

# MRI - Details

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## Exam Details - MRI

**Available at:**

DC, Chevy Chase, Park Potomac, and Fairfax

**Not Available at:**

Bethesda, Sterling, or Arlington

## MRI: Magnetic Resonance Imaging

### Used To:

- Modality of Choice for examining brain, neck, and spinal cord
- Detection of musculoskeletal diseases

### How:

- Large magnet that surrounds patient with radio densities
- Uses computer to produce images

### Before Exam:

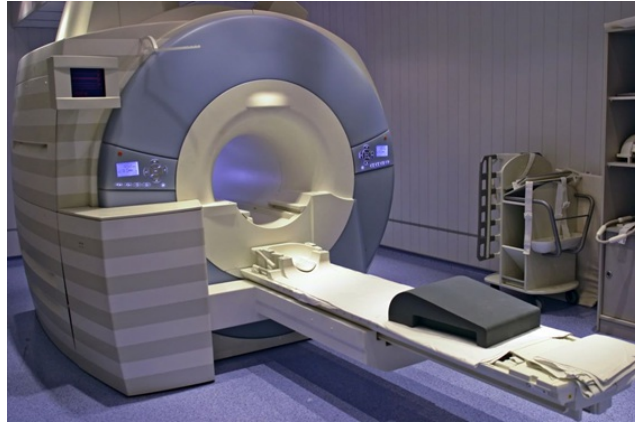
- Any metal is removed (E.G. Jewelry) because the magnet will attract them
- Note: Patients with pacemakers cannot have MRI's because the magnet will alter the radio frequencies in the monitor.

### Details:

- Human body is made up of atoms. in the center of an atom, there are spinning particles called nuclei.
- Nuclei normally spin in different angles. When the scanner stops, the nuclei return to their original spin rotation and radio frequencies.

- Part of the scanner (the coil) works like a radio antenna and receives these frequencies.
- This data is transmitted to a computer which generates very detailed images.

Machine:



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