

# **Pain Module**

## **Acute Pain**

# Definition: Acute Pain

- Normal, predicted physiologic response to a harmful stimuli e.g., burn, laceration, slam finger on car door.
- Results from activation of the pain receptors (nociceptors) at the site of tissue damage.
- Warns the body that something is wrong.
- Associated with surgery, trauma, or acute illness.
- May be somatic (skin, bone, muscles) or visceral (organs).
- Disappears when the underlying cause of pain has been treated or has healed. Typically resolves over days to weeks, but can persist for 3 months or longer as healing occurs.

\*See Anatomy and Physiology of Pain Module

# Responses to Acute Pain

- Activates the sympathetic branch of the autonomic nervous system and can produce
  - hypertension, tachycardia, diaphoresis, shallow respiration, restlessness, facial grimacing, guarding behavior, pallor, and pupil dilation.
- May be associated with significant and unnecessary physical, psychological, and emotional distress.

# Unrelieved pain is harmful

- Increased metabolic rate.
- Increased blood coagulation.
- Impaired immune function.
- Poor breathing patterns.
- Autonomic hyperactivity.
- Development of chronic pain syndromes.
- Increased secretion of catecholamines, glucagon and other substances.
- Water retention.
- Tissue breakdown.

# Consequences of Unrelieved Pain

- Depression
- Anxiety
- Inability to work
- Inability to participate in ADLs
- Decreased socialization
- Impaired ambulation
- Extended hospital stays and readmissions
- Patient dissatisfaction.
- Unrelieved acute pain might lead to chronic pain development of a chronic pain syndrome.