



Warren G. Harding III, MD

# Keep Your Shoulders in the 'Safe Zone'

**W**hether or not you carry the weight of the world on them, you need to take care of your shoulders. Strong and pain-free shoulders are crucial for throwing, lifting, and even back scratching.

If you want a strong throwing arm, racket swing, or swimming stroke, you need to learn how to keep your shoulder in its most stable (and safest) position. Thinking about shoulder motion in three "zones" can help you identify which shoulder motions are safe and which may harm your shoulders.

If your shoulder has been injured or operated on, healthy motion is especially important. A "safe zone" concept can help you recover from shoulder problems such as bursitis, tendinitis, instability, impingement, dislocation, and rotator cuff tears.

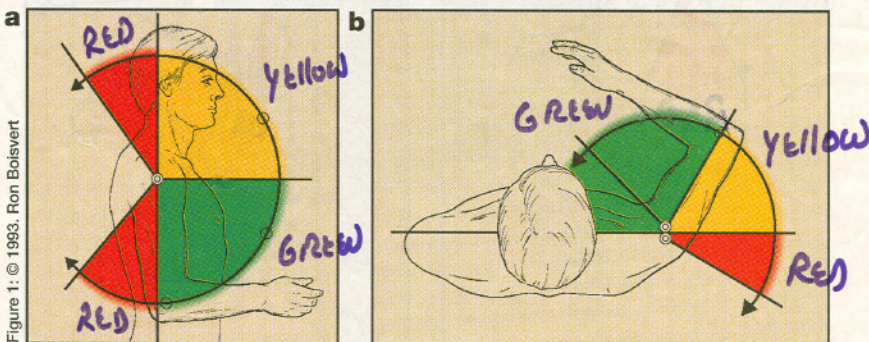
## Zone Defense

The safe zone positions keep the shoulder most stable. Certain motions move the shoulder out of the safe zone into less stable positions where it is more prone to injury.

Notice where your elbow is in re-

Dr Harding is an orthopedic surgeon with Wellington Orthopaedic & Sports Medicine in Cincinnati. He is a fellow of the American College of Surgeons and a member of the American Orthopaedic Society for Sports Medicine.

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**Figure 1.** In moving your shoulder up and down (a) or back and forth (b), try to keep your elbow in the green or yellow zone. These positions place the least stress on your shoulder—and make your motions efficient—for activities, exercise, and rehabilitation. When your elbow is in the yellow zone, there is moderate stress on your shoulder. Having your elbow in the red zone places your shoulder under the most stress. Try to avoid motions in the red zone when possible, especially if you have an injured shoulder.

lation to your shoulder blade. As you move your elbow—and therefore your shoulder—up and down (figure 1a) or back and forth (figure 1b), it goes through three zones.

The green zone is the safest, and the yellow zone is next. Your shoulder is most vulnerable to an injury when your elbow is in the red zone. In general, be careful in the yellow zone and very careful in the red.

Your shoulder is safest and most efficient in the green zone because that is where it fits most sturdily in its socket. This stable fit gives a firmer platform for a throw, push, or pull.

## Improving Technique

A stable arm position best funnels energy through your shoulder. You can use the safe zone to hone your arm technique in any sport.

As you throw, pitch, swim, golf, do gymnastics, or swing a racket,

note whether your elbow stays in the green zone. The farther it strays from the green zone, the less fluid and efficient your motion is—and the more harmful it is to your shoulder. Figure 2 shows this in pitching.

If you can't judge your technique on your own, ask a coach or a friend to observe you. Or try videotaping your motion.

