

# CT - Computed Tomography - Details

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## Exam Details - CT Computed Tomography

**Available at:**  
**DC, Chevy Chase, and Sterling**

### Used To:

- Provides detailed organ studies by stacking individual image slices

### Why:

- Many reasons for exam

### How:

- Uses tomography uses an x-ray beam that rotates around the patient
- X-ray passes through the body and are detected by sensors
- The information from the sensors is processed by a computer and displayed as an image on the video screen
- Images produced are visual slices of anatomy (cross-sections)
- Provides detailed organ studies by stacking individual image slices
- This technique is very useful in imaging the internal portion of the organs and separates overlapping structures precisely
- Contrast material is sometimes used for more detail

### Contrast:

- Contrast material blocks the penetration of x-rays through selected parts of the body
- Helps visualize an organ on x-ray film
- Examples of contrast are barium and iodine
  - Barium is an "oral" contrast and is used for filling the large and small intestines
  - Iodine is an "I.V" (intravenous) contrast and is used to highlight organs and blood vessels

### Machine:



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