

Investigators of death

Whether it is a warm corpse in a spreading pool of blood or a heap of dry bones, the discovery of a human body triggers a special kind of investigation. Its organization, progress, and participants depend on how the death happened—was it natural, accidental, suicide, or homicide? If there is doubt, the death is treated as suspicious.

No matter what its condition, the discovery of a corpse brings a medical examiner to the crime scene. Medical examiners are public officials that investigate all sudden, unexplained, unnatural, or suspicious deaths. They also perform autopsies and assist in criminal cases. These physicians, trained in forensic medicine, advise police on situations where law and medicine meet. Often, they can answer crucial questions at the earliest stages of an investigation, such as, was it a sexual assault, is the assailant right- or left-handed, and has the body been moved after death?

Checking for life

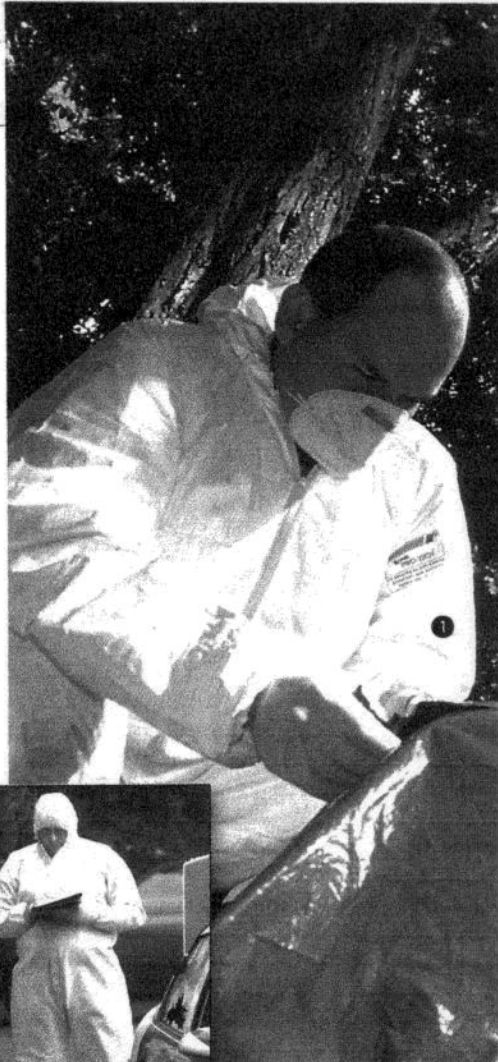
At the crime scene, though, the main responsibility of the medical examiner is to certify death. Even when a victim is

obviously dead, such as where the body is decapitated or decomposed, official certification of death is still required.

For recent deaths of between a few hours and a few days, medical examiners measure the ambient (air) temperature, since this affects the rate at which the body cools—an important clue to the time of death. They also make an initial assessment of the manner of death (see facing page).

Medical detectives

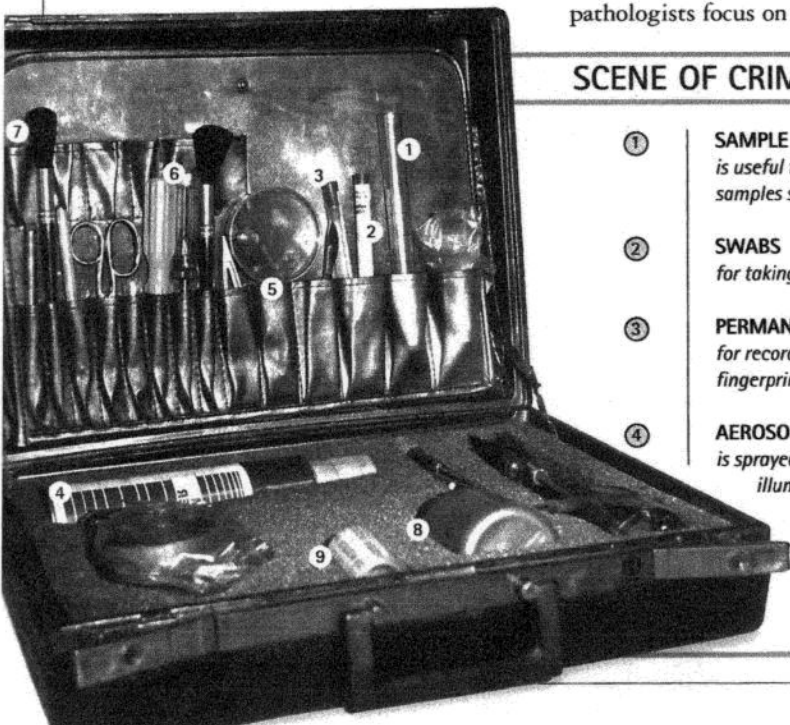
Forensic pathologists are specialists who combine medical and legal skills. Like clinical pathologists, they are experts in injuries to and diseases of the human body. Unlike their colleagues, forensic pathologists focus on the dead



