Pradesh created dedicated DNA division in the year 2006. With the new initiative, the technique was introduced in Biology & Serology division by developing infrastructure and made functional in 2008. DNA profiling is done in cases of disputed parentage, homicide, sexual assaults, burglary & in identity problems. The division undertakes DNA profiling of biological clues such as:

- Human body fluids (blood, semen, saliva, urine etc.)
- Human body tissues (hair, skin, flesh & bone)
- Nail bed materials
- Teeth
- Vomit
- Foetal remains & retained product of conception
- Cigarette butts

**CASE STATISTICS**

![Graph showing case statistics from 2012-13 to 2016-17]

![Pie chart showing district-wise case receipt for 2016-17]

Shimla
- Solan
- Sirmour
- Kinnaur
- Chamba
- Kangra
- Una
- Lahaul & Spiti
- Kullu
- Mandi
- Bilaspur
- Hamirpur
## TEACHING & TRAINING

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<th>Name &amp; Designation</th>
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<tr>
<td>Dr. Arun Sharma, Director</td>
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<tr>
<td>Dr. G. C. Thakur, Assistant Director</td>
<td>15</td>
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<td>Sh. Visheswar Sharma, Assistant Director</td>
<td>08</td>
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<td>Dr. Vivek Sahajpal, Assistant Director</td>
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<td>Sh. Kapil Sharma, Assistant Director</td>
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<td>Sh. Nasib Singh, Scientific Officer</td>
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</tr>
<tr>
<td>Sh. H.K. Bhardwaj, Scientific Assistant</td>
<td>01</td>
</tr>
<tr>
<td>Sh. Rakesh Rana, Scientific Assistant</td>
<td>06</td>
</tr>
<tr>
<td>Sh. Jaswant Singh, Scientific Assistant</td>
<td>09</td>
</tr>
</tbody>
</table>

## TRAINING ATTENDED

Training is a key feature rather essential aspect of Human Resource Management. Training interventions often aim to affect the attitude as a way of honing up the skill and behavior. Accordingly, officers and officials are deputed from time to time to undergo training in different institutions.

<table>
<thead>
<tr>
<th>Name</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. G.C. Thakur, Dr. V.S. Jamwal, Sh. Visheswar Sharma</td>
<td>• Laboratory QMS &amp; Internal Audit as per ISO/ IEC-17025-2005 on 26-29.4.16 at STQC Noida (UP).</td>
</tr>
<tr>
<td>Sh. Visheswar Sharma</td>
<td>• Document Examination for Criminal Justice Functionaries on 4-8.4.16 at NICFS, New Delhi.</td>
</tr>
<tr>
<td></td>
<td>• Communication and Presentation Skills on 8-10.8.16 at HIPA, Shimla.</td>
</tr>
<tr>
<td>Dr. Sanjeev Kumar</td>
<td>• Office Procedure and Financial Administration from 26.9.16 to 1.10.16 at HIPA, Shimla.</td>
</tr>
<tr>
<td></td>
<td>• Training on Website up gradation of DFS on 6.4.16 at NIC, Shimla.</td>
</tr>
<tr>
<td></td>
<td>• Training programme on PMIS on 8.2.17 at NIC, Shimla.</td>
</tr>
<tr>
<td>Sh. Nasib Singh Patial</td>
<td>• Investigation of Road Accidents on 15-18.11.16 at NICFS, New Delhi.</td>
</tr>
<tr>
<td>Sh Rajesh Kumar</td>
<td>• Forensic Science &amp; Forensic Medicine on 17-21.10.16 at NICFS, New Delhi.</td>
</tr>
<tr>
<td>Sh. Kuldeep</td>
<td>• Noting &amp; Drafting on 15-17.12.16 at HIPA, Shimla.</td>
</tr>
<tr>
<td>Sh. Shani Kumar</td>
<td>• Noting &amp; Drafting on 15-17.12.16 at HIPA, Shimla.</td>
</tr>
<tr>
<td></td>
<td>• Training programme on PMIS on 8.2.17 at NIC, Shimla.</td>
</tr>
</tbody>
</table>
## CONFERENCE/SEMINAR/WORKSHOP/SYMPOSIUM ATTENDED

