

**Contrast echocardiography:**

An echo contrast agent may be used to enhance the imaging of your heart and blood vessels. Echo contrast is composed of microscopic bubbles suspended in a liquid that is injected into one of your veins. The bubbles are smaller than red blood cells and circulate in your bloodstream for about 3 to 5 minutes before being exhaled. The microbubbles are considered extremely safe, but they have not been tested in pediatric patients, pregnant or nursing patients, and for this reason we do not use echo contrast in these patient groups. Otherwise, echo contrast agents may be used in all forms of echocardiography testing (routine echocardiography, stress echocardiography, and transesophageal echocardiography). Detailed information and instructions about the contrast echocardiography are as follows:

- Tell the sonographer or nurse performing the examination if:
  - You are potentially pregnant, or are nursing
  - You have an allergy to blood or blood products
  - You have ever had retinal surgery
  - You have a severe heart or lung condition that severely limits your ability to exercise
  - You have problems with venous access or if you have a venous access line already in place (e.g.: Mediport), as this access line can often be used instead of placing an additional intravenous line for this test
- The echo contrast agents used in our lab are Optison (GE Healthcare) and Definity (Lantheus Pharmaceuticals).
- The contrast agent most commonly has no side effects, and most patients are not even aware when they are receiving the injection. The exception is a brief sensation of back discomfort that may occur in about 1 out of every 100 patients receiving Definity. We might administer a short-acting pain medication if this occurs, but in any event the back discomfort resolves in about 10 minutes.