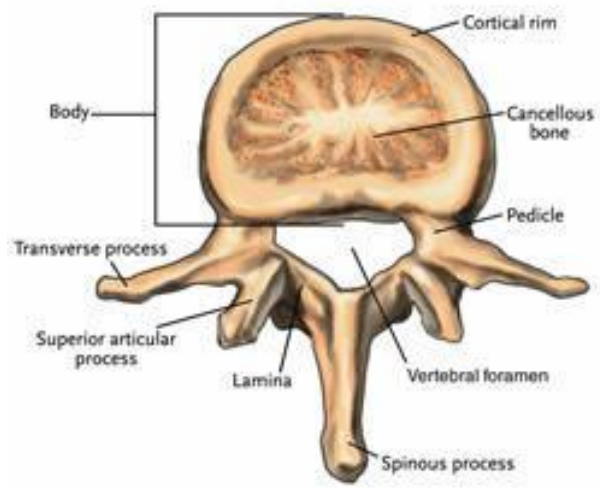
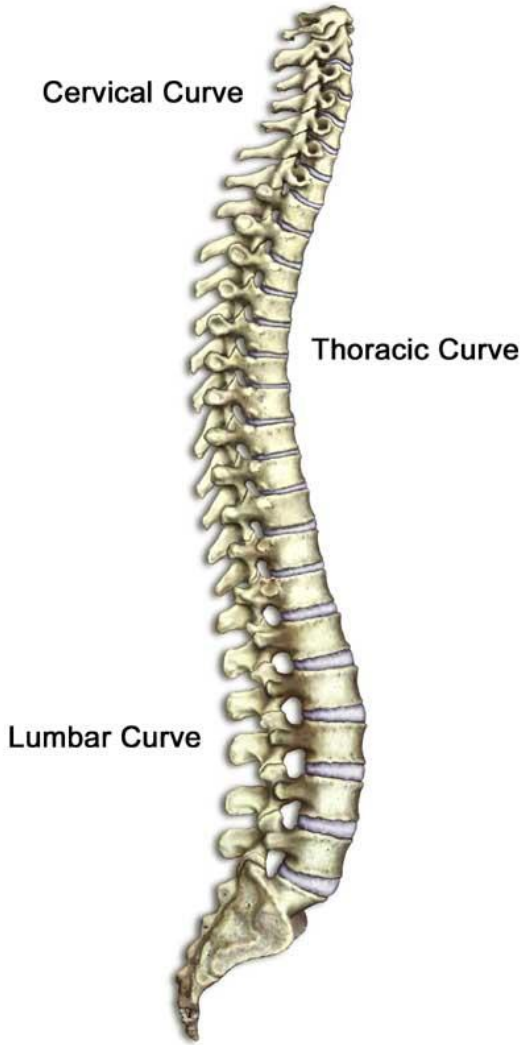
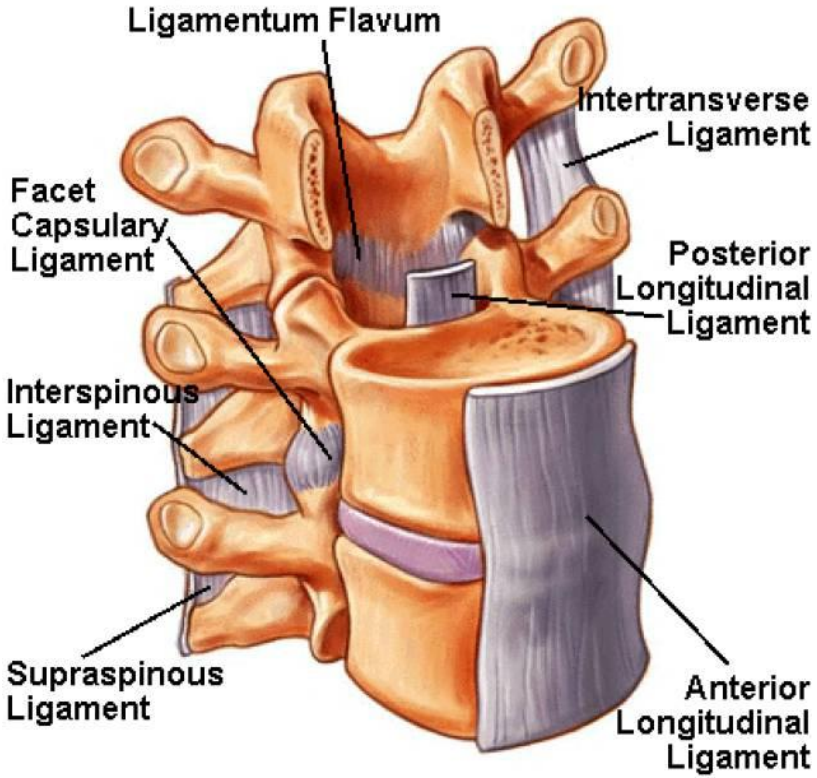
Spinal Disorders