<table>
<thead>
<tr>
<th>Name</th>
<th>Remarks</th>
</tr>
</thead>
</table>
| Dr. Arun Sharma    | • Conference on Human Identification Solutions (HIDS-2016) on 10-11.6.16 at Thermofisher Scientific, Gurgaon.  
• Seminar on National Standards for Forensic DNA profiling at LNJN National Institute of Criminology & Forensic Science MHA/GOI, New Delhi on 23-24.3.17.  
• National Workshop on Management of Cyber Forensic Laboratories at Raksha Shakti University, Ahmadabad, Gujarat on 17-18.3.17.  
• Seminar on DNA Technology for the officers of Judiciary, Prosecution, Police, Medical and Forensics organized at RFSL, Dharamshala on 26.3.17. |
| Dr. G.C. Thakur    | • Workshop on RTI Act – 2005 on 1.10.16 at HIPA, Shimla.                  |
| Sh. Visheshwar Sharma | • National Conference on Forensic Science on 19-21.12.16 at Punjabi University, Patiala. |
| Dr. Vivek Sahajpal | • Conference on Human Identification Solutions (HIDS-2016) on 10-11.6.16 at Thermofisher Scientific, Gurgaon.  
• Workshop on DNA Technology for Judiciary, Public Prosecutors and Police Officers on 26.3.2017 at RFSL, NR, Dharamshala. |
| Sh. Nasib Singh Patial | • National Conference on Future perspectives of Forensic Science in India on 9-10.3.17 at Dr. APJ Abdul Kalam Institute of Forensic Science & Criminology, Jhansi, India. |
| Dr. Jagjeet Singh  | • National Conference on Forensic Science on 19-21.12.16 at Punjabi University, Patiala. |
| Sh. Satya Prakash  | • Conference on Digital Investigation Conference and Exhibition – 2017 on 25.2.2017 at India Habitat Center, Lodhi Road, New Delhi. |

## WORKSHOP/SEMINAR/MEETING ORGANIZED

An Annual Administrative Performance Meeting, at Directorate of Forensic Science, Himachal Pradesh, was organized for the officers of State FSL and Regional FSLs, Dharamshala & Mandi with a vision: Plan for the year 2016-17, R&D, and novelty in the working so as to achieve excellence on the professional front.
COURSES ORGANIZED

With the aim to enhance use of forensics in police investigation, also mandated by the enactment of HP Police Act, 2007, courses were organized. By adopting scientific means, professionalism in crime investigation is bound to increase. Similarly, it has become imperative to impart training to the officers of Judiciary and the prosecution department for better understanding, evaluation and appreciation of forensic reports in dispensation of justice.

<table>
<thead>
<tr>
<th>Course</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Five days induction training programme for Newly Appointed Civil Judge (Jr. Division) on 3-7.10.16</td>
<td>07</td>
</tr>
<tr>
<td>Five days induction training programme for Newly Appointed Civil Judge (Jr. Division) on 13-17.2.17</td>
<td>04</td>
</tr>
<tr>
<td>Training on Forensic Science for HPS, Probationer on 27.2-5.3.17</td>
<td>01</td>
</tr>
</tbody>
</table>

A Group Photograph: Faculty and Newly Recruited Judicial Officers during Course on Orientation to Forensic Science, as a part of Induction course of HP State Judicial Academy, at DFS HP on 3-7.10.16.
<table>
<thead>
<tr>
<th>Name &amp; Designation</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Arun Sharma</td>
<td>• Live talk on Career Avenues in Forensic Science at Doordarshan Kendra, Shimla on 25.10.16.</td>
</tr>
<tr>
<td>Director</td>
<td>• Invited lecture under UGC Innovative Programme to the Deptt. of Genetics( Forensic Science) at MDU, Rohtak on 20.3.17.</td>
</tr>
<tr>
<td></td>
<td>• Invited talk in Seminar on DNA Technology at RFSL, Dharamshala on 26.3.17.</td>
</tr>
<tr>
<td>Dr. G.C. Thakur</td>
<td>• Live talk on Role of Forensic in Crime Investigation on Doordarshan Kendra, Shimla in the month of November, 16.</td>
</tr>
<tr>
<td>Sh. Visheshwar Sharma</td>
<td>• Co-chaired a session in National Conference on Forensic Science on 19.12.16 at Punjabi University, Patiala.</td>
</tr>
<tr>
<td>Dr. Vivek Sahajpal</td>
<td>• Invited lecture in Seminar on DNA Technology at RFSL, Dharamshala on 26.3.17.</td>
</tr>
</tbody>
</table>

A Group Photograph of Chief Guest Hon/ble Mr. Justice VK Sharma, Chairman HP State Administrative Tribunal, Delegates and Faculty members during One Day Seminar on DNA Technology at RFSL, NR on 26.3.17.
INTERNERSHIP

Analysis of clues in the forensic lab has direct bearing on lives and liberties of people. Accordingly, technically qualified manpower is essential to undertake the task. With this motive, students from different universities in different disciplines were imparted training to generate professionals.

