

## Who Might Benefit?

Bedsore, also known as pressure ulcer, are wounds of the skin and underlying tissue. They can be caused by friction, incontinence, temperature, or unrelieved prolonged pressure on the skin. Although bedsore can develop on any part of the body, they are often found on the hips, heels, ankles, buttocks, and tailbone. Bedsore are not only painful, but can lead to serious, life-threatening infections. People most at risk for bedsore are those with a medical condition that limits their ability to change positions, requires them to use a wheelchair, or confines them to a bed for a long time.

### > Current Practice

Repositioning and turning people at risk are common ways to try to prevent bedsore. If people are able, they may change their position in bed or in a wheelchair on their own. Caregivers, such as nurses, may also turn and reposition patients regularly while they are in a hospital or long-term care facility. Specialized cushions and mattresses are sometimes used to help prevent bedsore. Improved skin care and nutrition may also aid in prevention.

New medication for heart failure may reduce the risk of dying, and improve quality of life

### > What's New?

A specialized type of underwear has been invented for people at risk of developing bedsore. This underwear delivers electrical pulses to areas of the body where bedsore often occur (e.g., the buttocks and hips). The electrical pulses are sent for 10 seconds, once every 10 minutes. They are meant to mimic the regular body movements that able-bodied people automatically do while sitting or lying down. It is these regular body movements that prevent constant pressure on a specific part of the body and help to avoid bedsore.



### > Potential Advantages

Electrically stimulated underwear is intended to prevent bedsore. In a recent experimental phase 2 study, none of the 48 people who used this electrically stimulated underwear developed bedsore. The majority of the time, people in this study did not find the device irritating, distracting, or uncomfortable. Bedsore continue to happen very often despite current efforts to prevent them. They are painful, expensive to treat, and uncomfortable. Electrically stimulated underwear has the potential to be beneficial; however, it has not been proven to work better than other methods of prevention.