

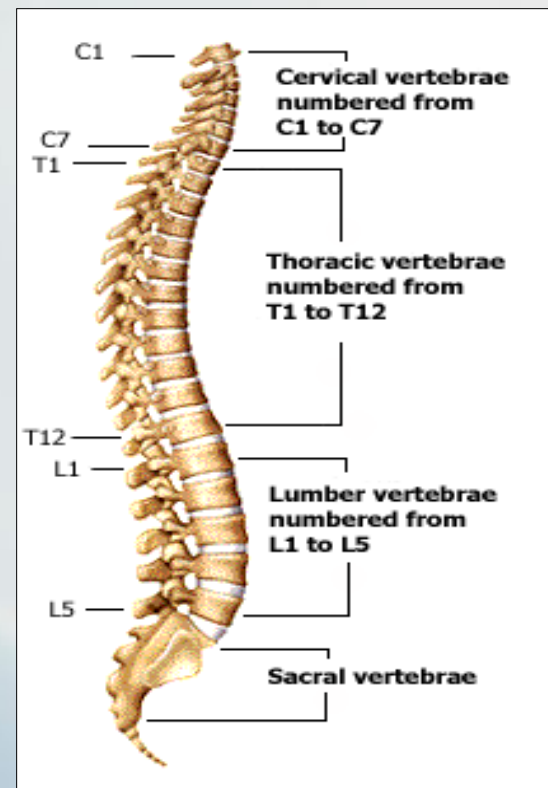


BACK to Basics

How to transfer your child safely without harming yourself

The Back is A Complex Place!

- The Spine is Divided into five main areas:
 - Cervical (Upper)
 - Thoracic (Middle)
 - Lumbar (lower)
 - Sacrum (even lower)
 - Coccyx (tailbone)

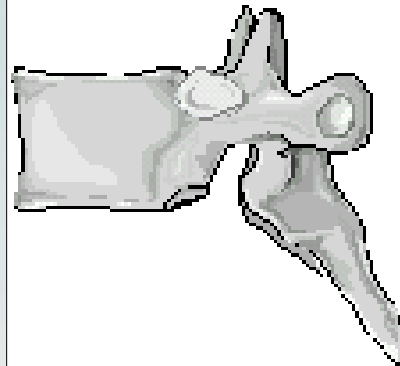


Bones

- Bones in the spine are referred to as ‘vertebrae’
- Each section of the spine has different shaped vertebrae
- The different shapes allow for different movements in different areas of the spine.

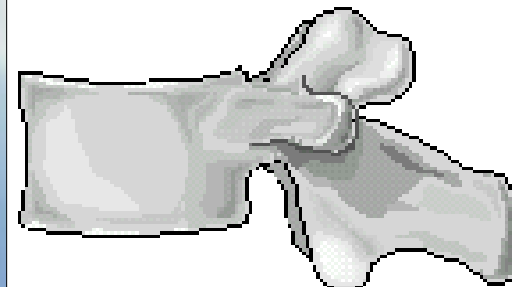


Cervical



Thoracic

Lumbar



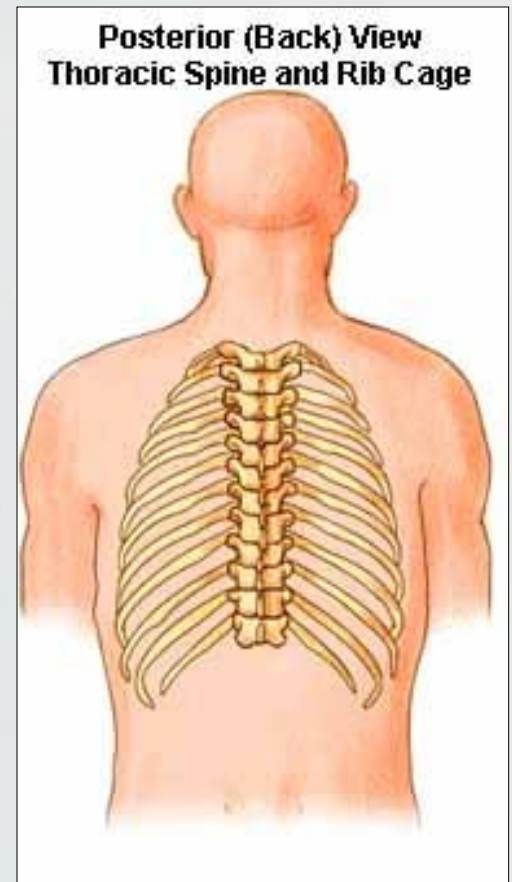
Movement: Cervical Spine

- The cervical spine has the greatest range of motion in the spine.
- These vertebrae can flex and extend and rotate a significant amount.