<table>
<thead>
<tr>
<th>Sr. No</th>
<th>Institute/University</th>
<th>Date</th>
<th>No. of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Amity University, Noida (UP)</td>
<td>20-26.5.16</td>
<td>03</td>
</tr>
<tr>
<td></td>
<td></td>
<td>16.5-18.6.16</td>
<td>01</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1-30.6.16</td>
<td>01</td>
</tr>
<tr>
<td>2.</td>
<td>Institute of Forensic Science, Gujarat Forensic Science University, Gandhinagar, Gujarat</td>
<td>19.5-25.6.16</td>
<td>02</td>
</tr>
<tr>
<td>3.</td>
<td>LNJN National Institute of Criminology &amp; Forensic Science, Delhi</td>
<td>23.5-22.6.16</td>
<td>08</td>
</tr>
<tr>
<td>4.</td>
<td>Amity University, Gurgaon (HR)</td>
<td>26.5-25.6.16</td>
<td>02</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1-30.6.16</td>
<td>03</td>
</tr>
<tr>
<td>5.</td>
<td>Punjab University, Chandigarh (UT)</td>
<td>6-27.6.16</td>
<td>02</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5.6-15.7.16</td>
<td>06</td>
</tr>
<tr>
<td>6.</td>
<td>Chandigarh University, Mohali (PB)</td>
<td>1-30.6.16</td>
<td>04</td>
</tr>
<tr>
<td>7.</td>
<td>Dr. Hari Singh Gour University, Sagar (MP)</td>
<td>2-30.6.16</td>
<td>02</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3-30.6.16</td>
<td>01</td>
</tr>
<tr>
<td>8.</td>
<td>Maharaja Agrasen University, Baddi (HP)</td>
<td>15.6-15.7.16</td>
<td>06</td>
</tr>
<tr>
<td>9.</td>
<td>Shoolini University of Biotechnology and Management Sciences, Solan (HP)</td>
<td>16.6-15.7.16</td>
<td>01</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1-30.7.16</td>
<td>03</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15.6-6.8.16</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2-31.1.17</td>
<td>02</td>
</tr>
<tr>
<td>10.</td>
<td>Gurughasidas Vishwavidyalaya, Bilaspur (CG)</td>
<td>15.7-12.8.16</td>
<td>05</td>
</tr>
<tr>
<td>11.</td>
<td>H.P.U. Summer Hill, Shimla (HP)</td>
<td>4-31.1.17</td>
<td>01</td>
</tr>
</tbody>
</table>
### VISITS

<table>
<thead>
<tr>
<th>Title</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students from Homeopathic Medical College Solan on 4.10.16.</td>
<td>59</td>
</tr>
<tr>
<td>Students from G.S.S.S Junga Distt. Shimla on 6.10.16</td>
<td>50</td>
</tr>
<tr>
<td>Students from M.Sc. Forensic Science, Kurukshehra University, Haryana. on 7.11.16</td>
<td>38</td>
</tr>
<tr>
<td>Students from Homeopathic Medical College, Solan on 16.11.16</td>
<td>48</td>
</tr>
<tr>
<td>Medical Officers, as a part of induction course, from State Health &amp; Family Welfare Training Centre, Parimahal, Shimla on 21.11.16</td>
<td>23</td>
</tr>
<tr>
<td>Students from Department of Forensic Science, SGS. Campus, Jain university Bengaluru on 8.2.17</td>
<td>34</td>
</tr>
<tr>
<td>Medical Officers, as a part of induction course, from State Health &amp; Family Welfare Training Centre, Parimahal, Shimla on 9.2.17</td>
<td>24</td>
</tr>
<tr>
<td>Student from Shimla Nursing College, Annadale, Shimla on 15.2.17</td>
<td>38</td>
</tr>
<tr>
<td>Students from G.S.S. Junga, District Shimla on 22.2.17</td>
<td>113</td>
</tr>
<tr>
<td>Students from G.S.S. Badarana, District Hamirpur on 24.2.17</td>
<td>24</td>
</tr>
<tr>
<td>Students from Himachal Pradesh University, Shimla. on 28.3.17</td>
<td>78</td>
</tr>
</tbody>
</table>

Faculty and Trainee Medical Officers from State Health & Family Welfare Training Centre, Shimla at DFS, HP.
<table>
<thead>
<tr>
<th>Visitor(s)</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Anil Kumar, Department of Zoology, Kurukshetra University, Kurukshetra</td>
<td>07.11.2016</td>
</tr>
<tr>
<td>Dr. Sukhdeep Kaur, Department of Forensic Medicine and Toxicology</td>
<td>16.11.2016</td>
</tr>
<tr>
<td>Dr. V.K. Kashyap, Former Director, DFSS, MHA, New Delhi</td>
<td>27.01.2017</td>
</tr>
<tr>
<td>Dr. R. Shanti Iyer, Jain University, Bengaluru</td>
<td>08.02.2017</td>
</tr>
<tr>
<td>Ms Naina, Jaspreeet Singh Minhas, Nikita Tahim, Vatsala Chaudhary Trainee Judicial Officer, Shimla</td>
<td>17.02.2017</td>
</tr>
<tr>
<td>Sh Sunil Kumar, IPS Commandant 1st HPAP, Junga</td>
<td>20.05.2016</td>
</tr>
<tr>
<td>Dr. R.P. Joshi, CEO &amp; Technical Advisor at RI Instruments &amp; Innovation INDIA - Research India</td>
<td>12.12.2016</td>
</tr>
<tr>
<td>Prof. A. K. Bhatt &amp; Wamik Azami Deptt. of Biotech., HPU Shimla</td>
<td>28.03.2017</td>
</tr>
</tbody>
</table>

