

## Chapter 1

# PHYSIOLOGY OF PAIN

### OVERVIEW

*In this chapter you will learn about acute and chronic pain, medical assessment techniques, and the Gate Control Theory of pain.*

### ACUTE VERSUS CHRONIC PAIN

Acute pain is a sensation you feel when there is damage (or danger of damage) to your body. For example, placing your hand against a hot surface causes acute pain. The amount of acute pain you feel relates well to the amount of damage to the body. Acute pain gets better with time and medical care; it is expected eventually to go away completely. Resting an acute injury is important, and taking narcotic pain killers and tranquilizers may be appropriate.

Chronic pain goes on for months or years, continuing long after an acute injury should have healed. Chronic pain does not signal ongoing injury or damage, and the amount of pain you feel is not related to the amount of damage to the body. Chronic pain is a complicated disorder involving multiple systems of your body. Inactivity and pain killers help the pain only for a little while. Treatment of chronic pain involves close control of your medication and gradual increases in your level of physical activity. Ini-

tially you may feel worse rather than better when treatment for your chronic pain is begun.

The differences between acute pain and chronic pain can be summarized like this:

**Acute Pain**

New damage or injury

Improves with rest  
and time

Activity interferes  
with recovery

Narcotics are needed

Short-term distress

Doctor "cures"

**Chronic Pain**

Old damage, no  
new injury

Gets worse with rest  
and fluctuates over  
time

Activity is necessary  
for recovery

Control of medica-  
tion is important

Long-term stress  
and depression

Patient and doctor  
work together