



# Fact Sheet

Office of Public Affairs

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## THE NEW INTERNATIONAL RADIATION WARNING SYMBOL

The Nuclear Regulatory Commission regulates the civilian use of nuclear materials to ensure adequate protection of public health and safety and to protect the environment. The NRC requires those licensed to handle radioactive materials to post the international radiation symbol, known as the trefoil, as a warning to protect people from undue exposure to radiation.

On February 15, 2007, the International Atomic Energy Agency (IAEA) and the International Standards Organization (ISO) introduced a new supplemental radiation warning symbol to warn individuals not trained in radiation safety of the presence of a large source of ionizing radiation and reduce the potential for serious injury or death from accidental exposure. The NRC seeks to clarify the intent and use of this symbol.

The new ISO/IAEA symbol, a red triangle containing the traditional trefoil radiation symbol with waves radiating toward a skull-and-crossbones and the figure of a fleeing man, is meant to *supplement* the standard trefoil symbol, which warns of potential radiation exposure. It is not meant to *replace* the trefoil.

The radioactive “sources” used in devices such as irradiators, Gamma Knives, teletherapy, or industrial gauges are encased, or “sealed,” in metal housings that protect people nearby from potentially harmful radiation. Properly used, these sealed sources do not present a threat to public health or safety. During normal use of these sealed sources, the new symbol should not be visible to the general public.

The new warning symbol is intended to be placed *only on the inside* of devices containing sealed sources. The IAEA initiated the development of this symbol in late 2000 out of concern that people might try to disassemble such devices, unwittingly thinking the metal might be valuable as scrap. The symbol is meant to warn them of the danger of imminent harm after they break into a device and urge them to flee before they expose themselves and others to potentially harmful contamination. The symbol was tested with more than 1,600 people in 11 countries to ensure that its meaning was clear and understandable by all.

Used as intended, the new symbol will not be placed where the general public could see it. It is not intended to scare the general public. The symbol is not to be used on a door to a room or in public areas, or on trucks or shipping containers. It is to be placed as close to the sealed source as possible, and only inside the device containing the source.

Strategies for deploying the new radiation symbol will be developed by the IAEA, with participation by the NRC and other U.S. agencies. The NRC has not initiated rulemaking to incorporate the new symbol in its regulations, and there are no new requirements for licensees regarding the new supplemental warning symbol.



The traditional trefoil radiation warning symbol



The new ISO/IAEA radiation warning symbol

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