

# [Investigating arson and bombings](https://assignbuster.com/investigating-arson-and-bombings/)

[](https://assignbuster.com/)[Law](https://assignbuster.com/essay-subjects/law/)

1. What are the main things to remember in the preliminary investigation of a suspected arson? A first principle for an arson investigator is to treat any fire as a potential crime. Given the extreme range of motivations that people may have for starting a fire, it is best to avoid a Type II error (a false negative) and not give some degree of investigation to a fire. Therefore, airing on the side of cautiousness, an arson investigator should be present at a fire before it is fully extinguished, on the scene, and asking questions. The more knowledge an investigator gains at this initial step, the easier it will be to track down and examine clues later on.   
In a preliminary investigation, an investigator should be searching for two things once the fire has been extinguished: the point of origin and the cause of the fire. The point of origin is where the fire began; it is easier to determine the cause of the fire once the point of origin is discovered. For instance, the presence of combustible materials far away from an electrical outlet could indicate the point of origin and a candidate for the cause of the fire. In addition, the United States Justice Department recommends that arson investigators, upon arriving to the scene, mentally note evidence at the scene, recognize threats to evidence, and protect evidence from threats.   
2. List and explain the various clues that flames and smoke can offer in an arson investigation.   
Part of the advantage of arriving on the scene of a potential arson is the identification of the color and height of smoke and flames. The intensity of the fire and the role that accelerants played in starting it can be inferred from the nature of its flames. Depending on the temperature, flames range from red to yellow to blue to white. According to Burke (2006), normal flames tend to burn with a combination of yellow and orange; generally, hydrocarbon accelerants produce a yellow-to-deep red flame and deep red flames with dense black smoke indicates petroleum products. By arriving at the scene early enough, the arson investigator can visually observe these signs of accelerants and infer additional clues.   
In addition, the flame and smoke of arson cases also gives clues to the other senses, including the sense of smell. The seasoned arson investigator should be able to recognize the scent of accelerants. Gasoline and kerosene, for instance, have noticeably different smells. The investigator should also be able to distinguish between paint thinner and lacquer, which are common accelerants used in arson cases. These various scents are given off and carried when they fuel a fire.   
3. What types of evidence are necessary in the successful prosecution of an arson case?   
Evidence comes in a number of forms. Primary evidence includes direct, material evidence of a crime establishing primarily that, beyond a reasonable doubt, arson actually occurred. Primary evidence may also include evidence on the accused person’s body, such as a burn mark or traces of accelerant on clothing. Secondary evidence relies more on the circumstances in which the crime was committed, such as a motive to commit arson (for instance, to collect on an insurance policy) or an opportunity to commit arson (that is, a lack of an alibi). Witness testimony could be either primary (if the witness describes seeing the accused bringing accelerant onto the crime scene) or secondary (if the witness is helping to establish a motive). Both primary and secondary are important for the successful prosecution of an arson case, but primary evidence is always first to be considered when the case is taken to trial.   
In certain kinds of cases (for example, cases of insurance fraud), the timing of the arrest may also destroy evidence after the crime, such as the act of filing an insurance claim (FEMA, 1988). An insurance claim, an example of primary evidence, builds upon the secondary evidence of motive and accordingly can play a huge role in making the prosecution’s case. Therefore, the prosecution should carefully time the arrest of a suspect in order to allow the suspect to produce additional incriminating evidence after the fact.   
References   
Burke, R. (2006). Counter-Terrorism for Emergency Responders (2nd ed.). New York: CRC Press.   
FEMA. (1988, June). Arson prosecution: Issues and strategies. Retrieved September 20, 2011, from Federal Emergency Management Agency: http://www. usfa. fema. gov/downloads/pdf/publications/fa-078. pdf   
National Institute of Justice. (2009, June 1). A guide for investigating fire and arson: Arriving at the fire and/or arson scene. Retrieved September 20, 2011, from Office of Justice Programs: http://www. nij. gov/topics/law-enforcement/investigations/crime-scene/guides/fire-arson/arrive. htm