Dr. V.K. Kashyap, Former Director, DFSS, MHA, GOI, New Delhi at DFS, HP

Dr. V.K. Kashyap, Former Director, DFSS, MHA, GOI, New Delhi at DFS, HP
INTRODUCTION:

Dharamshala became headquarters of District Kangra in 1855 and is located in the shadow of Dhauladar Mountains. The area known as Dharamshala was annexed by the British in the year 1848 and was notified as the second capital of the state in 2017. The area was ruled by the Katoch dynasty of Kangra said to be the oldest serving royal family in the world. Kangra is famous for the Kangra tea. There are many temples in Kangra including Masroor Rock Cut temple dating back to 8th century and have carvings similar to Kailash temple at Ellora.

In the first meeting of the Himachal Pradesh Forensic Science Development Board, the Government approved setting up of Regional Forensic Science Laboratory, Northern Range to cover the farthest ends and to expedite delivery of forensic reports from the lab. In the beginning (2008), the RFSL, NR Dharamshala was temporarily housed in a rented accommodation. Now the RFSL has moved to its own new complex in 2012 and has covered floor area of about 10,000 square feet. The RFSL Dharamshala is catering to the needs of three districts viz. Kangra, Chamba and Una. The forensic experts are rendering services in the field of scene of crime examination and providing regular faculty to the Police Training College, Daroh. The RFSL is on the mailing list of RCMP journal (Canada) and FBI bulletin (USA).

The institution has been in forefront in introducing novelty and has taken lead on many fronts. On 3.3.13 a Pilot Project “One District one Police Station” (OPDS), first of its kind in the country, has been launched by the Hon’ble Chief Minister, Himachal Pradesh, Sh. Virbhadra Singh during Silver Jubilee Year of the State FSL. Then the pilot project was expanded to include PS Sadar Chamba on 31.7.2016 during International Minjar Fair.

Sometimes, the available techniques are not delivering good results that necessitate the use of new technology. Forensic XP-4010 D, second in the country, was acquired under Modernization of Police Forces Scheme, GOI. Further, Inter Laboratory Comparison (ILC), a prelude to NABL accreditation, Forensic experts of document specialty had successfully participated with Asia’s best Govt. Forensic Lab in Hongkong. On 16.4.15 Hon’ble Chief Minister Himachal Pradesh has laid foundation stone of residential complex for the staff of Regional Forensic Science Laboratory, NR, Dharamshala and thus will become first RFSL in the country to have its own residential complex for the officers and officials. A traction elevator facility for hassle free entry to the specially abled persons was inaugurated on 17.11.16 by the Hon’ble Chief Minister HP. With a new initiative, five officers/officials were felicitated on the eve of raising day celebrations for rendering excellent services during the year.

WORKING:

There are three divisions:

Biological Sciences (Biology & Serology Division)
Chemical Sciences (Chemistry &Toxicology Division)
Physical Sciences (Document &Photography Division)
BIOLOGY & SEROLOGY DIVISION

This division is functioning since 2008. The scientific posts were filled up in 2010. The division plays a vital role in cases of homicide, suicide or accidental death and sexual assault etc. The types of evidentiary clues examined in different crime cases for identification and comparison are as under:

- Blood, semen and saliva
- Diatom from bone
- Vomit and faecal matter
- Charred bones, tissues and skin
- Bone (animal and human)
- Hair (animal & human), fibre, feather
- Wildlife cases (flora and fauna)
- Wood and plant products
- Maggots

CASE STATISTICS
CHEMISTRY & TOXICOLOGY DIVISION

The division undertakes examination of clue materials such as:

- Petroleum products residues in arson, dowry deaths and in adulteration cases
- Poisons
- Alcohol estimation from blood and urine for drunkenness
- Phenolphthalein in trap cases
- Liquor
- Methanol in hooch tragedy
- Acids attacks
- Grease, wax, oils and resins
- Cosmetics and organic dyes
- Chemical identification of unknown substances

CASE STATISTICS

[Bar chart showing receipt and disposal for years 2012-13 to 2016-17]

District wise case receipt 2016-17

[Pie chart showing distribution of cases in Kangra, Una, and Chamba]

1306
362
378
Kangra
Una
Chamba