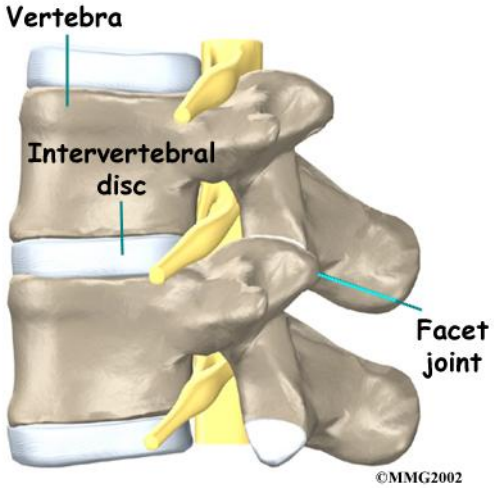
Adam Rufa, PT, DPT, OCS

- 4 Spinal Regions (C, T, L, S)
  1. Cervical Spine (C1-7)
  2. Thoracic Spine (T1-12)
  3. Lumbar (L1-5)
  4. Sacrum (S1-5)-Usually fused






Ligamentum Flavum
Intertransverse Ligament
Facet Capsulary Ligament
Posterior Longitudinal Ligament
Interspinous Ligament
Supraspinous Ligament
Anterior Longitudinal Ligament


Vertebra
Intervertebral disc
Facet joint
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84% Get Lumbar/Sacral Pain

