

Pre-lab-tyrone hayes discussion on atrazine

[Science](#), [Chemistry](#)



In a few sentences please describe the problem that Dr Tyrone Hayes is talking about in his lecture.

The problems Dr Tyrone Hayes is talking about in his lecture relates to the harmful effects of pesticides and other chemicals. The concentration of chemicals to waters is a harmful process. Concentrations of these pesticides within living organisms then provide a breeding place for the cancer cells. The concentration of various chemical causes dysfunctions. This pertains to the non-functionality of some of the body organs and growth irregularity.

What was the part of the video that was most intriguing to you?

The most intriguing part of the video was the scientific manner in which the toxic effects of atrazine and DES were related in rats to humans. The fact that smaller creatures are able to simulate and identify potential effects of pesticide exposure on humans is most intriguing.

Overall Questions

Discuss the pros and cons of animal testing. Do you think that testing on animals is justified?

Animal testing is an integral part of the product and drug trails before their commercialization. The benefits of testing animals are the fact that it acts as a prototype through which the effects of the drug or product on human life can be simulated. The value of human life cannot be compared with that of animals, for this reason, these product or drug trials cannot be tested on humans directly. The research helps increase the yield and betters result. On the negative aspect, the testing exacerbates the animal to early exposure and diseases. Others argue that testing effects on animals do not accurately simulate human's response to the same drugs. This creates a problem

associated with misleading results.

Do you feel that testing upon animals gives accurate results that can be related to humans? Support your reasoning.

Animal testing is essential in order to simulate and understand the effects of toxicity in humans. This is proven by vaginal cancer and uterine deformities in offspring of rats that were exposed to DES. Offspring's of humans that had been exposed to DES also developed similar symptoms as those seen in rats. The DES exposure case similarity in rats and humans clearly pointed out that animal testing does give accurate results that can be related to humans.

What did Tyrone Hayes say about using rats to simulate humans? Does he think that they are accurate results? Why? Why not?

Dr Tyrone Hayes talks about using rats to simulate the effects of toxicity in humans. Dr Hayes argued that effects of toxicity in rats reflect possible effects of exposure in humans. He presented the case of DES exposures in both rats and humans. DES exposure caused vaginal cancer and uterine deformities in offspring of those rats that had been exposed. Similarly, DES exposure in humans has caused similar symptoms to develop in offspring. Similarly, Atrazine exposure in humans can cause the same effects that it causes in rats.

If you were a farmer that dependent on the high yield of crops for a living do you think that you would use atrazine on your crops? Assume that using herbicides and pesticides would ensure that your yield produced is enough to sustain your business.

The usage of atrazine on crop production is dangerous. Atrazine has been found to cause prostate and mammary cancer, immune failure and abortion

in rats. It is clinically known that rats simulate human effects. Since the use of other herbicides and pesticides are sufficient to sustain a business, then the use of atrazine is not justified. For this reason, I as a farmer would take up alternate practices to increase crop yield instead of using atrazine.