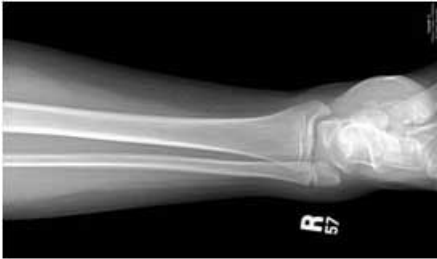


## How much radiation is too much?

The question: "How much medical radiation is too much?" has no definitive answer.

The amount of medical radiation that meets your health needs is all that is required.

- Low need – an x-ray of a broken ankle



- Moderate need – a CT scan for adult appendicitis



- High need – multiple CT scans after a traumatic accident



A better question is: How much radiation exposure is required to take care of my condition?

- There is no fixed answer.
- It depends on your medical condition.
- Ask your healthcare provider and radiologist about the benefits of your exam and amount of radiation exposure involved.

Ask your physician two questions:

1. What do we expect to learn from this x-ray examination?
2. Will decisions about my healthcare be determined from my imaging exam?

You and your healthcare provider must work together to decide what is necessary and best for you.

One follow-up question to ask might be: Is an x-ray, CT scan or nuclear imaging exam the best exam, or would other exams like ultrasound, magnetic resonance imaging or lab tests, work as well?

Your physician may say:

1. An ultrasound examination will not be sensitive for what we are trying to see.
2. An MRI exam takes longer and is not the best test at this time. We might need that later.
3. A CT exam is very sensitive for the condition you might have, and we have to find out if our diagnosis is correct.



If the results of an examination will not determine your future course of medical care, then it is unnecessary.

Sometimes, an additional x-ray, CT scan or nuclear imaging exam may help determine treatment or recovery progress. If so, the examination is necessary.

There is no set answer to the question: "How much medical radiation is too much?" Physicians should prescribe what is necessary, avoid overuse and safely use imaging procedures for your healthcare.

The answer depends on your medical need. Asking questions can help you understand why you need an examination and which one is best for your healthcare.

## Disclaimer

This information is copied from the RadiologyInfo Web site (<http://www.radiologyinfo.org>) which is dedicated to providing the highest quality information. To ensure that, each section is reviewed by a physician with expertise in the area presented. All information contained in the Web site is further reviewed by an ACR (American College of Radiology) - RSNA (Radiological Society of North America) committee, comprising physicians with expertise in several radiologic areas.

However, it is not possible to assure that this Web site contains complete, up-to-date information on any particular subject. Therefore, ACR and RSNA make no representations or warranties about the suitability of this information for use for any particular purpose. All information is provided "as is" without express or implied warranty.

Please visit the RadiologyInfo Web site at <http://www.radiologyinfo.org> to view or download the latest information.

**Note:** Images may be shown for illustrative purposes. Do not attempt to draw conclusions or make diagnoses by comparing these images to other medical images, particularly your own. Only qualified physicians should interpret images; the radiologist is the physician expert trained in medical imaging.

## Copyright

This material is copyrighted by either the Radiological Society of North America (RSNA), 820 Jorie Boulevard, Oak Brook, IL 60523-2251 or the American College of Radiology (ACR), 1891 Preston White Drive, Reston, VA 20191-4397. Commercial reproduction or multiple distribution by any traditional or electronically based reproduction/publication method is prohibited.

Copyright © 2022 Radiological Society of North America, Inc.