1. In your own words, based on the materials you watched / read for this assignment,
2. (0.25 points) define e-waste (including which chemicals can be found in e-waste)

This the electronic waste like mobile phones, computers, and many others whose life span has come to an end. They are often recycled or refurbished.

1. (0.25 points) summarize why public health scientists are concerned about it

It is because the e-waste contains much chemicals that are more harmful to our health and the health of environment. Some of the chemicals have radioactive material whose half-life begins when it mixes with either soil, water and air.

1. (0.25 points) describe the rationale for the study being done by the researchers in the video *The Circuit: Tracking America's Electronic Waste.*

the main point is that the recycling of e-waste is made systematical on how best e-waste can be reduced. The primary way is the returning of either an old computer or a phone when buying a new one.

1. After reviewing the two slides in the homework folder on exposure media and pathways please answer the following:
2. (0.25 points) What are the exposure media of concern with e-waste? (see Slide 1, slide 2, the video, and the article)

It is because the main chemical that exist in the e-waste mixes with the media, which makes it possible for humans to consume them, which is harmful.

1. (0.25 points) What are the exposure pathways of concern with e-waste? (see Slide 1, slide 2, the video, and the article)

This is the main entry of how the harmful chemicals that has diffused from the e-waste enters the human body.

1. (0.25 points) Who are the potentially exposed populations? (see slide 2, the video, and the article)

Humans depending on what they do.

1. (0.25 points) After reviewing the slides, answer the question – how was exposure measured in the Leung et al study?

It is through the nature of the medium that predicts the exposure rate. For instance, gaseous medium is much effective that the soil.

1. (0.5 points) An introduction to epidemiologic study designs is in the slide presentation from Module 2 on exposure assessment and epidemiology. Using Google Scholar or PubMed (or another database of peer-reviewed scientific articles of your choice) find an EPIDEMIOLOGIC study from a peer-reviewed journal that investigates the health impacts of e-waste, and paste the abstract here along with a proper citation of the article (APA style is preferred). *(If there is a question about this, the Abstract is the short text (usually 200-300 words) at the beginning of the peer-reviewed article before the Introduction section that summarized the study).*

Regardless of the huge volume of e-squander reused casually, the commonness of business related wounds among e-squander laborers is obscure. Thusly, this investigation evaluated the commonness, examples and variables related with word related wounds among e-squander laborers in the casual area in Nigeria.This cross-sectional examination received a multistage inspecting strategy to choose 279 respondents from three urban communities (Ibadan, Lagos and Aba) in Nigeria. A poll was utilized to get data on sociodemographics, work practices and injury events from the respondents in 2015 (Kettl, 2003). The information were investigated utilizing spellbinding insights and standard strategic relapse.

1. (0.25 points) What is the study design of the study you chose?

Health factors of the e-waste workers and the effects they risk getting.

1. (0.25 points) What are the objectives of the Leung et al study?

The nature of how the dangerous chemicals reaches the human body to the limit where it can cause bodily harm.

1. Risk in this article was measured by calculating a Hazard Quotient.
2. (0.5 points) Define a hazard quotient, including how it is calculated and what it means if the HQ is greater to or less than 1.

Hazard quotient is the ration of the potential exposure to a harmful substance to the level of the numbered effects are expected. HQ is less than 1, then the lesser the effect, but when it is greater than 1, it has adverse health effects. It is calculated through:

Risk quotient = exposure ÷ toxicity.

1. (0.5 points) After reading the article, take a look at Table S3 (Supplementary Table 3 is located in a separate document of Supplementary material for the article - also on blackboard). What are the HQs (and in which locations) that are of concern for adults and children? Spell out the locations, not just the ID Code of the location.

Residential yards, on site, private wells.

1. (0.25 points) What does your answer to 4b (and the results of the study overall) suggest to you about whether e-waste poses solely occupational (work-related) risks or whether it is an environmental hazard for nearby populations as well? A sufficient answer to this question is not simply saying “yes just occupational” or “not, not just occupational”. A sufficient answer should be a few complete sentences that reflect on your reading of the overall study.

The main issue on the study is that the more you get exposed you risk facing the health effects of the hazards. This makes it positive that the work places have a great risk to the employees other than the residential people.

References.

Kettl, D. F. (2003). Environmental Policy: The Next Generation. RENEWABLE RESOURCES JOURNAL, 21(3), 6-10.