



## What women need to know about nuclear power

*Exposure to radiation is more dangerous to the health of women and their children than to other members of society. Women need to be informed about these risks when living near operating or proposed new nuclear power reactors.*

### **Women and children are more vulnerable to radiation damage than men**

Women are as much as 60% more sensitive to radiation than men. Infants and children are more radiosensitive than adults, with female children at higher risk. Established levels of exposure to radiation, deemed “acceptable” — but not “safe” — average the doses to adults and children, hiding the full impact to more sensitive members of the population. Pregnancy is not given any special protection.

### **Nuclear power reactors routinely release radioactive gases and liquids**

Radioactive releases of liquids and gases from commercial nuclear power reactors occur routinely as part of daily operation. It does not take an accident, although releases are far higher, and travel further, during an accident.

### **There is no “safe” dose of radiation**

The US National Academy of Sciences has investigated the dangers of low-energy, low-dose ionizing radiation and has concluded, “that it is unlikely that a threshold exists for the induction of cancers.” Claims that “a little radiation is good for you” have been widely discredited.

### **Studies show increased leukemia rates among children living near nuclear reactors**

More than 60 studies worldwide have shown that children under the age of five living near nuclear power plants which have not had an accident suffer from increased rates of leukemia.

### **Not all radiation exposures are comparable**

When man-made isotopes like cesium, strontium or iodine are inhaled or ingested they irradiate cells from inside the body. If they are routinely ingested, they can build up in the body. Flying in an airplane every once-in-a-while, or eating a banana, is not as dangerous as routine exposure to man-made radiation released by nuclear reactors.

### **Why are women and children at greater risk?**

Experts theorize that rapid cell division during childhood and pregnancy seems to be the reason for the vulnerability of embryos and fetuses. Studies also indicate a negative impact of radiation on estrogen and its functions; therefore radiation might be an endocrine disruptor and this would affect women in particular. Women also have much larger reproductive organs and far more hormonal systems than men.

### **Cancer cluster victims around nuclear reactors are often ignored, making them victims twice**

Health impacts of radiation exposures caused by nuclear power reactors are often observed anecdotally in local communities. Yet the burden of proof is invariably placed upon the “victims” to demonstrate cause and culpability, even though the nuclear reactor is the most obvious suspect.

### **Nuclear reactors cause more than cancers**

The harm that radiation exposures can do is not limited to leukemia and cancers. Exposures during pregnancy and childhood can cause diseases years later when the person is an adult. Exposures can also increase the frequency of mutations in our germ cells, which are passed down the generations. And exposure can disturb the development of — and cause malformations in — embryos and fetuses.

### **Information about health risks from nuclear reactors is suppressed or ignored**

Women are largely kept unaware of the dangers they and their children — born and in the womb — face due to the routine radioactive releases from nuclear power reactors. Instead, the nuclear industry overstates promises of jobs and economic benefits that a new nuclear reactor might deliver, strategically bypassing any health concerns by keeping this information out of public view.

**Beyond Nuclear 2019**

[www.BeyondNuclear.org](http://www.BeyondNuclear.org); [info@beyondnuclear.org](mailto:info@beyondnuclear.org); 301.270.2209