Thoracic Spine Movements

- The thoracic spine's primary movement is rotation, with a tiny bit of flexion and extension.
- Motion at the thoracic spine is limited due to attachments of the ribs



Lumbar Spine Movements

- The lumbar spine has the least amount of movement in the spine.
- The lumbar spine is able to flex and extend and rotate only small amounts.

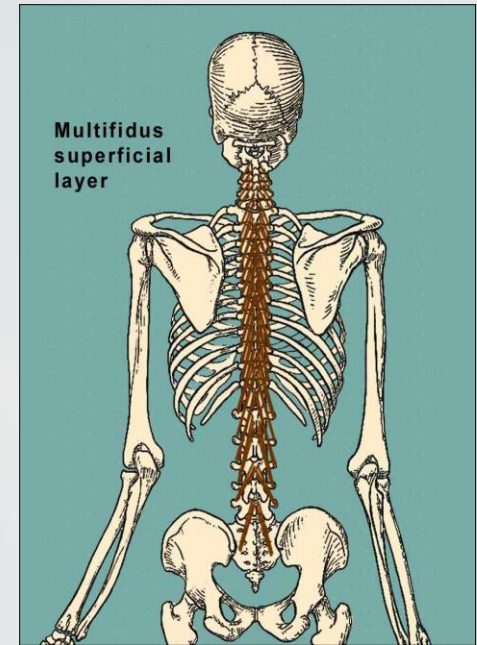
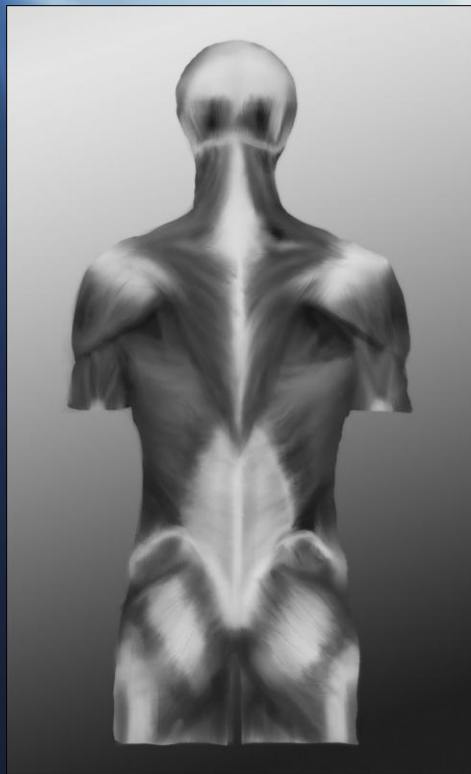


Back Muscles

The muscles in the back range from very small to very large.



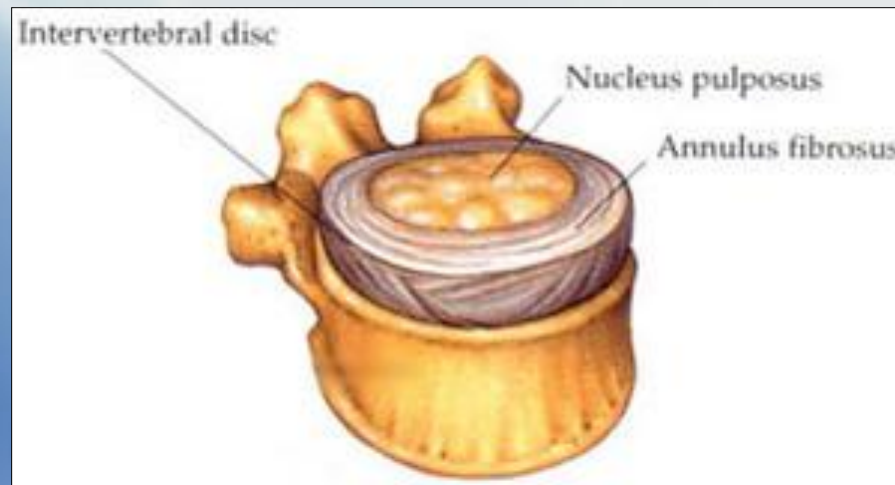
The small muscles are used primarily for **STABILIZING** the spine.



