

# [Hsc 2024 pressure area care](https://assignbuster.com/hsc-2024-pressure-area-care/)

HSC 2024 Pressure area care (1. 1) describe the anatomy and physiology of the skin in relation to skin breakdown and the development of pressure sores ANATOMY AND PHYSIOLOGY The skin is primarily composed of three layers. The skin, which appears to be so thin, is still itself divided into epider­mis, dermis, and subcutaneous layer or hy­podermis. Please refer to the figure below to understand all the three layers. Each layer has it own function and own importance in maintaining the integrity of skin and thereby the whole body structure. So lets, study each part in detail. 1. Epidermis: Epidermis is the topmost layer or rather the visible part of the skin that is composed of stratified squamous epithelial cells. This layer is com­posed of five layers of cel1s, which are arranged in two zones; the superficial horny layer and a germinal layer beneath it. The horny layer is again made up of three layers of cells. These are stratum corneum , which is the superficial layer. It has thin, flat, dead cells filled with keratin, which are constantly being cast off. Keratin is a very important constituent as it is a type of insoluble fibrous protein that helps to protect the body. This layer helps in protection against heat, chemicals, light, and microorganisms. Below this layer is stra­tum lucidum . This layer contains flat cells with no distinct outline and no nuclei. These cells contain eleidin, which is a retractile and weakly staining keratin present in the cells of the stratum lucidum of the palmar and plantar epidermis, which is a prekeratinous substance. Below this layer is stratum granulosum . It is a layer of well-defined flat cells, which have their own nucleus and also granules and con­tains a substance called keratohyalin, which later becomes keratin. The next layer of the epidermis is stratum spinosum , which is the first and largest layer of the germinal zone of epidermis. It is made up of prickle cells having prickle-like appearance. The deepest layer of epidermis is stratum basale also known as stratum germinativum. It is a single layer of cuboidal and columnar cells from which new epidermal cells are con­stantly being produced, which later become cells of more superficial layers. These cells divide continuously by mitosis and either push older cells closer to the surface or re­place them. 2. Dermis: The next layer below the epidermis of the skin is called the dermis, which is primarily made up of elastic and fibrous connective tis­sue. This layer is arranged in small papillae, which contain loops of capillary blood vessels. This layer also contains nerve endings of sensory nerves, coiled tubes of sweat glands in deep parts of dermis and sebaceous glands, which produce an oily secretion called as sebum . Ducts fromsweat glands pass through dermis and epidermis as spiral ca­nals and open on the skin as minute depressions, which are called pores. The sweat glands found on the skin are of two types; eccrine and apocrine. Eccrine sweat glands, which are found everywhere in the body, secrete a watery fluid to regulate the body tempera­ture. Apocrine sweat glands are present in certain parts of the body and secrete a milky sweat caused by breakdown of cells by bac­teria. Both types of glands perform an important function of excretion for the body. 3. Subcutaneous tissue (hypodermis): The third layer below the dermis is the subcutaneous layer. This layer contains adipose tissue, which is the storage depot for fats. Also called hypodermis, this layer helps in regula­tion of body temperature and provides cushioning to the skin. All the underlying muscles and structures are below the hypodermis Source: http://www. shvoong. com/medicine-and-health/dermatology/1751408-skin-anatomy-physiology/#ixzz26r0vm77F Source: http://www. shvoong. com/medicine-and-health/dermatology/1751408-skin-anatomy-physiology/#ixzz26r0gm9c6g Common pressure points on the body include the tail bone (sacrum), hip bone areas, and the ankle and heel. Less common sites include the elbows, spine, ribs, and back of the head. Pressure sores may also result from friction caused by your skin rubbing against another surface, or when two layers of skin slide on each other, moving in opposite directions and causing damage to the underlying tissue. This may happen if you are transferred from a bed to a stretcher, or if you slide down in a chair. Pressure sores affect people who are unable to change position regularly. Sustained pressure on those areas which support the body leads to reduced blood supply and eventually death of the skin and underlying muscles (a pressure sore).