◀ TEAM WORK

The crime scene manager (left) shares information with the pathologist, who notes down his observations at the scene.

SCENE OF CRIME OFFICER'S KIT



①

SAMPLE CONTAINER

is useful for storing small, delicate samples such as fibers or hair.

②

SWABS

for taking bodily fluid samples.

③

PERMANENT INK MARKER PEN

for recording details on an acetate fingerprint sheet.

④

AEROSOL REAGENT

is sprayed on surfaces and then illuminated with a special light to find hidden prints and even wiped-away bloodstains.

⑤

MAGNIFYING GLASS

is used to assess the quality of prints.

⑥

SCREWDRIVERS

are useful if an item of evidence such as a door handle needs to be removed and examined back at the lab for prints or tool marks.

⑦

FINE FINGERPRINT BRUSH

is made of squirrel hair and used to dust delicate human prints.

⑧

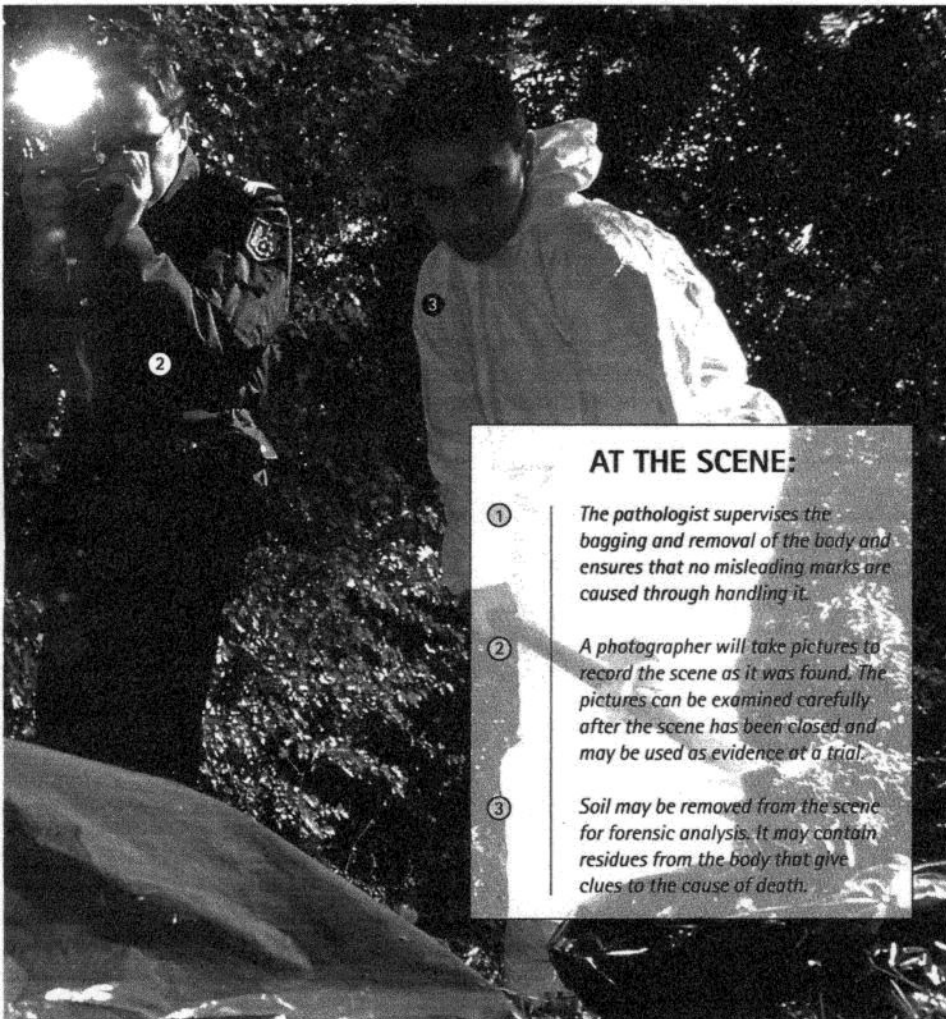
ALUMINUM DUSTING POWDER

is used for dusting fingerprints.

⑨

LIFTING TAPE

is used to collect a print and fix it to an acetate sheet.



AT THE SCENE:

- ① *The pathologist supervises the bagging and removal of the body and ensures that no misleading marks are caused through handling it.*
- ② *A photographer will take pictures to record the scene as it was found. The pictures can be examined carefully after the scene has been closed and may be used as evidence at a trial.*
- ③ *Soil may be removed from the scene for forensic analysis. It may contain residues from the body that give clues to the cause of death.*

THE MANNER OF DEATH

In discovering the cause of death, the forensic pathologist contributes valuable information about the circumstances surrounding a death. This information will determine the nature of the police investigation and also helps the coroner decide whether the death was natural, accidental, suicide, or homicide.

NATURAL ▶

Most people die of natural causes, such as heart failure (shown in this X-ray). However, a death may still be the subject of a coroner's inquest if it happened suddenly or unexpectedly, or if the person was chronically ill and had not seen a doctor within the previous two weeks.

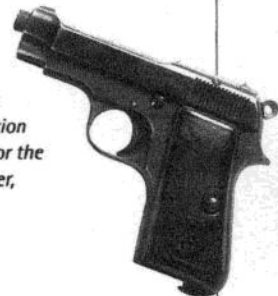


◀ ACCIDENTAL
Coroner's inquests also examine accidental deaths, but coroners may start criminal investigations if they find that accidents could

and should have been avoided—for example, because a safety guard was not in place on a dangerous machine.

