

UW Medicine

If You Have Had Contrast Allergy

What you need to know about premedication



This handout is for patients who have had a moderate or severe allergic reaction when they received contrast in the past, who are scheduled for an imaging study that uses contrast materials.

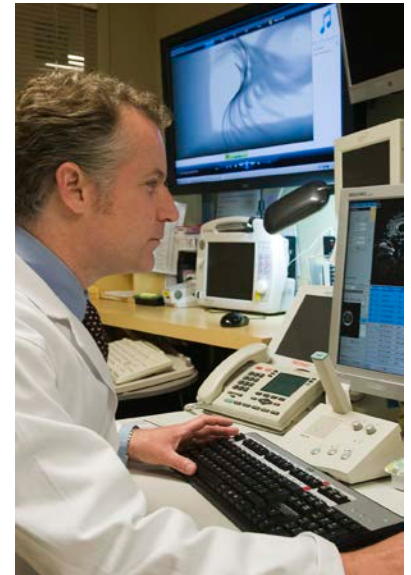
Your doctors have decided that a special imaging study is needed to help them manage your health. You are scheduled for 1 of these scans:

- A **computed tomography (CT) scan** that uses *iodinated contrast* (X-ray dye)
- A **magnetic resonance (MR) scan** that uses a *gadolinium contrast agent*

What is contrast?

Contrast is a substance used in many types of imaging procedures. It helps your doctor see the inside of your body more clearly. Contrast is also called *contrast dye, contrast agent, or contrast media*.

Types of contrast include iodinated contrast for CT imaging and gadolinium contrast for MR imaging. Contrast is usually given *intravenously* (through an IV tube into your vein).



Images from the scan will help your doctors manage your health.

What puts me at risk for an allergic reaction to contrast?

You have a higher risk of allergic reaction to contrast if you have:

- Reacted to the same type of contrast medicine in the past.
- Had moderate to severe allergic reactions to 4 or more foods or medicines, that treating with just Benadryl did not resolve. Allergic-type reactions include having trouble breathing or having facial swelling.
- Current, active asthma symptoms.

How do I know if I had an allergic reaction to contrast?

Moderate allergic reactions to contrast include:

- Hives (more than 12)
- Shortness of breath
- Wheezing
- Facial swelling
- Throat tightness without shortness of breath

Severe allergic reactions to contrast include *anaphylaxis*, which can be life-threatening and require IV medicines, intubation, or hospitalization. Some symptoms of this severe reaction are:

- Low blood pressure (*hypotension*)
- Fast heart rate (*tachycardia*)
- Wheezing with shortness of breath
- Swelling in your throat and airway that makes it hard to breathe

What do I need to do?

If you have had any of these reactions to contrast in the past:

- You have a high risk of having another reaction if you are exposed to contrast again.
- Tell your technologist that you have had an allergic reaction to contrast before. Your technologist will need to talk with the radiologist and your doctor about whether you need contrast for this study.
- If your allergic reaction to contrast has been severe, you may need to sign a special *informed consent form* to confirm that you want to go ahead with the scan that uses the contrast agent.
- If you have any questions or concerns after reading this handout, please tell the technologist. The technologist will tell your doctor, and your doctor will talk with you and answer your questions.
- Talk with your doctor about *premedication*.

What is premedication?

For people who have had allergic reactions to contrast, doctors have found that giving them medicine before the scan may help reduce the risk of their having another allergic reaction. This is called *premedication*. A type of medicine called a *steroid* is most often used for premedication.

Will premedication prevent my allergic reaction?

Most patients who have premedication do not have another allergic reaction to the contrast. A small number of patients (10%, or 10 out of 100 patients) who are premedicated have *breakthrough* reactions. A breakthrough reaction is an allergic reaction that occurs even after having premedication. Most times, these breakthrough reactions are similar to their first allergic reaction.

This means there is a small risk that you may have a repeat contrast reaction even if you are premedicated. If this happens, your reaction will likely be similar to your first reaction.

What if I have tried premedication before?

A study at the University of Michigan found that 88% of patients (88 out of 100 patients) who had a breakthrough reaction with premedication on one scan did **not** have another breakthrough reaction when they were premedicated before a later scan. (To read more about this study, visit www.ncbi.nlm.nih.gov/pubmed/19789241.)

This means that even if you have had a breakthrough reaction with premedication once, you may not have one the next time you are premedicated with steroids and given contrast dye.

How long after receiving contrast could I have an allergic reaction?

A small number of people have a reaction to contrast more than 1 day after they receive contrast. Most people who get these delayed reactions have rashes, itchy skin, headaches, or nausea.

If you have a delayed reaction to contrast, you may need treatment with skin lotions, steroids, and antihistamines. Please call your primary health care provider.

Questions?

Your questions are important. Call your doctor or health care provider if you have questions or concerns.

Weekdays from 8 a.m. to 6 p.m., call:

- UWMC Radiology:
206-598-6200
- HMC Radiology:
206-744-3105
- SCCA Radiology
Observation Nurse:
206-288-7184

Call 9-1-1 if you are having an emergency.