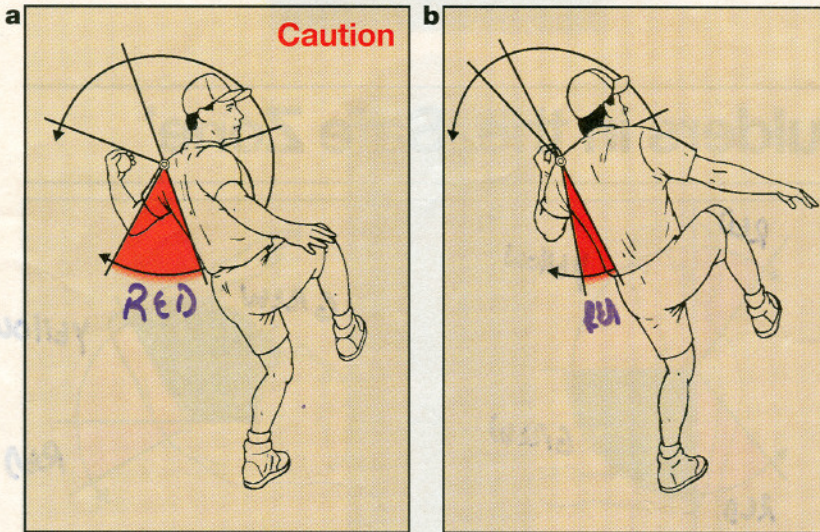
## Gaining Strength and Flexibility

If your shoulder is unhurt, you can use the safe zone concept to maintain or improve flexibility, strength, and endurance.

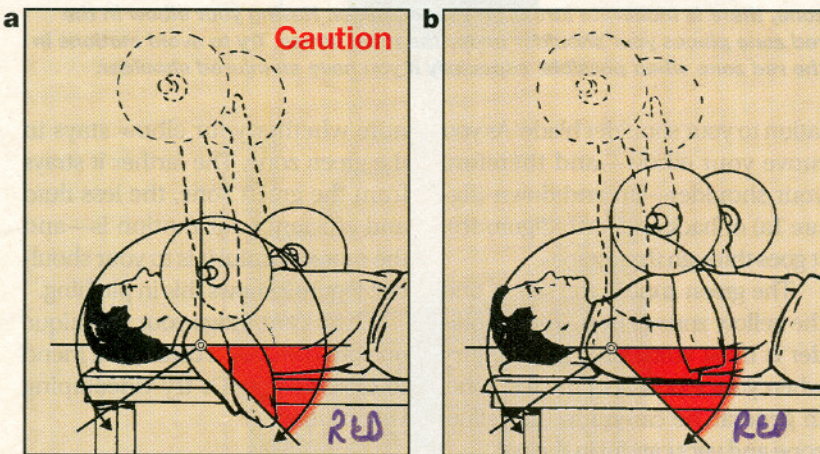
Start with your warm-up program. Stretches that you control yourself are usually safe, because pain will tell you when you've gone too far. But when a partner helps you stretch, the stretch should not bring your elbow into the red zone. If it does, learn new stretches.

*continued*

Figures 2 and 3: Terry Boles



**Figure 2.** When pitching, stay in the 'safe zone' by not turning your body toward the batter ('opening up') too soon (a). Don't bring your elbow way behind your back when your arm is cocked. Good technique (b) avoids this.



**Figure 3.** If you have shoulder problems, modify the bench press. Avoid bringing your elbows below your sides as you lower the weight to your chest and press it back up (a). Instead, keep your elbows above the level of your back to stabilize your shoulders (b).

One potentially harmful stretch is used by many swimmers and gymnasts. In it, a buddy brings your arms behind your back and raises them. As you can see by looking at figure 1, this applies force to your shoulder when it is in the red zone.

Also use safe zones as you build

strength and endurance. While weight training, use techniques that keep your elbows in the green and yellow zones (figure 3). You may want to avoid or modify such lifts as the military press and pullovers.

The same holds true for other exercises. Lowering and raising your

body on parallel bars (doing "dips"), for example, may bring your elbows into the red zone if you go too low.

And for safe-zone push-ups, stop before your chest is below elbow level, keep your hands close together, or do a standing push-up against a wall.

### Recovering From Injury

If you are injured, have ongoing shoulder pain, or have had surgery, your doctor will likely tell you to rest your shoulder. He or she may prescribe drugs to ease pain and swelling.

In addition, your doctor will recommend exercises to help strengthen your shoulder and keep it flexible. He or she can show you how to stay in the green zone when you exercise. Then, as you gain strength and the pain goes away, your doctor may let you progress to the yellow zone. The safe zone technique can replace immobilizing your shoulder, which often decreases strength and motion.

For example, if you have swimmer's shoulder, you can modify your technique to protect your shoulder during the crawl. Breathe on the side of your injury with each stroke; this rotates your body to keep your elbow in the green zone.

### Green Means Go

Whatever your activity or shoulder condition, you'll likely gain efficiency, strength, and safety if you use the safe zone concept. It's as easy to remember as, "Green means go; red means stop." **FSM**

*Remember: This information is not intended as a substitute for medical treatment. Before starting an exercise program, consult a physician.*