HOMICIDE ▶

Literally "killing a human," homicide usually means either murder, where it was the killer's deliberate intention to cause someone's death, or the lesser crime of manslaughter, where death was not the intention.



◀ SUICIDE

Helping someone to end their life is against the law. A suicide pact in which one person survives may also lead to manslaughter charges.



▲ AVOIDING CONTAMINATION

Protective clothes worn at the crime scene are disposable, but some police forces retain them in order to demonstrate that they took appropriate care to protect the scene from contamination.

rather than the living—and, in particular, how the cause of death may affect a criminal investigation and trial. If a suspect is caught and tried, the pathologist may be called to give evidence as an expert witness.

The work of the pathologist at the crime scene involves examining the body and its surroundings (see p. 30). Later, an autopsy at the morgue (see p. 34) will give the pathologist the chance to make a more thorough study. At the crime scene, though, the pathologist works alongside the team of investigators, which is supervised by a crime scene manager (also called a scene of crime officer or SOCO).

As the investigation moves forward, the pathologist may need the help of other specialists. If the body is in an advanced state of decay, a forensic odontologist (see p. 50) can often establish identity by examining dental records. A forensic anthropologist may also help with establishing age and gender. And, if the later autopsy suggests that the subject was poisoned, the pathologist might require

the expertise of a forensic toxicologist.

The pathologist's objectives are to discover the cause of death from an analysis of organ failure. They may also be able to give an indication as to what instrument or mechanism would have caused organ failure. With any death that raises questions, including accidental and some natural deaths, a coroner will hold an inquest, which may give a verdict of nonaccidental death, prompting a police investigation.

The inquest

Coroners' investigations conclude with an inquest (inquiry). After listening to the evidence, the coroner returns a verdict on the manner of death—natural, accidental, suicide, or homicide—and on how, when, and where the death occurred.

