



Healthcare Facility Incident

Scenario

A sealed source of iridium-192 was delivered to the wrong floor of the _____ **(fill in Hospital Name)**. The source is used in a high dose-rate after loader used to deliver radiation therapy. Instead of being delivered to the radiation oncology department on the first floor of the hospital, it was delivered to the front desk of the hospital where patients check in. The person receiving the package did not have radiation safety or transportation training. They signed for it without understanding what it was and placed it on the floor under the check-in counter.

_____ 's **(fill in Hospital Name)** radiation oncology department did not realize the package had been delivered until 1 week later, when the medical supplier called to schedule installation of the part. Until that point, there was no indication of tracking the replacement source package while it was in transit to the hospital. As a result, the hospital was initially unaware of the delivery and that it had been misdirected. Upon discovering the location of the shipment, _____ **(fill in Hospital Name)** retrieved the shipment and transferred it to a secure location.

The hospital then evaluated the dose received by staff working in the proximity of the package. They noted that staff work a maximum of _____ **(fill in average shift length)** hours per day, and the closest estimated distance from the package was 2 feet. They also performed radiation dose measurements on and near the source package at various distances and orientations with a survey meter. From those measurements, they determined that no patients or staff were harmed from this delivery issue.

An unnamed hospital employee notified the local media about the incident prior to the radiation dose measurements being taken. Local news outlets reported that anyone who went to the check-in counter at the hospital may have been exposed to radiation.

Artificialities and Assumptions

The following artificialities and assumptions have been identified for the purposes of the scenario:

1. Your community has a medical center with a high dose-rate after loader used to deliver radiation therapy.
2. This incident occurred during an influenza outbreak in the community.
3. Some hospital workers are exaggerating their influenza-like symptoms, attributing them to acute radiation syndrome.



Example Key Issues

- Patient and responder safety issues
- Public information needs
- Hospital public relations concerns

Real-Life and Exercise Scenario Examples

[Two radiation incidents involving staff, patients, reported at Salem Hospital](#)