

RIBAVIRIN AEROSOL

Information for visitors

Overview

What is Ribavirin?

Ribavirin is a medicine that kills viruses, much like antibiotics kill bacteria. It is sometimes given to the patient as an aerosol (small particles suspended in air). Although it is used as a medicine, it may cause some health problems.

How Is Ribavirin Aerosol Produced?

The SPAG, or Small Particle Aerosol Generator, creates tiny particles of Ribavirin that the patient can inhale.

How Can Ribavirin Aerosol Affect Me?

The particles of Ribavirin can leak from the patient's mask and get into the air. Once the particles are in the air, anyone can breathe them in. The closer you are to the patient's head, the more likely you are to breathe in small amounts of Ribavirin.

How Does Duke Protect Staff and Visitors?

Duke employees try to keep the particles of Ribavirin from getting into the room. However, masks are available if needed. See inside for details.

HEALTH PROBLEMS LINKED TO RIBAVIRIN

The drug Ribavirin is used to treat some serious viral illnesses. Like many drugs, it can cause side effects.

Reproductive Effects: *Ribavirin has been shown to cause birth defects in animal studies; however, no one knows if Ribavirin causes these problems in humans.*

Any visitor who is or may be PREGNANT should not enter a patient room during Ribavirin treatment unless a breathing machine is used or a Demistifier (see picture on front of brochure) is in place.

Other Effects: Some health care workers have reported the following SHORT-TERM symptoms after working around Ribavirin: headache, redness/watering of the eyes, runny nose, upset stomach, dizziness, unusual tiredness or weakness, and trouble sleeping. There have been reports of damage to contact lenses after long-term exposure to Ribavirin (because the aerosol dries out the lenses).

PROTECTING VISITORS AND STAFF

For very sick patients, the benefits of treatment outweigh the risks. This is not true for healthy staff and visitors, who could breathe in "stray" particles. Duke uses several methods to keep particles out of room air, protecting visitors and staff.

Engineering Controls

Engineering Controls make use of equipment to keep Ribavirin out of the air. For example, when a patient on a **breathing machine** is given the drug, the Ribavirin can't get into the room. When Ribavirin is given through a mask, employees will set up a **Demistifier** tent and filter system. The Demistifier pulls air (and Ribavirin particles) through a High Efficiency Particulate Air (HEPA) filter. The cleaned air comes out into the room. When possible, the airflow is also adjusted so that air moves from the hall into the room, keeping Ribavirin out of the hall.

Work Practice Controls

Work Practice Controls are actions taken to prevent exposure to Ribavirin. For example, Duke employees will **turn off the flow of Ribavirin before disturbing the Demistifier tent** for routine patient care. Another way to keep Ribavirin out of room air is to quickly fix breathing machine tubes if they "pop off" when a patient moves or coughs

Personal Protective Equipment (PPE)

In an emergency, Demistifiers may not be available for all patients receiving Ribavirin through a mask or hood. If this occurs, you will see employees wearing personal protective equipment, such as "N-95" respirators and goggles. (Surgical masks do not provide enough protection because they do not fit tightly to the face and do not filter out the tiniest particles.) **Visitors should wear "N-95" respirators in these situations.** These respirators filter out more than 95% of the particles in the air. Ask a nurse how to get a respirator.

People with contact lenses should wear tight-fitting goggles if they will be in the room for a long time. (This keeps the lenses from drying out.)

If the Demistifier tent or breathing machine tubing is disturbed, visitors who are or may be PREGNANT should step outside the room or wear an "N-95" respirator.



"N-95" Respirator

Questions?

Consult with the **nursing staff** for more information about:

- When to wear a mask and what type to wear (Masks should be available through the nursing unit.)
- Eye protection for contact lens-wearers to use around Ribavirin aerosol

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