

screening, diagnosing, and monitoring

# a closer look

at right heart catheterization

*Insights*  
*Your PAH Resource*

This brochure is designed to provide information about right heart catheterization (RHC). It is not intended to replace discussions with your doctor. Your doctor is your best source of information about this procedure and can answer any additional questions you may have.

To better understand how well your lungs and heart are working, your doctor has requested a procedure called *RHC*.

### **Why has my doctor requested this procedure?**

RHC is the most accurate way to measure the blood pressure in your heart and the arteries of your lungs (called the *pulmonary arteries*). Depending on the findings of this test and possibly other tests, your doctor will be able to tell whether you have a condition called *pulmonary arterial hypertension (PAH)* or whether your symptoms are caused by a different problem. This procedure may also help your doctor decide on the best treatment for you.

### **How is RHC performed?**

RHC is usually performed by either a cardiologist or a pulmonologist and is typically done in a hospital. Mild sedation and local anesthesia are used to prevent discomfort. During the procedure, the doctor inserts a very thin, flexible tube, called a *catheter*, into a vein in your body and guides it to your heart. Instruments at the tip of the catheter allow the doctor to take measurements inside of your heart and in the large arteries of your lungs.



## What is being measured during the procedure?

During RHC, the doctor measures the pressures inside the pulmonary arteries and chambers of your heart, how much oxygen is in your blood, and the amount of blood your heart is able to pump each minute.

## What other information is obtained by RHC?

A *vasodilator* test may also be performed during RHC to see if the blood pressure in your pulmonary arteries falls when a fast-acting blood pressure-reducing medication is given. The results of this test can help your doctor decide on the type of therapy you may receive.

## Where will the procedure take place?

The procedure is generally performed in a hospital's cardiac catheterization laboratory, sometimes called a *cath lab*. Your doctor or a staff member can give you specific information on where your procedure will take place.

## How should I prepare for RHC?

Be sure to follow any instructions your doctor has given you. For example, your doctor may tell you to stop taking certain medications several days before the procedure. Your doctor may also give you specific instructions on when to stop eating and drinking before the procedure. Be sure to inform the staff at the cath lab if you have an allergy or sensitivity to any medications.

# On the day of your procedure

## What can I expect when I get to the cath lab?

At the cath lab, you will be given a hospital gown to change into, and you will be transferred to a special table. A doctor or staff member will prepare an entry point for the catheter, usually at the upper thigh (groin), chest, or neck. The area will be cleaned, possibly shaved, and then numbed with a local anesthetic to prevent any pain during the insertion of the catheter.

## Will I be awake during RHC?

Yes, you need to be awake during the procedure. However, you will probably be given a mild sedative to help you relax.

## How long will it take?

The procedure typically takes less than an hour, but afterward you will need to stay in the recovery room until your sedative has worn off enough for you to go home. Some people may need to stay in the hospital overnight.

## Can I drive home after the procedure?

Because the effects of the sedative can last for some time, it is recommended that you not drive after your RHC. Plan to have a friend or family member pick you up.

## How soon can I go back to my normal activities or work?

You should take it easy for the rest of the day after your procedure. Your doctor will let you know when you are able to return to normal activities or work.

## Are there any risks associated with RHC?

Most people undergo RHC without difficulty; however, there are risks associated with any medical procedure. Be sure to discuss these risks with your doctor before the procedure.

