

How to Read Your Radiology Report

Your healthcare provider (usually a doctor, nurse practitioner, or physician assistant) sometimes uses medical imaging to diagnose and treat diseases they think you may have. A radiologist is a doctor who supervises these exams, reads and interprets the images, and writes a report for your healthcare provider. This report may contain complex words and information. If you have any questions, be sure to talk to your provider or ask to speak to a radiologist.



Electronic Health Records

The radiologist writes the report for your provider who ordered the exam. Typically, the radiologist sends the report to the person who ordered your test, who then delivers the results to you.

Many patients can now access their electronic health records online. These records include radiology reports. Online access to your health records may help you make more informed decisions about your healthcare. In addition, online access lets you share your radiology reports with other doctors electronically. This may increase the safety, quality, and efficiency of your care.

In most radiology practices, the radiologist still writes the report using medical terms that your healthcare provider will understand. However, these terms may be confusing for you as a patient. The information below helps explain the typical parts of a radiology report.

Sections of the Radiology Report

Type of exam

This section usually shows the date, time, and type of exam.

Example:

- *Computed tomography (CT) of the abdomen and pelvis with intravenous and oral contrast performed January 10th, 2022.*

History/Reason for exam

This section usually lists the information that your ordering provider has listed for the radiologist when they ordered your exam. It allows your ordering provider to explain what symptoms you are having and why they are ordering the radiology test. This helps the Radiologist accurately interpret your test and focus the report on your symptoms and past medical history. Sometimes the radiologist who reads your exam will also add information that they find in your chart or forms that you fill out before your imaging test.

Example:

- *64-year-old female with a history of breast cancer and new onset abdominal pain.*

Comparison/Priors

Sometimes, the radiologist will compare the new imaging exam with any available previous exams. If so, the doctor will list them here. Comparisons usually involve exams of the same body area and exam type. It is always a good idea to get any prior imaging exams from other hospitals/facilities and provide them to the radiology department where you are having your test. Having these older exams can be very helpful to the radiologist.

Example:

- *Comparison is made to a CT scan of the abdomen and pelvis performed August 24, 2013.*

Technique

This section describes how the exam was done and whether contrast was injected in your vein. Because it is used for documentation purposes, this section is not typically useful for you or your doctor. However, it can be very helpful to a radiologist for any future exam if needed.

Example:

- *Imaging was performed from the lung bases through the pubic symphysis following the administration of intravenous and oral contrast. Coronal and Sagittal reformatted images were evaluated.*

Findings

This section lists what the radiologist saw in each area of the body in the exam. Your radiologist notes whether they think the area to be normal, abnormal, or potentially abnormal. Sometimes an exam covers an area of the body but does not discuss any findings. This usually means that the radiologist looked but did not find any problems to tell your doctor. Some radiologists will report things in paragraph form, while others use a reporting style where each organ or region of the body is listed as a line with the findings. If the radiologist does not see anything concerning it may say “normal” or “unremarkable.”

Example:

- *Lung bases: No pulmonary nodules or evidence of pneumonia.*
- *Cardiac: Base of heart is within normal limits. No pericardial effusion.*
- *Liver: Normal size and contour. There is a new 2 cm hypoattenuating focus in segment 8. Gallbladder is surgically absent.*
- *Biliary: No intra or extrahepatic biliary dilation.*
- *Spleen: Unremarkable.*
- *Pancreas: Normal.*
- *Kidneys and Adrenals: No masses, stones or hydronephrosis. No adrenal nodules.*
- *Lymph nodes: No lymphadenopathy.*
- *Bowel: No dilation or wall thickening.*
- *Bladder: Normal.*
- *Uterus and Adnexa: The uterus and bilateral ovaries are within normal limits for age.*
- *Bones: No aggressive osseous lesions. Degenerative changes are present in the spine.*
- *Soft Tissues: Bilateral fat and bowel containing inguinal hernias are again noted.*
- *Other: No free fluid within the pelvis.*

Impression

In this section, the radiologist summarizes the findings and reports the most important findings that they see and possible causes (this is called a differential diagnosis) for those findings. This section offers the most important information for decision-making.

Therefore, it is the most important part of the radiology report for you and your doctor.

For an abnormal finding, the radiologist may recommend:

- other imaging tests that can help better assess the finding or getting a follow up imaging test to relook at the finding after a period of time.
- biopsy.
- combining the finding with clinical symptoms or laboratory test results.
- comparing the finding with any other imaging studies that the radiologist interpreting your test does not have access to. This is common when you have imaging tests done at different facilities or hospitals.

For a potentially abnormal finding, the radiologist may make any of the above recommendations.

Sometimes the report does not answer the clinical question, and more exams may be needed. More exams may be necessary to follow-up on a suspicious or questionable finding.

Example:

1. *No findings on the current CT to account for the patient's clinical complaint of abdominal pain.*
2. *There is a new 2 cm lesion in the liver which is indeterminate (cannot be definitively diagnosed by the study).*
3. *RECOMMENDATION: Given the patient's personal history of breast cancer, an MRI of the liver is recommended to better characterize the indeterminate liver lesion to exclude the possibility of metastases (or cancer spread).*

Additional Information

Once the report is complete, the radiologist signs it, and sends the report to your physician. Your doctor will then discuss the results with you.

Sometimes, you may have questions about your report that your physician cannot answer. If so, talk to your facility's imaging staff. Many radiologists are happy to answer your questions.

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