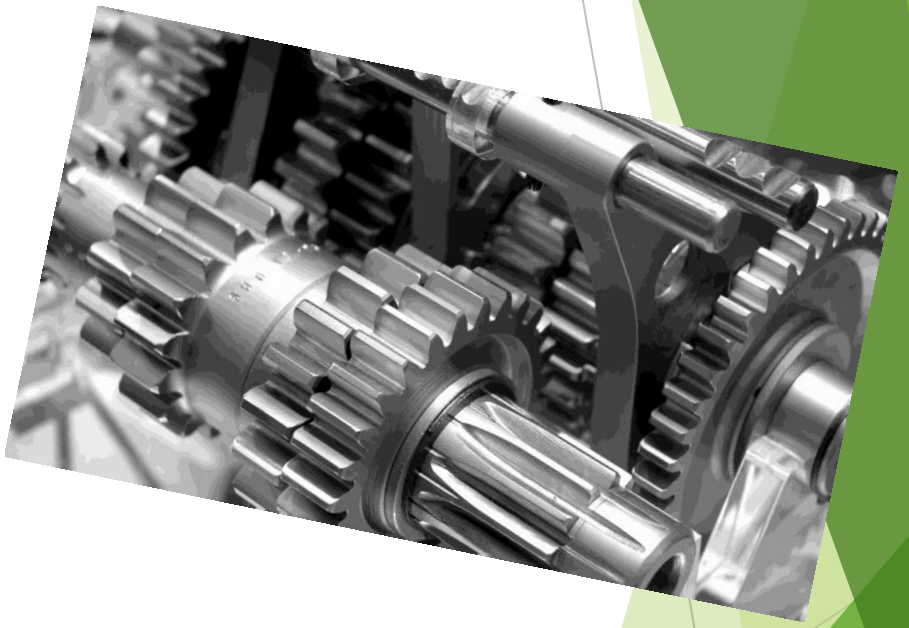
70% Get Neck Pain

20% Get Thoracic Pain

90% Get Better in 1 Year

40% Have Recurrence in 1 Year

Two Types of Symptoms



1. Mechanical
   - Changes with:
     - Movement, Position and Activity

2. Non-Mechanical
   - Does not change with:
     - Movement, Position and Activity

Non-Mechanical

- Rare
- May indicate a more serious problem

Mechanical

1. Back/Neck Dominant

