

Perceived Risk for 24 Activities: Average Risk Scores and Rank Ordering¹

(Average score is based on a 5 point scale with "5" being an activity that is very risky.
Rank of "1" indicates the activity that is perceived to have the greatest risk.)

Activity	Lay Public	Rank	Risk Experts	Rank
Hazardous Waste Sites *	4.32	1	3.35	19
Persistent Organics	4.17	2	4.04	5
Sewage *	4.05	3	3.33	20
Radiation *	4.00	4	2.79	21
Heavy Metals	3.92	5	3.70	13
Population Growth *	3.90	6	4.61	1
Loss of Wildlife Habitat *	3.90	7	4.37	2
Eutrophication	3.89	8	3.88	8
Ozone Depletion	3.80	9	3.97	6
Global Warming *	3.78	10	4.36	3
Pesticides	3.75	11	3.77	11
Clear-cut Logging	3.68	12	3.84	10
Wetland Loss *	3.68	13	4.23	4
Acid Rain	3.67	14	3.69	14
Surface Run-off *	3.61	15	3.93	7
Oil Extraction	3.39	16	3.53	17
Mountain-top Mining	3.34	17	3.57	16
Overgrazing	3.30	18	3.46	18
Invasive Species *	3.29	19	3.86	9
Damming of Rivers *	3.25	20	3.73	12
Entrainment of Fish *	3.14	21	2.75	22
Commercial Fishing *	3.06	22	3.59	15
Genetically Modified Organisms	3.00	23	2.75	23
Hunting/Sport Fishing *	2.76	24	1.97	24
Number of respondents	291		148	

* Indicates that there is a significant difference ($p < .05$) in the risk score between the public and risk experts. A probability (p) value of .05 means there are only 5 chances in 100 that the difference is due to chance alone.

¹ Slimak, M. W. *Personal Values, Beliefs, and Ecological Risk Perception*. Ph.D. Dissertation, George Mason University, Fairfax, VA, 2003.

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continued

The table on the previous page shows the ordering of 24 risk items for two groups: the lay public and risk experts. The ordering for the lay public is from a randomly drawn sample of adults from across the entire US. The experts are professionals who work for the US Environmental Protection Agency. For some of the risk items, the order is different as well as the average risk score. The lay public are more concerned about low-probability, high-consequence risks; whereas, the risk experts are more concerned about risks that pose long-term impacts and produce ecosystem-level effects. For example, the lay public are most concerned about exposure to contaminants from hazardous waste sites, but this risk item is only ranked 19th by the risk experts. Hazardous waste sites can produce important risks to humans, but it is usually limited to just a few individuals who live near the site. Population growth and global warming are more highly ranked by the risk experts. These types of risks produce long-term impacts at all scales of the environment. It is interesting to note that both the lay public and the experts do not consider risks from genetically modified organisms (GMO's) to be important. This situation would likely be different if individuals in Europe were polled. Europeans are known to be concerned about the long-term impacts of genetically altered crops and other organisms. What do you think some of the reasons might be to account for this difference?

