

A Caregiver's Complete Guide for Safe Mobility  
and Independence in the Home



**A Caregiver's Complete Guide for Safe Mobility  
and Independence in the Home**

Kevin Lockette, PT

Two Harbors Press

A Caregiver's Complete Guide for Safe Mobility and Independence in the Home

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NOTE: Physical disability can vary greatly from one person to the next. Health and wellness require individual consideration. Readers should consult their physicians, occupational and physical therapists regarding their individual needs with regard to mobility. This book is not intended to replace professional medical rehabilitation programs. It should be used as a guide to promote safety in conjunction with the medical profession. Any application of the recommendations set forth in this book is at the reader's discretion and risk.

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This book is dedicated to the memory of Pearl Atkins and to all caregivers who give so much of themselves to help others.



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## PREFACE

**W**ith more than twenty years as a physical therapist, I have accumulated a wealth of knowledge, strategies, and tips to make caregiving easier and safer, especially as it relates to mobility and independence. You as caregivers must understand a wide spectrum of issues and are faced with daily challenges.

This book is intended to make life for you, the caregiver, a bit easier. If a caregiver is injured, it frequently results in the care-receiver losing the ability to remain in a community setting. The following pages are filled with pragmatic information to assist you in all aspects of caregiving, including assisting with bed mobility and transfers, simple home adaptations, wheelchair selection, adaptive equipment, assisting with exercises, and much more. The following pages includes golden nuggets of knowledge from many perspectives including from residential and professional caregiving, physical therapy and occupational therapy.



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**CONTENT REVIEWERS:** Arlene A. Schmid, PhD, OTR; Ginger Lockette PT; Bruce Katsura MD, Stanley Bergstrom, Staff of Ohana Pacific Rehab Services, LLC



# CHAPTER ONE:

## BODY MECHANICS



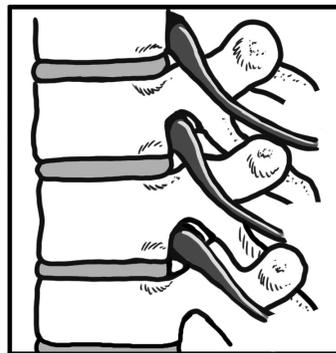
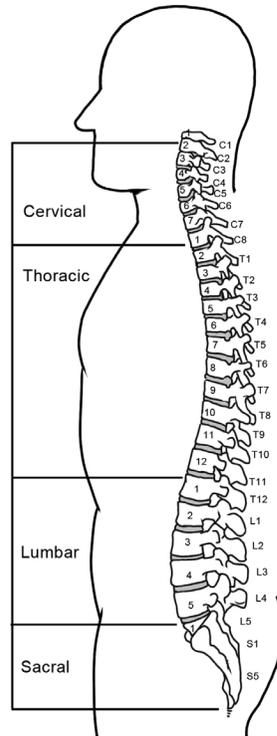
### **Oh, My Aching Back!**

Most back injuries result from poor body mechanics. Poor body mechanics can occur while sitting, standing, working in the yard, and yes, assisting a care-receiver with transfers from the bed to a chair. That ache or fullness in the low back at the end of the day is due to stress on spinal discs, facet joints (where two vertebra connect), muscles, and ligaments. I call these “micro-traumas,” and over time, they can add up to produce a full-blown back injury.

## Anatomy

The vertebrae (back bones) have two functional areas. The first area is the vertebral body, which is designed and responsible for weight-bearing. This is the area where loading or stress through the spine should take place. The vertebral bodies are separated by sponge-like discs to assist in shock absorption and weight-bearing. The second area is called the facet joint, which is where the vertebrae articulate (connect). The facet joint is responsible for movement and is non-weight-bearing. Poor posture can affect where stress takes place and can cause injury. The low back is the lumbar spine; the middle back is the thoracic spine; and the neck area is the cervical spine. There are normal curves in each of these areas (see Illustration 1.2, above). The normal spinal curves include a gentle low back (lumbar) curve; a gentle, rounded upper back (thoracic); and another gentle curve in the neck (cervical).

Maintaining these normal curves minimizes stresses to the back (ligaments, discs, nerves, etc.) and helps to avoid injury.

