

# [Forensic pathology case study: problem a](https://assignbuster.com/forensic-pathology-case-study-problem-a/)

[Health & Medicine](https://assignbuster.com/essay-subjects/health-n-medicine/)

Full Forensic Pathology (A case study on Problem A) 14 July Forensic pathology is a sub-specialty of pathology that determines the cause of death of people who died suddenly, violently, or unexpectedly by means of an autopsy. It requires a thorough knowledge of biology, science, medicine, and other fields in order to find the cause of death especially if foul play is suspected. Forensic pathologists are also called alternatively as medical examiners due to the nature of their job which is to think like a detective.
Q1. The cause of Suzys death is probably due to alcohol poisoning which triggered a reaction in her body such as the development of hives resulting in itchiness from the allergies. She might have developed urticaria from drinking the sherry that resulted in a severe adverse reaction from certain allergens (she could be allergic to sherry or wines) or unknown reasons. Her face becoming flushed initially was due to the alcohol but the other signs were consistent with alcohol poisoning such as vomiting, confusion, slow or irregular breathing, and finally, passing out (unconsciousness). She may have only a low tolerance level for the alcohol. The euphoria she felt initially is a sign of alcohol intoxication and it is possible her death was caused by an eventual central nervous system (CNS) depression (DiMaio & DiMaio 519).
Q2. A probable cause of Sarah MacAroys multiple problems is lead poisoning. She showed the classic symptoms of such poisoning which had affected her development as child. Young children are especially vulnerable to lead poisoning because they are still developing; their tolerance level is very low compared to adults because their body systems are not yet fully developed and a lower body mass which in her case had affected her motor skills. Other symptoms include dizziness and nausea (due to anemia as lead is known to interfere with the production of red blood cells and her lack of appetite), gastrointestinal pain and bleeding, vomiting, severe headaches, muscular weakness, and seizures (Payne-James et al., 213).
Q3. In the camping trip made by the MacAroy family in the Sunnydale National Park the symptoms that had developed shortly after their arrival could be due to the pollens usually found in nature parks and reserves (from flowers, trees, and grasses) resulting in hives, rashes, and itchiness while the constipation could be due to lack of sufficient drinking water as being out in the outdoors increases water loss from perspiration while the diarrhea could be due to unclean drinking water from the parks water sources (assuming they did not bring enough water of their own to last the camping trip). The symptoms are not related to lead poisoning.
Q4. The outbreak that David had after coming back from the camping trip could be due to resumption of the lead poisoning which in his case is chronic (lead poisoning in small amounts over a period of time rather than acute poisoning) probably from their drinking water in the house which got contaminated with lead from the plumbing pipes and also probably from inhaling fumes from leaded gasoline when he resumed working and his nightly habits in which he drove a lot in going to and from work together with his visits to Suzy. All symptoms he had were consistent with lead poisoning such as constipation, irritability, abdominal cramp, vomiting, and dizziness which were very similar to what Sarah was suffering from. In Davids second attack, the chemicals involved are lead and alcohol (he was given his favorite wine of Merlot 1976 nightly by wife Katie even while he was hospitalized). The wine vintage is 1976 which was two years before use of lead was banned officially back in 1978 (Perez para. 4).
Q5. It is very probable Mr. Austins death was not related to his heart disease based on the observations made during the two hospital visits which were duly noted by two of the attending physicians (Harry Burgman and Greg Davis). Instead, his symptoms were that of lead poisoning. Also as noted all his physical tests were in the normal range except for blood pressure (130/96) but this is on the borderline only (pre-hypertensive range). However, lead poisoning is known to elevate blood pressure levels so he could have died secondary to that.
Works Cited
DiMaio, Dominick, and Vincent J. M. DiMaio. Forensic Pathology. 2nd ed. Boca Raton, FL, USA: CRC Press, 2001. Print.
Payne-James, Jason, Richard Jone, Steven B. Karch, and John Manlove. Simpsons Forensic Medicine. 13th ed. Boca Raton, FL, USA: CRC Press, 2011. Print.
Perez, Eric. “ Lead Poisoning.” National Library of Medicine, 01 Feb. 2013. Web. 14 July 2014. .
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