The large muscles are used primarily for **MOVING** the spine.

Discs aren't just for Frisbee's Anymore!

- Between each vertebrae there is a squishy disc.
- This disc helps absorb the forces at the spine.



Transfers vs. Lifts: *What's the Difference?*

- A **transfer** is the procedure used to assist a client to move from one surface to another.
- It is a *DYNAMIC* co-operation between client and caregiver.
- Client is able to bear weight through at least one leg or both arms.

- A **lift** is used to carry the entire weight of the client from one surface to another.
- Client is physically unable to bear weight or mentally unable to help with the transfer.
- Important to consider lifting capacity of caregiver and weight of client.

General Lifting Guidelines

- Mentally and physically plan for the activity before attempting it.
- Position yourself close to the child to be transferred.
- Use the major muscles of the extremities and trunk to perform transfers and maintain your normal lumbar curve throughout.

Lifting Guidelines Con't

- When performing a lift with two or more persons instruct everyone how and when they are to assist.
- Avoid trunk flexion and rotation at the same time.
- Do not perform a transfer immediately after a prolonged period of sitting, lying or inactivity. Stretch the lower back and extremities first.

Lifting Guidelines modified from: *Pierson, F. and S. Fairchild. (2002) Principles & Techniques of Patient Care, 3rd Ed. Saunders, Philadelphia: pg. 69*

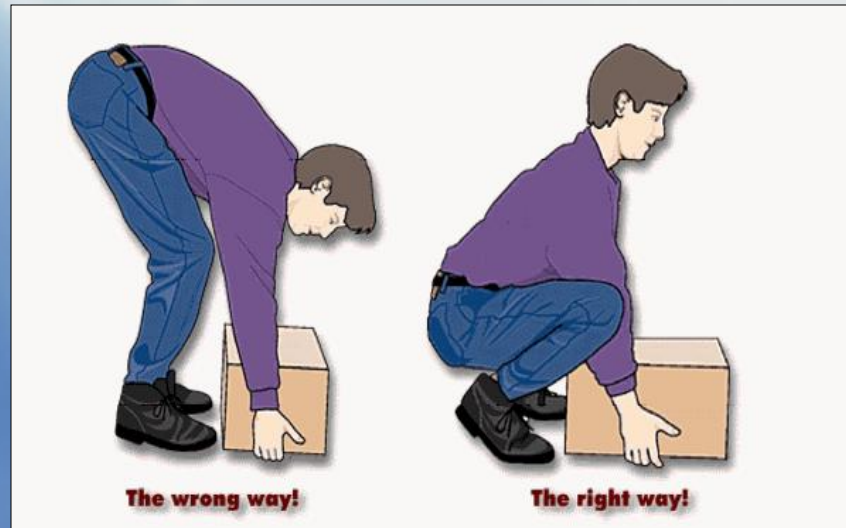
Some Do's and Do Not's!

- **DO:**

- Have a transfer surface that is clear of objects
- Lock the wheelchair brakes whenever completing a lift or transfer
- Remember to unfasten all seat belts and harnesses
- Lift by holding the child at the waist or by holding the child's crossed arms
- Tell the child what you are going to do

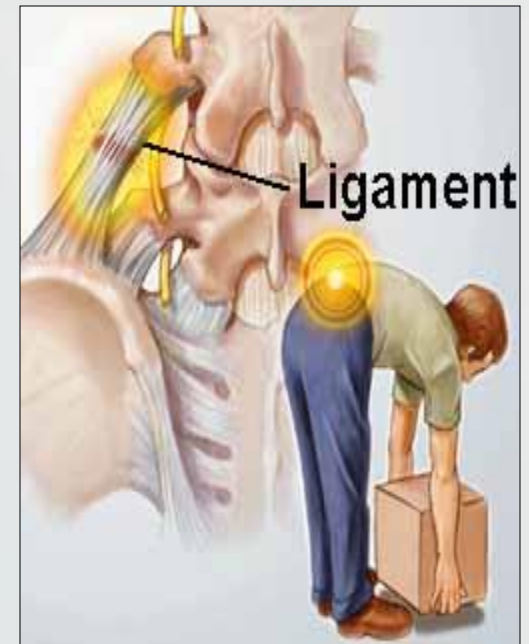
More Do's!