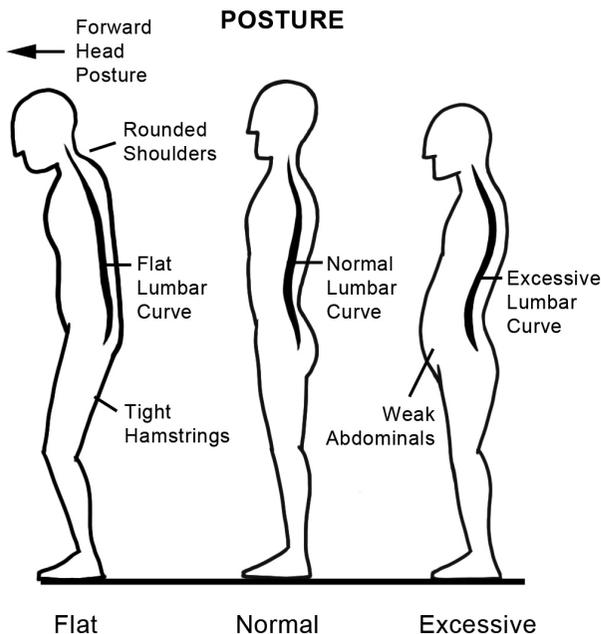


## Posture

Good posture is essential for a healthy spine. By maintaining the normal curves mentioned above, the vertebrae are mechanically stacked, which minimizes or eliminates abnormal stresses. Once out of this ideal alignment, stresses occur to the different structures in the neck and back, which ultimately can lead to pain and injury. The three basic types of postures are swayback, flat back, and neutral spine/normal back.

The swayback posture has an excessive lumbar curve and is common in people who have weak abdominals and excessive abdominal fat (pot belly). This excessive curve can lead to mechanical pain and arthritis in the spine by placing stress on the facet joints, which are designed for movement and not weight-bearing.

A flat back is basically a rounded low back, which causes the loss of lumbar (low back) curve. This posture, especially when lifting objects or when transferring care-receivers, can lead to muscular injury or involvement of the intravertebral discs.



## **Good Body Mechanics**

The nature of caregiving can cause great physical stress on you as the caregiver. Practicing proper body mechanics will decrease the stress and strain and help to safely manage the mobility of the care-receiver. The primary rule is to maintain the normal lumbar curve *at all times*. By following this one simple rule, injury to the lower back can be avoided. This means that you may need to get in different positions or use different transfer techniques, based on your own body type/size and that of the care-receiver. The following lifting principles will help keep the normal lumbar curve.

## **Principles of Safe Lifting**

1. *Maintain a sturdy or broad base of support.* A stable position is necessary when assisting the care-receiver with moving. A wide base of support is stable—spread the feet at or greater than shoulder-width apart—but keep in mind that having the feet in a scissor position, with one foot forward and one foot backward, also offers a wide base of support. The physical space available will dictate which position to use when assisting with moving. For an example, when assisting someone with a car transfer, there may not be enough room to spread the feet shoulder-width apart; therefore, the scissor position may be the better option.



2. *Keep the load close.* This applies to lifting objects as well as to assisting a care-receiver with a transfer. For example, when lifting a chair, if the chair back is close to the body, it feels much lighter than if the chair is lifted with the arms extended and away from the body. With the latter technique, a strain will be felt in the low back. The farther away the object (or care-receiver) being lifted, the greater the lever arm, which makes the care-receiver or object feel heavier. It is much easier to lift and much easier to keep that normal lumbar curve when the load is closer.



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3. *Bend with knees, not with the back.* The take-home message here is that bending forward with a rounded low back (lumbar spine) loses the normal lumbar curve and causes stress to your low back. The larger, stronger leg muscles are better equipped to do the lifting than the low-back muscles. Remember to tighten up the stomach and bend down with your legs.



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4. *Push instead of pull, whenever possible.* When pulling a load, it is much harder to keep the normal lumbar curve (neutral spine); so whenever possible, push rather than pull. For example, in assisting a care-receiver up from a low chair, it is better to stand on the side of the care-receiver and push him forward so that his center of gravity is over his feet—so that he can use his legs to transfer to standing—rather than standing in front of him and pulling forward where you are performing more work and potentially placing more strain on your lower back.



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