

Health risk assessment essay

[Environment](#), [Disaster](#)



HEALTH RISK ASSESSMENT

Health risk assessment in humans is used to approximate the type and likelihood of the occurrence of health effects on people that may be exposed to hazardous material in a contaminated environment. Not only does the assessment seek to establish the likelihood and type of effects but also whether there is a given concentration of the hazardous material that would not cause any harm to humans. The assessment also involves an analysis of the chances whether the effects of the hazardous material will be different in people based on their sex, age, or genetics (Glendon, Clarke & McKenna, 2006, p. 18). A health assessment is done using four steps. I am going to conduct a health assessment of my environment to show how these four steps are used.

The first step in my assessment will involve hazard identification. In this particular case the hazard I identified is contaminated food. It is however important to note that before this step one should have planned their assessment well and conducted research on the area. The contaminated food in this case will be the one I get from our kitchen and from restaurants. In particular I am interested in knowing the E. coli levels that I can be exposed to through this food.

The second step involves an assessment on the dose response to show the relationship in numerals between being exposed and the impacts. The infectious population of E. coli ranges from 10 to a 100 organisms (Glendon, Clarke & McKenna, 2006, p. 92).

In the third step which involves assessment of the exposure in terms of the timing, levels, and frequency at which I get in contact with the E. coli. I am likely to get exposed to this bacterium if the food handler in where I eat comes into contact with any fecal matter and does not wash their hands before touching my food. Also the handler may wash their hands but some of the fecal matter remains wedged in their nails. This therefore means that my levels and frequency of exposure are subjective to the actions of the food handler, even when it is at home.

In my final step I am doing the risk characterization where I make conclusions on the extent and nature of the health risk from exposure to E. coli. Exposure to this bacterium may lead to me having diarrhea and stomach pains. If I get exposed to more than 100 organisms then I can become seriously ill and even be hospitalized because of the pain and diarrhea I will be experiencing (Glendon, Clarke & McKenna, 2006, p. 93).

I can avoid the risk of getting contaminated with diarrhea by making sure I wash my hands with soap before I start cooking. I should also ensure I keep short nails and that everyone in our house who handles food does the same too. What else I can do to avoid exposure to E. coli is to eat only in restaurants that maintain a good record of cleanliness.

REFERENCES

Glendon, I., Clarke, S. & McKenna, E. (2006). Human Safety and Risk Management.

Washington DC: CRC Press.