The Office of Chief Medical Examiner (OCME) is charged with determining cause and manner of death in cases under their jurisdiction. RSA 611 B gives OCME the legal authority to investigate certain deaths. Accidents, suicides and homicides fall under their jurisdiction, as well as a significant number of natural deaths.

OCME staff consists of 2 board certified forensic pathologists, a chief forensic investigator, an administrative assistant and an evidence technician. In addition, there is a part-time Sudden Unexpected Infant Death (SUID) Data Clerk who was hired with a grant from the Centers for Disease Control and Prevention (CDC). In late 2015, OCME hired a Planning Analyst for the National Violent Death Reporting System (NVDRS), also funded by a grant from the CDC. The responsibilities for that position are varied and encompass data analysis and management for NVDRS and also for Enhanced State Opioid Overdose Surveillance (ESOOS) deaths in collaboration with the CDC, National Center for Injury Prevention and Control (NCIPC). The Planning Analyst reports and disseminates findings to numerous stakeholders and also participates in committee meetings related to violent deaths and opioid overdoses. The SUID Data Clerk and the Planning Analyst do work specific to their grants and are not involved in the day to day running of the office. The assistant deputy medical examiners (ADME) are the death scene investigators and are independent contractors, trained and supervised by OCME. The training consists of 55 hours of classroom lectures plus observing 20 autopsies and attending 20 death scene investigations with an experienced ADME. In the last biennium, OCME trained 2 new ADMEs and added 2 ADMEs with previous death investigator training and experience to their ranks.

Twice a year, OCME provides continuing education for the ADMEs. Speakers included forensic pathologists, troopers from the State Police Major Crimes Unit, the head of the NH DOJ Homicide Unit, the director of the NH DOJ Victim Witness Advocate Program, an agent from the Drug Enforcement Agency, and the director of NH Vital Records Administration. OCME has also participated in mass casualty drill exercises at Pease International Tradeport and Manchester Airport.

The ADMEs respond to scenes from their homes and do not work in the office. They are called to death scenes by local law enforcement dispatch agencies. The ADME gathers information from police, witnesses, and family. They work with, but independently from, law enforcement. They observe the scene and do a minimal physical exam of the body. In consultation with the on call forensic pathologist, a decision about autopsy is made. If no autopsy is required, the body is moved to a funeral home and the ADME does a complete head to toe exam, documents any findings, and obtains the necessary specimens for toxicology testing. About one third of ME cases are autopsied and the others receive external exams.

In the last biennium, OCME actively investigated 3486 deaths. Of those, 1128 were autopsied and the remainder received external exams which included toxicology testing for most of them. OCME also consulted on almost 3,700 deaths where they declined jurisdiction. In addition, ADMEs viewed over 22,000 decedents prior to cremation and reviewed their death certificates to ensure that any deaths that needed further investigation would receive it.

OCME is active with several of the State’s fatality review committees, including:
• Child Fatality Review Committee
• Trauma Fatality Review Committee
• Sudden Unexpected Infant Death Committee
• Sudden Death in Youth Committee
• Drug Overdose Fatality Review Committee
• Maternal Mortality Committee
• Elderly and Incapacitated Adult Fatality Review Committee
• Suicide Prevention Committee

The goals of the committees are to review the circumstances of death for particular cases, recognize risk factors and develop recommendations that could prevent future deaths.

**Major Causes of Accidental Deaths**

- Drug Overdose
- Drowning
- Motor vehicle crash
- Fall
- Fire
- Other

OCME staff is very involved with teaching. They developed the Forensic Pathology Lecture Series in the pathology residency program at Dartmouth Hitchcock Medical Center. The office also hosts pathology residents, medical students and physician assistant students who do month long rotations where they learn autopsy skills and get a close up look at anatomy, disease processes and patterns of injury. In addition, presentations on a variety of subjects by staff and ADMEs are made on a regular basis to college and high school classes, local and municipal agencies, law enforcement, and health care providers.

OCME staff members are on the faculty of the New England Seminar in Forensic Sciences at Colby College in Waterville Maine. Presentations by NH OCME staff included Maternal Deaths, Elder Abuse,
Forensic Controversies, Infant Death Investigation, Implantable Cardiac Devices and Cause of Death, Forensic Case Studies, and Identification, Finding Families and NAMUS.

Presentations on the national stage included “Bound to Die” at the American Academy of Forensic Sciences Annual Scientific Meeting in 2017 and “Dissection Allows Certification of a Pill Death that is Neither Asphyxiation nor Intoxication” at the National Association of Medical Examiners Annual Meeting in 2015. “Common Findings and Predictive Measures of Opioid Overdoses” was presented at the National Association of Medical Examiners Annual Meeting in 2016 by OCME intern Danielle Pelletier who won the Best Student Paper award for her research and presentation.

Publications by our forensic pathologists include:

- “Confronting an upsurge in opiate deaths with limited resources” published in Academy of Forensic Pathology, March 2017
- “Congenital and acquired causes of toxic megacolon” published in ASCP Case Reports Forensic Pathology, No. FP 16-2

The OCME forensic pathologists and ADMEs are called to testify on homicide cases in Superior Court and also on all types of death cases in civil depositions, district and family courts, as well as other agencies, including the Labor Board. In the last biennial, the chief medical examiner was deposed 9 times and testified in 10 trials? The deputy chief testified in 11 depositions and 6 trials.

New Hampshire has been experiencing an overwhelming number of deaths from opioid overdoses in recent years. Our state has one of the highest rates of drug overdose deaths in the country. 493 people in NH lost their lives due to drug overdoses in year one of the biennial and 467 people died of overdoses in year two, resulting in 960 deaths in this past biennial. In comparison, 692 people died from drug overdoses in the 2013-2015 biennial and 362 people overdosed and died in the previous biennial.

The increase in overdose deaths has put a severe strain on the staff and resources of OCME. The investigation report, medical record and toxicology report must be thoroughly reviewed by the forensic pathologist before the death is confirmed to be from an overdose. The high number of cases have
caused long delays in the finalization of death certificates which can be a hardship for families who cannot get death benefits until the death certificate is completed.

The staff at OCME compiles the drug overdose death data, update it monthly and distribute it to over 250 local, State and federal agencies as well as numerous media outlets. Many of the recipients use the drug death data to help their agency plan their response to the crisis.

In 2013, heroin deaths in NH almost doubled from the previous year. 2014 had another sharp increase in heroin deaths. In the following years, the deaths from heroin started to drop off as the deaths from fentanyl shot up. By far, the drug driving the increase in overdose deaths for the past few years has been fentanyl. Fentanyl is a pharmaceutical drug but the fentanyl found at most death scenes is not a prescription medication. According to law enforcement, the type of fentanyl involved with most of the NH deaths is produced in illicit labs in Mexico and China. There were over 600 fentanyl deaths in this last biennial. The previous biennial had over 300 fentanyl deaths and the 2013-2015 biennial period had fewer than 30 deaths. The increased number of ME cases has been straining the

NH has also seen over 80 deaths in the last biennial where fentanyl analogues caused or contributed to the death. Fentanyl analogues are drugs that are chemically similar to fentanyl and affect the human body similarly, but chemists have adjusted the molecular structure so that they do not fall within the class of drugs that are scheduled by the Drug Enforcement Agency. Furanyl fentanyl, fluoro-fentanyl, U-47700, and acetyl fentanyl were the analogues seen in NH.
In 2017, NH OCME was fully accredited by the National Association of Medical Examiners for a 5 year period.