

Case study on environmental effects of herbicide x

[Health & Medicine](#), [Cancer](#)



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Prof:

Hazard identification

Evaluating the health hazards available for Herbicide X has shown that this herbicide is highly carcinogenic. This can be seen in animal studies conducted although there are no human studies available for the herbicide X. Those available peer-reviewed studies help in identifying and labeling herbicide X has a cancer causing herbicide as we see in majority of herbicides.

Exposure assessment

Considering the exposure assessment to the herbicide X, the rate of exposure is likely to be high simply because of the sole dependence of the community on the herbicide, it spent about 3 months before degradation, contact possible via eating of the vegetables or skin contact by children on the playground. All these modes increase the rate of exposure hence making the community to live at high risk of health hazards from the herbicide X.

Dose-response assessment

Evaluating the dose-response pattern, it can be concluded that the community is at higher risk of high concentration because of the longer time it takes for the herbicide to degrade and the spraying which occur twice at different period in a year. The implication of this is that the community is at risk for about 6 months in a year.

Risk characterization

The absence of human studies as regards to the carcinogenic effects of Herbicide X is not available. This is a major shortcoming in characterization of the effects such chemical could have. Although, animal studies, exposure and risk assessment all support increased risk, this is not yet conclusive but there is a tendency for a high cancer risk associated with herbicide X. This all support the need for the chemical to be banned for the time being before there is any available human data.

References

California Environmental protection Agency, (2012). A Guide to health risk Assessment. Office of Environmental Health Hazard Assessment.

Retrieved 12, April, 2012 from <http://www.oehha.ca.gov>