

Nuclear Power Numbers: Policies, Waste, Security

- Number of Nuclear power plants operating in the United States: **103**¹
- Percentage of U.S. electricity they generate: **20%**
- Number of new plants that the industry hopes to build by 2020: **50**²
- Number of Nuclear power plants evaluated by the NRC under the Operational Safeguards Response Evaluation (OSRE) program, in which mock intruders challenge plant security: **68**
- Number of plants where “significant weaknesses” were found: **33**
- Total number of NRC regulations requiring plants to prepare for an attack by aircraft, boat, or truck: **0**³
- Range of the typical number of curies in natural radiation: **2 to 20**⁴
- Average number of curies in a typical power reactor: **16 billion**
- Approximate number of Hiroshima-size bombs needed to produce 16 billion curies of radiation: **1,000**⁵
- Number of times more radioactive fuel rods are after use than they were before use: **1 million**
- Tons of spent fuel produced by U.S. plants in the past 40 years: **40,000**
- Approximate number of additional tons produced by U.S. plants every year: **2,000**⁶
- Number of tons of highly radioactive waste that will be buried at Yucca Mountain: **77,000**
- Number of miles from Yucca Mountain to Las Vegas: **100**⁷
- Number of states through which nuclear waste will be transported if the Yucca Mountain site becomes operational: **43**
- Average number of truck accidents per 1 million miles traveled, by the American Petroleum Institute: **6**
- Expected average number of accidents that trucks transporting nuclear waste would be involved in every year: **15**
- Maximum speed of a crash that nuclear shipping containers are designed to withstand: **30 mph**
- Average maximum speed limit on U.S. rural interstate highways: **70 mph**⁸
- Maximum degrees Fahrenheit of a fire that nuclear shipping containers are designed to withstand: **1475**
- Degrees Fahrenheit of a typical diesel fire: **1850**⁹
- Probability of developing invasive cancer from birth to 39 years in the United States, 1998–2000: **1.64%**¹⁰
- Percent increase in likelihood that a child living near a nuclear plant will develop cancer versus the national average: **12.4%**¹¹
- Percent increase of incidence of thyroid cancer between 1975 and 1996 in the United States: **42%**¹²

¹ Energy Information Administration (EIA), “U.S. Nuclear Reactors,” http://www.eia.doe.gov/cneaf/nuclear/page/nuc_reactors/reactsum.html.

² Llanos, “Nuclear Waste: No Way Out?”

³ UCS, “Nuclear Reactor Security.”

⁴ NIRS, “High-Level Radioactive Waste,” <http://www.nirs.org/factsheets/hlwfstc.htm>.

⁵ NIRS, “Routine Radioactive Releases from Nuclear Reactors: It Doesn’t Take an Accident!”

<http://www.nirs.org/factsheets/ROUTINERADIOACTIVERELEASES.htm>.

⁶ NEL, “Nuclear Waste.”

⁷ Miguel Llanos, MSNBC, “Nuclear Waste: No Way Out?” <http://msnbc.msn.com/id/3072031/>.

⁸ United States Department of Transportation, “Speed Limit? Here’s Your Answer,”

<http://www.dot.state.mn.us/speed/speedbrochure.html#legal>.

⁹ NIRS, “Hot Cargo.”

¹⁰ American Cancer Society, “Probability of Developing Invasive Cancers Over Selected Age Intervals, by Sex, US, 1998–2000,”

<http://www.cancer.org/downloads/MED/Page14.pdf>.

¹¹ Nuclear Policy Research Institute (NPRI), “Power and Waste,” citing recent study in journal *Archives of Environmental Health*,

<http://www.nuclearpolicy.org/Issues.cfm?NewsTopicID=22>.

¹² AlkalizeForHealth, “Fluoride & Thyroid Cancer,” <http://www.alkalizeforhealth.net/Lfluoride.htm>.