

Material exposure

Business



Threshold for toxicity is a term used to denote the amount of substance that must be in the body for symptoms of toxicity to develop. This depends on a number of different things. It is not absolutely strange, therefore, when an industrial worker reports symptoms of toxicity even when they are exposed to levels of a drug that are only two-thirds of the allowable toxicity limits. There are a number of possible causes for this. There are different types of exposure to toxic materials.

This includes chronic and acute exposure. Acute exposure happens for less than a day, but the levels to which the worker is exposed may cause a lot of damage to the individual. On the other hand, the worker could have been exposed to very little amounts of the toxic over a long period of time. The amount of the hazardous substance that are in his body could be cumulative, having accumulated over days, months or years. This final exposure could have brought the levels of the substance to the toxicity threshold, thus the individual may have displayed the toxicity symptoms. Threshold limit values have been developed and adopted by several organizations and countries to help protect individuals from getting exposed to levels of chemicals that could be injurious.

It is, however, important to note that individuals differ in several ways. The exposure limits allowed for any particular substance may not be absolutely safe for different individuals because of differences in the levels of tolerance to any particular substance. This could be aggravated by a pre-existing condition that could amplify the toxicity of a particular substance. Another reason why the individual may have developed toxic symptoms is that he may have absorbed an “ overdose” of the substance. The individual may

have absorbed a large dose of the drug over a very short period of time; hence the effects could manifest themselves easily over the short period of time. Other factors that may have enhanced the toxicity of the substance are the room temperature at the time of exposure.

The temperature may have enhanced the absorption of the substance into the individual's body. Moreover, continual exposure may have caused more damage because if the exposure had been discontinuous, the body might have been given time to get rid of the substance.