2. Leg/Arm Dominant

Mechanical: Back Dominant

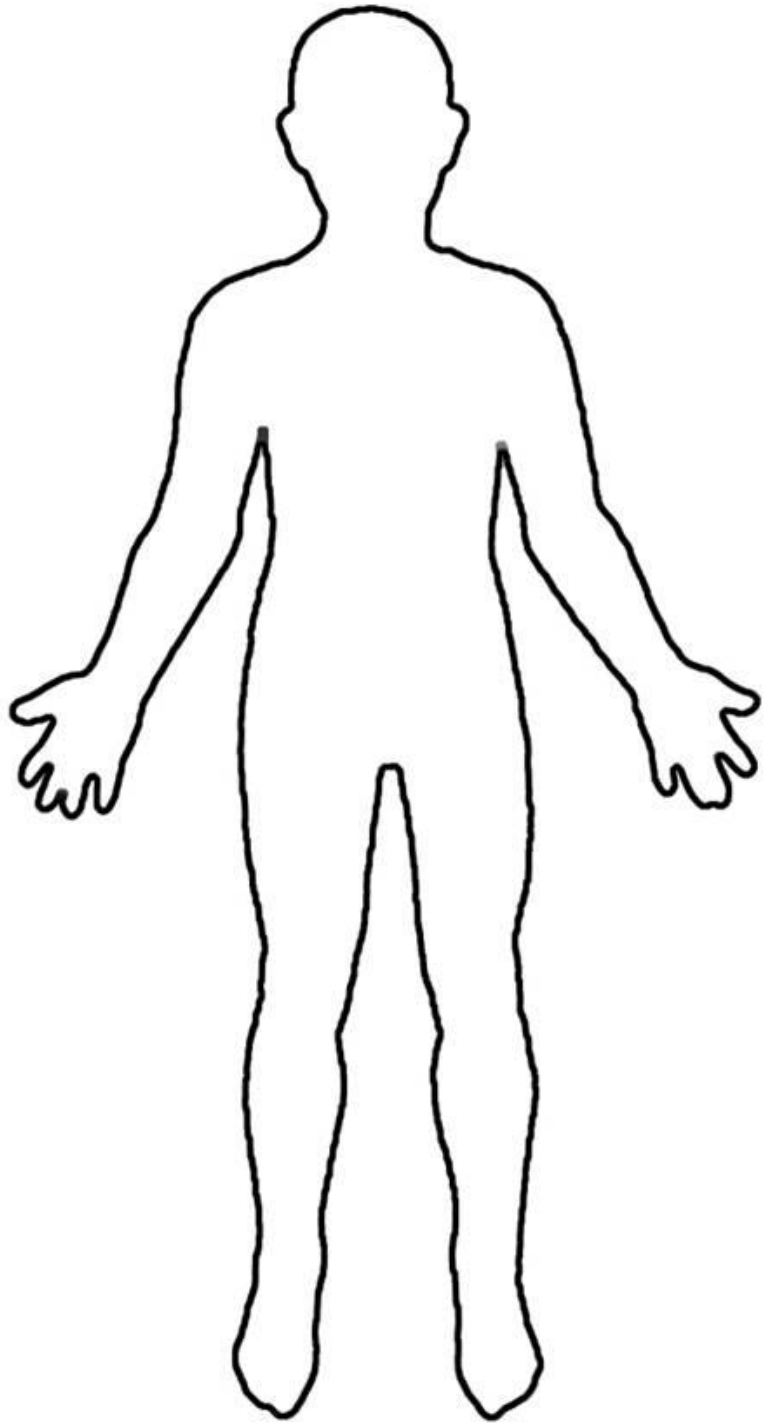
Changes with activity and position

Can be:

- Sharp/Dull
- Spasm
- Intense/Mild

Almost always gets better

We often can’t determine the exact problem



Mechanical: Leg Dominant

Changes with activity and position

Can be:

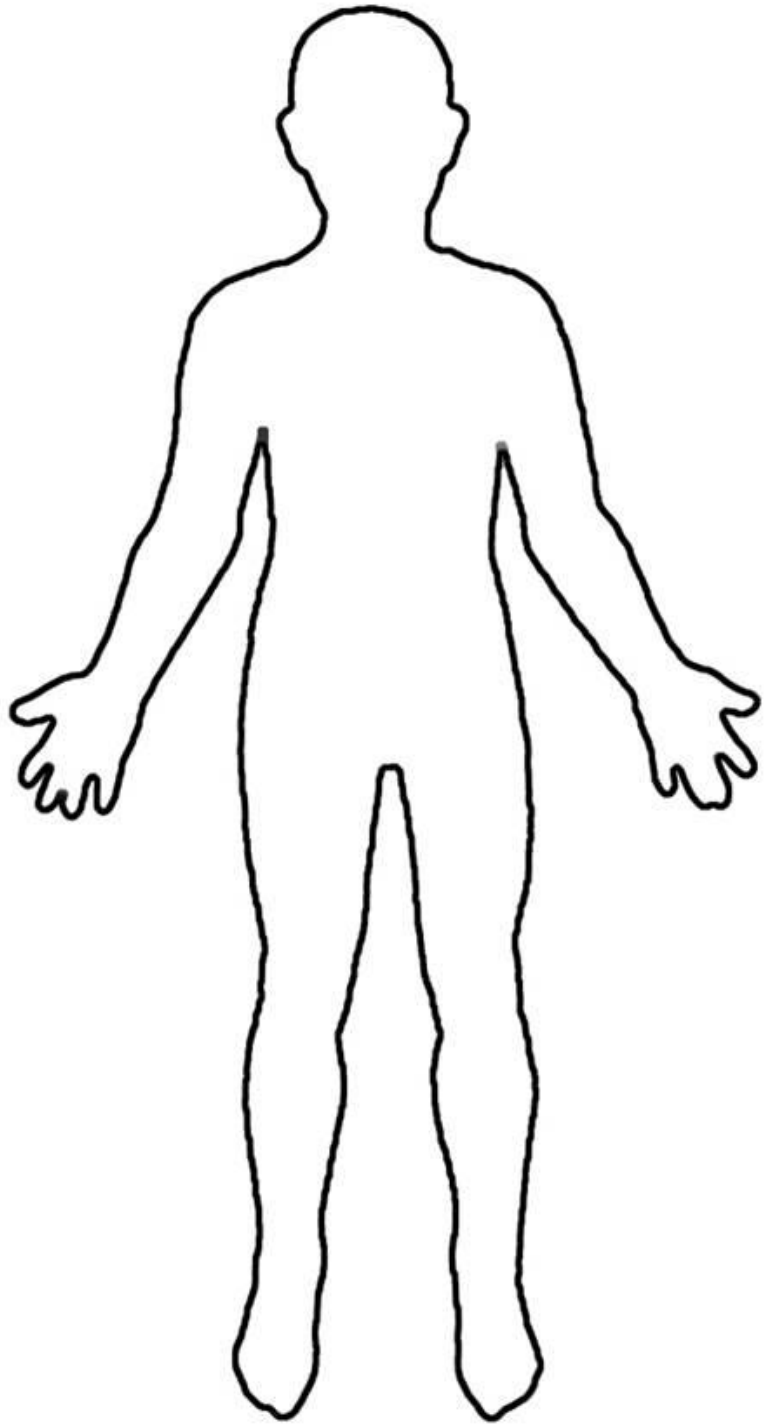
- Sharp/Dull
- Spasm
- Intense/Mild
- Shooting
- Numbness or Weakness

