

# Introduction to risk assessment - hazard identification

[Health & Medicine](#)



**ASSIGN  
BUSTER**

Risk is the probability of damage, liability, negative occurrence, injury, injury and loss, which is caused by internal or external weakness. This can be reduced with the help of preventive measures. Risk Perception It is sort of a personal, individual or any particular judgment made by people. This judgment concludes the basic features and difficulties which a person faces during its occurrence. Most of the time we relate risk to natural disaster, which is unpredictable and we are unable to identify the major destructions happened after this. Multiple theories are proposed about the estimations of risk and its after effects. We divide the risk perception theories in three formats. First one is a psychology approach which is related to heuristics and cognitive. Second one is sociology, which comes under cultural theory. Last theory is interdisciplinary, which is a social amplification.

**Pesticides**

Pesticides are invented to destroy insects, bacteria and fungus. The main user of the product is farmer. They don't realize that how much the environment is effected and ultimately the consumers too. Toxicity of Pesticides Pesticides are toxic in nature and harmful to human and animals as well. Some of these toxins require less time to kill and others are slow in action. Slow action toxicants harm the human body on long term. Pesticides can cause catastrophic accidents. One of the pesticides plant in Bhopal, India caused a catastrophic accident. This plant released about 40 tons of chemical gas. This gas resulted into death of 3, 000 people. However the death toll increased to 15, 000 later on. This disaster also affected 100, 000 people who suffered from different diseases at a later stage. Children are more sensitive to the pesticides effects. According to the Natural Resource Defense Council, pesticides cause leukemia, birth defects and brain cancer.

The pesticides can increase the death rate in children especially if they are exposed to such toxicants at an earlier stage. Possible reactions of pesticides are Fatigue, Brain Disorders, Nausea, Breathing Problems, Headaches, Vomiting, Liver & Kidney Damage, Skin Irritations, Death, Reproductive Damage, Cancer and Blood Disorders. Farmers suffer the most as well as their families have higher percentages and tendencies of pesticide toxicity in their bodies. The major sources of pesticide spread among farmers are: Wind-blown dust produced with the help of pesticides through animals, easily transferred in open water, including supply of public water, from fish and other seafood. Pesticides can easily enter through eyes, skin, nose and mouth. Eliminate toxins from pesticides. The risk of illness due to pesticides can be minimized with simple actions. One simple and effective idea is to protect your skin by covering your face when you are closer to pesticides. To prevent the toxicants, growing your own crops is definitely not a solution. A little effort could help in accessing pesticide-free vegetables by visiting the markets of local farmers in order to get the freshest grown foods. Grocery stores usually prefer products made from organic food. The general lack of pesticides and their harmful effects is adding to the already aggravated issue. So increasing the awareness among people will definitely work to remove the hazardous elements from food products. The awareness program can make people realize and pay attention to the apparent petty but very important decisions regarding eating healthy or not. Numbers of stores are increasing as shopkeepers are working to provide healthier food. Items that contain a higher number of pesticides must be eliminated from daily use. This avoidance can help us to reduce pesticide levels of

consumption at the rate of 90%. These items include fruit and vegetable group. Fruits like cherries, pears peaches and grapes. Vegetables group includes celery, sweet bell pepper and spinach. The organic nature of the fruits and vegetables need to be retained in order to ensure the elimination of hazardous health impacts among the adults and kids. As per the risk standards set by the table give, the condition of Nearest School seems to be a Zero Risk condition. The school is 1.3 miles from projected plant; type of wind is downwind and must be far enough from potential source of pesticides. Although the standards mentioned in the Organophosphate table have been carefully drawn but one cannot consider them free of any risk. So the need for risk assessment is essential in that case too. Primary factor to be considered in the risk assessment is that pesticides which are going to be used must be approved by the concerned authorities. The quantity, type and usage must be considered as it would help in taking the appropriate and tantamount precautions as well. The unreasonable risks of every pesticide used must be identified properly by EPA. Management of pesticide

Management of pesticide is done with the help of rotation among pesticides. It is done by creating different classes among pesticide groups. Risk Assessment In risk assessment we figure out the risks caused by the particular use of pesticide. Tank mixing is a method in which pesticides are combined in different ratios. This practice may improve single pesticide application which resultantly would give more benefits. To make the pesticide plant far enough from population can reduce the hazardous effects. Waste disposal of a Pesticide plant site is located 110 miles north of the project site is a good idea to save the population from the excessive hazards.