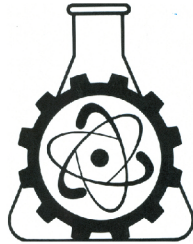


RADTriage50™

Read and follow the instructions provided on the dosimeter and in this manual. RADTriage50™ is a personal casualty, acute dose dosimeter.



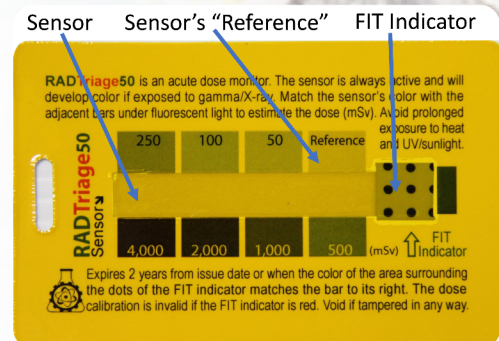
USER MANUAL

RADTriage50™ is intended to be used for monitoring medically significant radiation exposure, 50 mSv (diagnostic/tolerable dose) to $\approx 10,000$ mSv (fatal dose), in the event of a radiological incident. RADTriage50™ supplements, but does not replace, other radiation detection devices that a user may be required to use. RADTriage50™ has two monitors: 1. the sensor (rectangular strip in the center) which monitors ionizing radiations above 50 mSv (the yearly allowed dose limit for occupational workers in the United States); 2. FIT™ indicator (located to the right of the sensor with dark dots) which monitors service life, tampering and the effects of undesired ambient conditions.

HOW TO READ RADTriage50™

The RADTriage50™ dosimeter is always active and ready to use. RADTriage50™ should not be used for monitoring doses below 50 mSv, even though it may indicate a lower dose.

- The sensor's color must be lighter than the color of the "Reference" bar located above the sensor on the right.
- The sensor instantly develops color upon exposure to gamma/X-ray and the color intensifies with increased exposure to doses.
- Color development is permanent and cumulative.



LIMITATIONS OF RADTriage50™

The sensor of the RADTriage50™ dosimeter has the following limitations:

- The sensor will not monitor gamma/X-ray below 30 KeV, electrons/beta below 0.5 MeV and alpha particles.
- The sensor will not monitor doses from diagnostic X-ray (e.g. chest or dental), or security X-ray equipment. Multiple exposures to medical or airport equipment may result in sufficient exposure and will produce a detectable color change in the sensor.
- The radiated sensor, above 1,000 mSv, displays different color shades under different lights and should be viewed under fluorescent light.
- The sensor has slight thermal reactivity and a service life of two years at room temperature (25°C/77°F).
- The sensor will develop faint color advancement upon excessive exposure to UV/sunlight for an extended period of time, approximately one week. Avoid prolonged exposure to excessive heat and sunlight.

RADTriage50™

RADTriage50™ is the ideal personal radiation dosimeter for First Responders • Military • Nuclear Power Plants & Nearby Residents • Airport Personnel & Airline Crews
Anyone Concerned About Radiation Exposure

FIT™ INDICATOR

RADTriage50™ is equipped with a FIT™ indicator for monitoring exposures to heat and UV light exposures. RADTriage50™ should always be used according to instructions.

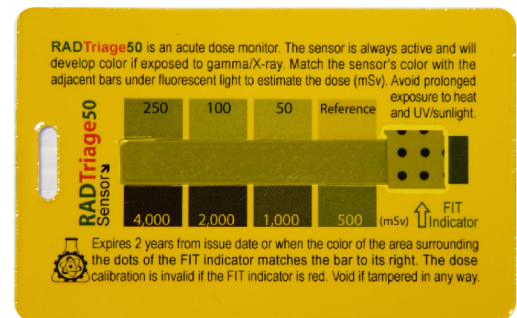
The FIT™ indicator simultaneously monitors; I) service-life, II) false positives/negatives from overexposure to heat and UV/sunlight, III) inactivation or altered sensitivity (i.e. change of dose calibration). Situations I and II are indicated by the darkening of the area surrounding the dots. Situation III is indicated by the FIT™ indicator changing to red.

Replace the RADTriage50™ dosimeter if the FIT™ indicator is red or darker than its color reference bar.

WHEN TO REPLACE RADTriage50™?

Replace your RADTriage50™ personal radiation dosimeter when one or more of the following occur:

- After two years of use, 7 years of refrigeration, or 10 years of freezer storage at $-15^{\circ}\text{C}/+5^{\circ}\text{F}$.
- When the sensor develops color which is noticeably darker than the "Reference" bar.
- When the area surrounding the dots of the FIT™ indicator matches or becomes darker than the color reference bar to the right of the FIT™ indicator.
- If the FIT™ indicator becomes red.



RADTriage50™ Exposed to 250 mSu

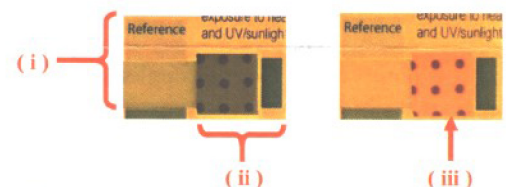
SERVICE LIFE/SHELF LIFE

RADTriage50™ has a useable two year service life from date of deployment at room temperature. The shelf life for RADTriage50™ can be extended, prior to deployment by storing the cards in the refrigerator or freezer.

Storage Temperature Celsius °C	Shelf life
-15°C	50 years
0°C	10 years
+5°C	7 years
+15°C	4.5 years
+25°C	2 years

Service life expires when I) the color of the sensor matches or is darker than the "Reference" bar, II) the area surrounding the dots of the FIT™ indicator matches or becomes darker than the color reference bar to the right, or III) the FIT™ indicator is red.

Replace the dosimeter when the service life expires.



Examples of expired service life / when to replace