Almost always gets better but may need some help

- Medication
- Exercise and Advice

Two Main Types

1) Disc Herniation (Sciatica)
2) Stenosis (Degenerative)



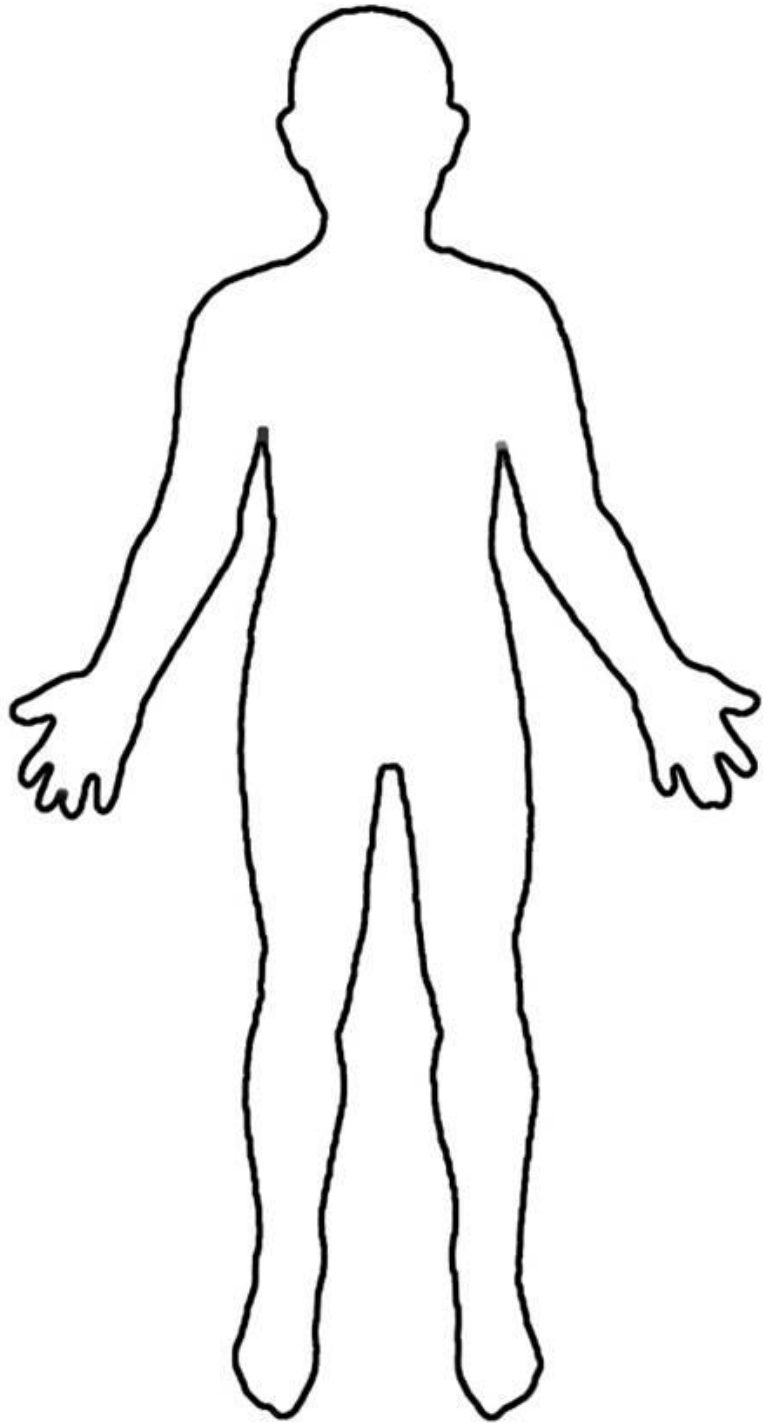
Mechanical: Leg Dominant

Disc Herniation (Sciatica)

- •Common in younger individuals (below 60)
- •Usually gets better without invasive treatment
- •Often Constant
  - •Better with lying down and walking
  - •Worse sitting and standing

Stenosis (Degenerative)

- •Common in older individuals (over 60)
- •Usually gets better without invasive treatment
- •Comes on with standing, walking and running
- •Much better or absent when sitting



Red Flags

- Changes in bowel or bladder function
- Numbness in groin/genitals
- Progressive weakness in foot or leg
- Fever/high risk of infection
- Pain result of an injury (History of Osteoporosis)
  - Car Accident
  - Fall
- History of cancer
  - Especially: Prostate, Breast or Lung
- Severe night pain
- Unexplained loss of weight
- Not getting better

Imaging (X-Ray, MRI, CT)

- Useful in 2 situations
  1. To rule out more serious pathology (Investigate Red Flags)
  2. Investigate surgical options

