

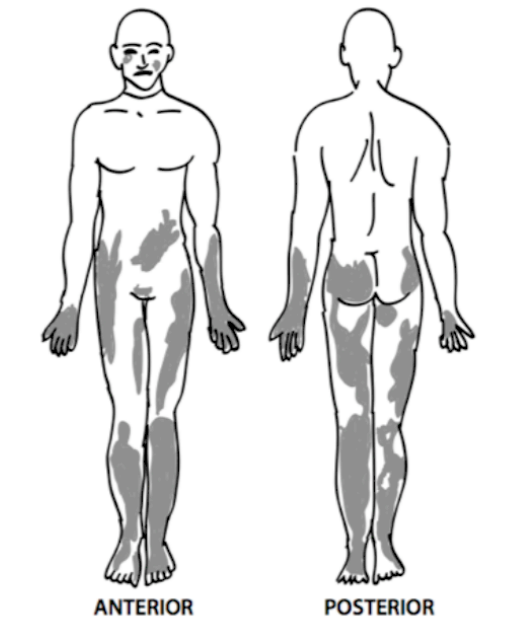
# Tanya's Case: Deadly Flames

Tanya, an 8-year-old Hispanic female, is in transport by an ambulance to the emergency room (ER) after being rescued from her burning house. She was asleep at night when a spark from a cigarette started a fire, leaving her trapped in her bedroom. By the time the fire rescue squad arrived and got her out, she had suffered severe burns to her lower extremities, hands, and abdomen and minor flash burns to the face following a house fire.

Burns appear gray-white with red, blistered borders. Patient just regained consciousness, but disoriented and verbally unresponsive.

Vitals are unstable with blood pressure = 60 / 40; heart rate = 165 [beats / min].; and respiratory rate = 35 [breaths / min].

Diagnosis: burn covering 33% of body with third -degree burn on legs and hands, second degree on abdomen and part of limbs, first degree on face. Vital show circulatory shock risk with low BP and high HR/RR.



## Part I:

1. What are the main functions of the integumentary system?
2. Given what you know about Tanya's burns, which 2-3 functions of the skin are most in danger? why?

## Part II:

3. Describe the difference between 1st, 2nd, & 3rd degree burns & explain the importance of the "Rule of Nines."

Source suggestion: <[http://en.wikipedia.org/wiki/Total\\_body\\_surface\\_area](http://en.wikipedia.org/wiki/Total_body_surface_area)>

4. Given the severity of Tanya's burns, label or note which structures of the skin may be damaged.
5. Given the major threats to the body upon severe burning, list the top 2-3 concerns you have for Tanya.