

Facts and myths of CSI



CBS' "CSI" franchise -- with shows based in Las Vegas, Nevada; Miami, Florida; and New York -- has given Americans a look at crime solving in the 21st century. However, real crime scene investigators note there are vast differences between them and their onscreen brethren. Hardly glamorous, they say their jobs require more time, guesswork and luck than seen on TV.

Click through the gallery to find out about myths and facts of crime scene investigation.

Sources: Various local law enforcement and coroner's offices, criminal justice experts, Federal Bureau of Investigation

DNA testing

Myth: DNA testing can always instantly pinpoint a criminal

Fact: DNA has made possible many criminal breakthroughs, both identifying guilty parties and freeing innocent ones. DNA, genetic code unique to every individual (except identical twins), is found in body cells or left on static material. However, tracing DNA is not instantaneous. A test can take about a week, but oftentimes takes longer due to a widespread backlog of DNA-related cases. Once a genetic profile is made, there is no guarantee it will help: Investigators must find a matching DNA profile through existing computer databases or detective work.



Questioning

Myth: CSI technicians question suspects

Fact: Real crime scene investigators play an integral role in many homicide and other such probes, mainly through their meticulous, extensive examination of evidence. But CSI technicians' roles are limited, with most of their time spent in laboratories. They do not, for instance, question witnesses or suspects. Nor do they follow "leads" or draw conclusions like a homicide detective or a prosecutor might do, according to those in the field.

Forensics

Myth: CSI experts have sweeping, in-depth forensic knowledge

Fact: CSI experts undergo extensive training and build up considerable experience on the job, working on homicide and other cases. But while they typically have a solid general knowledge base, they are not experts in every aspect of forensics as some television series lead to believe. Rather, most forensic experts specialize in a topic, like bones or tissue decay, and pool their expertise by working in groups.



Equipment

Myth: All CSI investigators utilize state-of-the-art equipment

Fact: Every year, new technologies give CSI investigators more ways to identify victims, track criminals and otherwise break cases. But that doesn't mean all or even most CSI technicians use such equipment. The cost of microscopes, computers and similar gear is a prohibitive factor. Having cutting edge technologies may also be problematic if courts are reluctant to embrace analyses aided by novel and to some extent, unproven, equipment.

Fingerprints

Myth: Fingerprints can always identify suspects and victims

Fact: Investigators have been matching fingerprints to identify victims and suspects for decades. The tool is a key part of most investigators' arsenals and can be pivotal to a case, but is not always conclusive. Precise, clear fingerprints can be difficult to obtain at a crime scene. Matches are rarely generated instantly after entering a set of prints into a computer, and trained human eyes are usually needed to verify or make a match. Potential matches are limited to those that already exist in a database, thus excluding large segments of the population.