- Only 1/2500 images show an important finding
  - Non symptomatic people have positive imaging findings
  - Not predictive of future back pain
  - Not predictive of recovery

Imaging (X-Ray, MRI, CT)

- Danger
  - Radiation
  - Cost$
  - Increase risk of invasive procedures
  - Impact on attitude

Yellow Flags

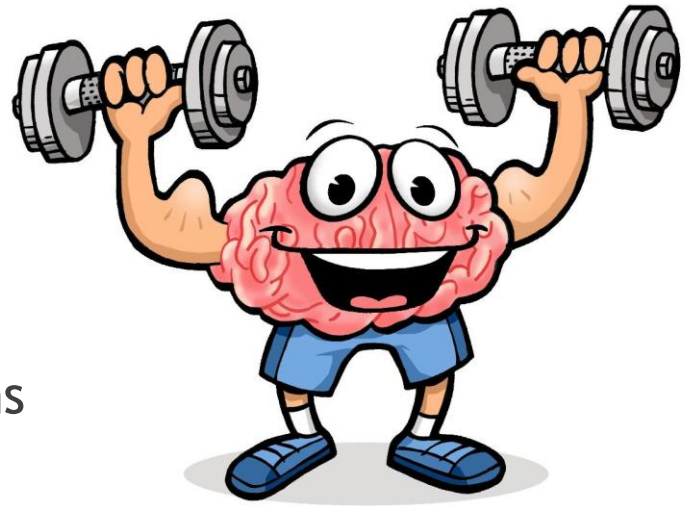
Back pain is harmful and disabling

Fear of condition and avoidance of activity/movement

Depression/isolation

Belief in passive over active treatments

Treatment



1. Develop accurate beliefs and expectations
   - Hurt does not equal harm
   - Sore but safe
2. Move (No activity = worse recovery)
   - Motion is lotion
3. Supportive care (combined with exercise)
   - Manual therapy
   - Medication
- Last resort—Invasive interventions

Study Participants

- 65 years and older
- Back or leg pain for at least 3 months
- Able to walk independently
- No recent surgery on back or legs
- No new treatment for condition
- Would like to learn some cutting edge information about pain
- Could use 20$

Contact Information

rufaa@upstate.edu

(315)464-4883

Twitter: @arufa