

INES Event Rating Form

Event Title:	Overexposure to Radiographer's Assistant
Date of Event:	2011-10-01
Event Location / Facility Name:	Las Vegas, Nevada/University of Nevada
Event Country:	United States
Type of Event:	Research Facility

INES Rating:	0
Status of Rating:	Final
Date of Rating:	2013-04-25

Impact on People and Environment		
<i>Release beyond authorized limits?</i>	<input type="checkbox"/>	
<i>Overexposure of a member of the public?</i>	<input type="checkbox"/>	
<i>Overexposure of a worker?</i>	<input type="checkbox"/>	
Impact on the Radiological Barriers and Controls at Facilities		
<i>Contamination spread within the facility?</i>	<input type="checkbox"/>	
<i>Damage to radiological barriers (incl. fuel damage) within the facility?</i>	<input type="checkbox"/>	
Degradation of Defence In-Depth?	<input type="checkbox"/>	
Person injured physically or casualty?	<input type="checkbox"/>	
Is there a continuing problem?	<input type="checkbox"/>	

Event Description¹:

A graduate student inhaled a mixture of U-233 and U-238 while working in a lab grinding a compound of uranium octoxide. The student used a glove box instead of a hood with a high-efficiency particulate air (HEPA) filter, contrary to the University of Nevada Las Vegas approved procedure. This happened twice, possibly between October 1, 2011 and April 1, 2012. The first bioassay, based on an inhalation date of October 1, 2011, resulted in a dose of 177.2 mSv (17.72 rem) total. When the inhalation date was assumed to be April 1, 2012, the result was 55.2 mSv (5.52 rem). The student will be given a third bioassay on September 5, 2012, that will involve a low-energy chest count to detect Th-234, and an organ count to detect any uranium in the kidneys. The student has been restricted from all lab work since April.

UPDATE 2013 04 25: The State of Nevada reported that all of the activity ratios are consistent with that of natural uranium, supporting the conclusion that the source of the exposure is natural uranium from a non-occupational origin. NRC EN48261.

Justification of INES Rating²:

A level 0 rating is warranted for events that are below the scale for rating. Note that the initial final rating could not be located; therefore, this is a reproduction of that rating.

Contact Person for Further Information	
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¹ If/when the ERF is published on the IAEA NEWS website, the first 300 characters of the event description will appear on the front page of the website.

² If/when the ERF is published on the IAEA NEWS, the contents of the Justification of the INES Rating field will not appear to users from the general public.

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Further Info on Web (URL):	Click here to enter text.
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Annexes:

Title	Category	Description (optional)
Click here to enter text.	Choose an item.	Click here to enter text.
Click here to enter text.	Choose an item.	Click here to enter text.