

# [Herbicide x](https://assignbuster.com/herbicide-x/)

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Herbicide X Basic Risk Assessment for Herbicide X Introduction The ensuing case study is to assess the risk associated with the use of Herbicide X that is being used extensively in the farms. Herbicide X poses certain health risks to the community that directly or indirectly come into contact with it.
Hazard Identification
It has been identified through several peer-reviewed studies done in the laboratory that Herbicide X in very high dosages causes cancer to rats. The study has prima facie proved that Herbicide X is toxic in nature and it has inherent potential to cause threat to human life.
Dose Response assessment
Though no direct study is done regarding the effect of Herbicide X on humans yet sufficient experiments have been done in laboratory on rats keeping strength of this herbicide at 1%. The results ultimately proved that the level of concentration is enough to cause cancer to the rats. The same concentration of Herbicide X is being used by farmers to control the weed as this is highly effective. In view of this, Herbicide X poses extreme threat to the humans as it is used in the same dosages as found to have affecting rats.
Exposure Assessment
Herbicide X is sprayed in the farms twice, once in the spring and the second time in fall. This means that farmers are exposed to the Herbicide X twice in a year that increases the health risk associated with this pesticide.
Risk Characterization
It is quite scientific to assess the risk of any hazardous chemical first on animals such as monkeys, rats, cows. It is certified and confirmed by several peer-reviewed studies that Herbicide X is toxic in the given dosages and cause deadly disease like cancer. It is quite appropriate to conclude that it indeed poses a threat to the human life too, especially when humans are exposed twice in a year with the same level of concentration that affected rats. Moreover, it has also been found that Herbicide X remains in the environment for at least 3 months before it disintegrates into harmless substances; it is slow in biodegradation and not eco friendly.
Thus, there are enough evidences and reasons to ban the use of Herbicide X in the fields and it be replaced with less hazardous pesticide as soon as possible.
References
1. Human Health Risk Assessment. online from, http://www. epa. gov/risk/health-risk. htm [Accessed on 7/17/2011]
2. What are the key steps... online from http://www. eurometaux. eu/MetalsToday/MetalsFAQs/Riskassessment. aspx [Accessed on 7/17/2011]