

Radiation Exposure to Pregnant Employees

Know your options for radiation dose limits to your embryo or fetus during pregnancy.



Radiation exposure is assumed to carry some risk

Exposure to ionizing radiation may contribute to adverse health effects, and the potential for adverse effects increases as radiation dose increases. At the 5000 millirem occupational dose limit for adults, the risk is believed to be very low.

Rapidly dividing embryonic or fetal cells are more sensitive to the effects of radiation exposure. The 500 millirem dose limit to the embryo or fetus of a declared pregnant worker provides an additional margin of protection.

Learn more about prenatal radiation exposure: www.nrc.gov, search 'prenatal'

Declaring your pregnancy

Declaring your pregnancy to your employer is completely voluntary.

- If you choose to declare your pregnancy, a lower radiation dose limit will apply to your embryo or fetus.
- You do not have to provide medical proof of pregnancy.
- If you choose not to declare your pregnancy, you and your embryo or fetus will continue to be subject to the same radiation dose limits that apply to other occupational workers.
- The lower dose limit remains in effect until you withdraw your declaration in writing. If you do not withdraw your declaration, the declaration will expire after one year.

Want to declare your pregnancy?

- In writing, provide to your employer your name, estimated month and year of conception, and the date of declaration.
- You may revoke your pregnancy declaration at any time, even if you are still pregnant.

Regulatory information

If you are likely to receive a radiation dose exceeding 100 millirem per year, your employer should provide the information in this fact sheet to you. In addition, your employer should tell you how a pregnant worker's responsibilities may change as a result of declaring a pregnancy.





For Pregnant workers

Q: What are the effects of radiation exposure to my embryo or fetus?

A: The potential occurrence and severity of health effects caused by ionizing radiation depend on the type and total dose of radiation received, as well as the time period over which the dose was received. The main concern is susceptibility to harmful effects of radiation such as cancer. Radiation has not been identified as a cause of hereditary disorders in humans. Any risk of genetic effects attributable to radiation exposure is speculative.

Q: If I declare my pregnancy in writing, what happens?

A: If you declare your pregnancy in writing, the licensee or registrant must take measures to limit the radiation dose to your embryo or fetus to 500 millirem during the entire pregnancy. If you have already received a dose exceeding 500 millirem in the period between conception and the declaration of your pregnancy, an additional dose of 50 millirem is allowed during the remainder of the pregnancy. In addition, Wis. Admin. Code § DHS 157.22(8) requires licensees or registrants to make efforts to avoid substantial variation above a uniform monthly dose rate during the declared pregnancy.

Q: If I have not declared my pregnancy, but my employer suspects that I am pregnant, do the lower dose limits apply?

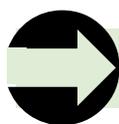
A: No. The lower dose limits for your embryo or fetus apply only if you have declared your pregnancy in writing.

Q: What effect will formally declaring my pregnancy have on my job status?

A: Only your employer can tell you what effect a declaration of pregnancy will have on your job status. As part of your radiation safety training, your employer should tell you what its policies are with respect to the job status of declared pregnant worker. In most cases, you can continue in your present job with no changes and still meet the reduced dose limit for your embryo or fetus. If your current work might cause the dose to exceed 500 millirem, your employer may consider accommodations to transfer some tasks to other qualified individuals.

Q: What if I have a miscarriage, find out that I am not pregnant, or want to revoke my pregnancy declaration?

A: You may revoke your declaration of pregnancy for any reason at any time. If you revoke your declaration of pregnancy, the lower dose limit for your embryo or fetus no longer applies.



For Licensees and Registrants

Q: What must be provided to occupational workers regarding prenatal radiation exposure?

A: It is your responsibility to provide the following to occupational workers:

- A copy of this document, with an explanation of its contents.
- An explanation of company policy on declared pregnant workers, including how that policy may affect a person's work situation after they have filed a written declaration of pregnancy.
- An opportunity to ask questions and request additional information on prenatal exposure to radiation.
- The name or title of the person who should receive a worker's written declaration of pregnancy.



References

U.S. Nuclear Regulatory Commission, *Instruction Concerning Prenatal Radiation Exposure*, Regulatory Guide 8.13, Revision 3, 1999.

National Council on Radiation Protection and Measurements, *Preconception and Prenatal Radiation Exposure: Health Effects and Protective Guidance*, NCRP Report No. 174, Bethesda, MD, 2013.