- Keep feet apart for a wide base of support
- Bend at the hips and knees
- Keep your back straight
- Complete the lift before turning



Do NOT:

- Wear slippery or high heeled shoes when transferring
- Bend forward at the hips while standing with the knees straight
- Relax your back and let it round
- Lift with the child's arms
- Twist your body when lifting



Remember! Your safety is also a concern when transferring your child!

Some Tips When Transferring Children in Wheelchairs

- If transferring from wheelchair to another surface, park the wheelchair on a 45 degree angle to the surface you wish to transfer to.
- Always remember to put on the breaks.
- Remove footrests and/or arm rests if they get in the way during a transfer.
- Allow your child to help as much as they are able to...it's easier for your back, and helps increase their independence and confidence.



Types of Common Transfers for Children

- Sitting on Floor to Stand
- Assisted Standing Transfer (Wheelchair to Stand)



Sitting on the Floor to Stand

- The child begins sitting on the floor with knees bent and arms crossed
- Place your arms under your child's arm pits and hold their crossed arms.
- Get as close to your child as possible.
- On the count of 3, lift straight up to stand.
- From here, you can either assist with walking or place child on another surface (wheelchair/bed/chair).

Assisted Standing Transfer

- Place the wheelchair as close to the transfer surface as possible on a 45 degree angle.
- Lock the brakes!
- Remove feet from foot rests
- Help the child scoot forward in his/her chair by shifting the weight to one side and moving the unweighted side forward.
- Place child's feet on the ground.
- Place your arms under your child's arm pits
- Bend your knees to get as close to the child as possible, using a flat back
- On the count of three, aid your child to standing and help guide them to the surface you are transferring to.

Types of Common Lifts in Children

- One Person Lift
- Two Person Lift
- Note:
 - *According to the National Institute for Occupational Health and Safety, if a child weighs more than **53 pounds** (23 kg) then either a mechanical lift or two persons should be used to complete the transfer.*

One Person Lift

- Before lifting, make sure the path is clear from wheelchair to surface you are transferring the child to.
- Plan your lift before you do it!
- Place chair at a 45 degree angle and lock the wheelchair brakes.
- Remove foot rests as needed.
- Place one arm under the child's knees and the other at the child's back.
- On the count of three lift your child, with a straight back, knees bent.
- Complete the lift before turning to the surface you are transferring to.

Two Person Lift

- The taller person stands behind the wheelchair and reaches under the child's arms, and holds the child's forearms (which are crossed over his/her chest)
- The other person squats close to the child and places one hand under the thighs and the other under the knees.
- On the count of three, both persons lift the child straight upward.
- Both persons carry the child to the second surface.



Person One

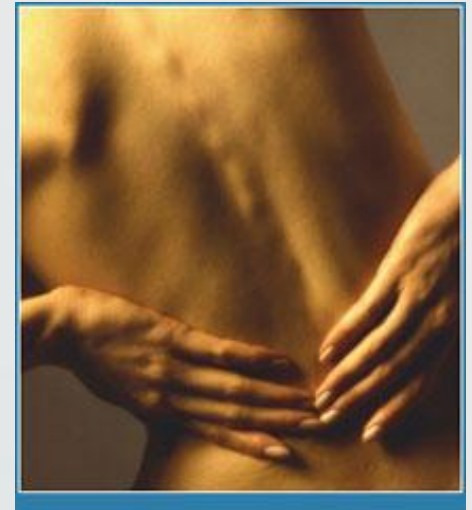


Person Two

Oh no! I've hurt myself, now what?

- Limit activities that are making your pain worse.
- Ice
- Bed rest as needed (Too much can make things worse)
- If things do not get better, consult a health care professional:

doctor, physiotherapist, massage therapist, chiropractor



Any Questions?



References

LaVonne Jaeger, D. (1989) Transferring and Lifting Children and Adolescents: Home Instruction Sheets. Therapy Skills Builders, Tuscon

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Pierson, F. and S. Fairchild. (2002) Principles & Techniques of Patient Care, 3rd Ed. Saunders, Philadelphia: pg. 69

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