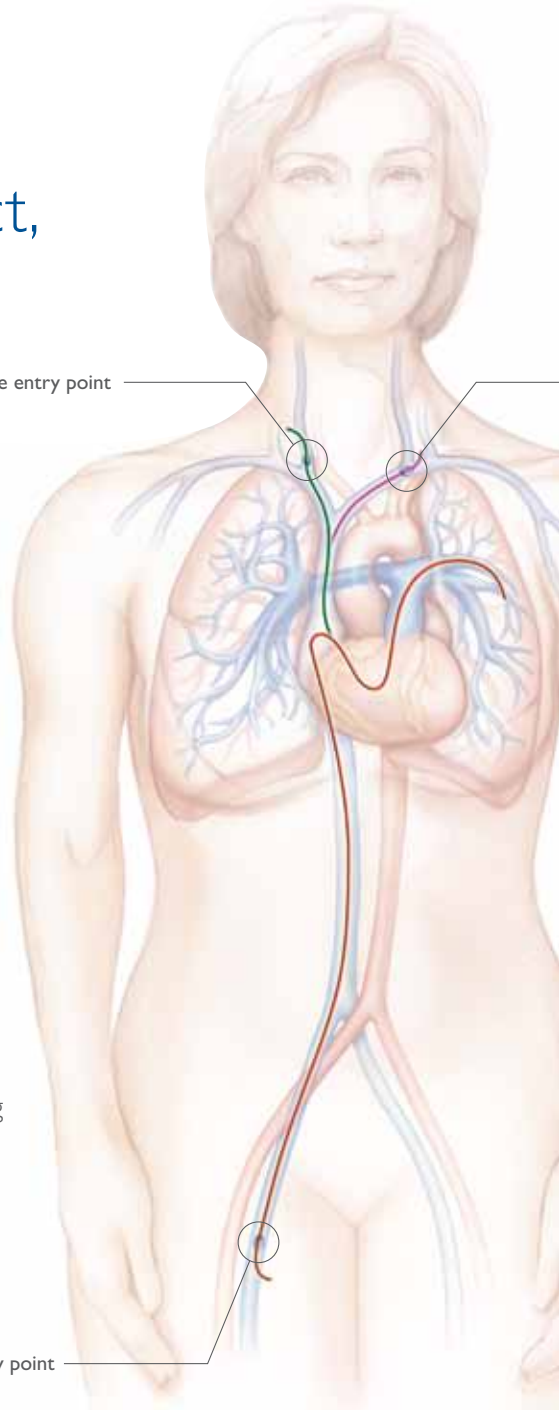
# What to expect, step-by-step

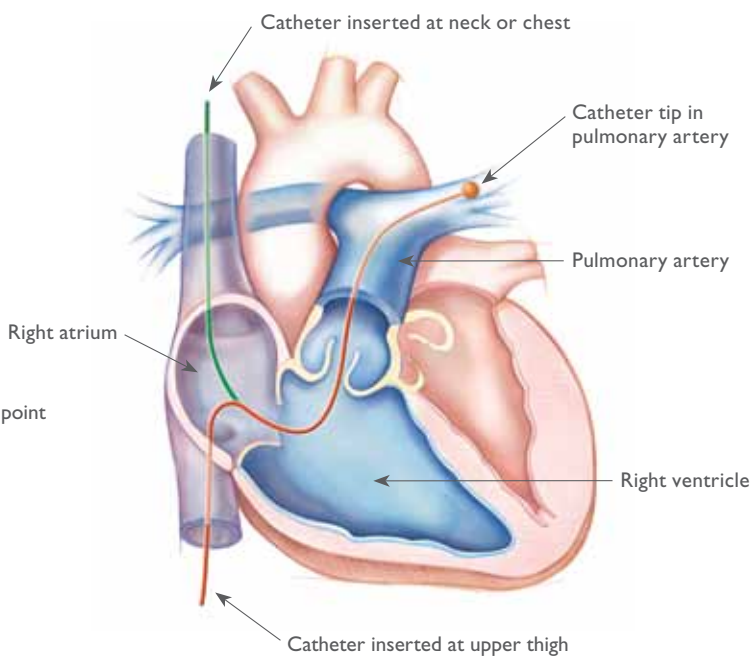
**Step 1.** A large vein, usually in your neck, chest, or upper thigh, is chosen as an entry point. The skin above it is cleaned and numbed with a local anesthetic.

**Step 2.** The doctor makes an opening in the vein and threads in a long, thin, flexible tube, called a *catheter*. He or she then guides the catheter through the vein toward your heart. An x-ray machine or other monitoring equipment is used to follow the catheter's progress.

Possible entry point

Possible entry point





**Step 3.** When the tip of the catheter reaches your heart, the doctor directs it first through the heart's right atrium, then through the right ventricle, and finally into a pulmonary artery.

**Step 4.** Instruments at the tip of the catheter measure the blood pressure in the chambers of your heart and in your pulmonary arteries. They also record how much oxygen is in your blood and the amount of blood your heart is able to pump each minute.

**Step 5.** If appropriate, the doctor may give you blood pressure–lowering medicine while the catheter is in place to see if it makes the pressure in your pulmonary arteries fall.

**Step 6.** Once the measurements have been completed, the catheter is carefully withdrawn and removed from your body. A bandage is placed over the entry site and you are taken to the recovery room.

# Information about my RHC

Use the space below to record details about your RHC appointment.

Date of procedure: \_\_\_\_\_

Arrive at: \_\_\_\_\_:\_\_\_\_\_ AM/PM

Name of hospital or cath lab: \_\_\_\_\_

Address: \_\_\_\_\_

Floor: \_\_\_\_\_ Room no.: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ ZIP: \_\_\_\_\_

Phone number: (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_

Be sure to bring your insurance card(s) and a list of all the medications you are currently taking.

Special instructions: \_\_\_\_\_

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\_\_\_\_\_



*Insights* is an educational program designed exclusively for individuals with pulmonary arterial hypertension and those who care for them—brought to you by Gilead Sciences, Inc.

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