

# How to Simulate Injuries

## *Shock*

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1. Apply a thin coating of grease, powder, or other makeup product onto the face, ears, neck, hands, arms, and legs.
2. Any body part that is immediately exposed or will be exposed during an assessment needs to be made up.
3. Blend the thin coating into the simulation patient's skin so that no blobs or streaks are obvious.
4. If using blue-based makeup, use only a very small amount of blue and carefully blend it into the base makeup.
5. Apply either water from a water bottle with a spray button or glycerin onto the exposed body surfaces. DO NOT spray in the simulation patient's eyes, nose, ears, or mouth.

## *Lacerations*

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1. Take a walnut-size amount of the plasteline or wax and roll it around in your hands to soften.
2. Flatten it out and apply it to the wound site.
3. Using a wooden tongue blade or an artist's knife, smooth it out evenly onto the site.
4. Take the edge of the blade and draw a jagged line to simulate the laceration site.
5. Blend the plasteline or wax into the simulation patient's skin with makeup.
6. To add color to the laceration, use red liner, red fingernail polish, or warmed red latex gel as indicated by the scenario.
7. Add small amounts of blood to the laceration.
8. Reapply before a new group of students arrives.
9. To make a laceration look even more realistic, use a combination of bleeding bags, simulated blood, warmed red latex gel, and coagulated blood.
  - a. For venous bleeding, use the coagulated blood, thick simulated blood, or red latex gel.
  - b. For arterial bleeding, a bleeding bag with simulated blood is used.
10. Bleeding bag lines can be hidden underneath a wound. The line can be taped onto the simulation patient, the plasteline or wax applied on top of the line.
11. Avoid getting simulated blood onto human hair or onto clothing because simulated blood products stain.

## ***Abrasions***

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1. Use a stipple sponge and red grease liner to draw abrasions on the simulation patient's skin.
2. Black or brown color and dirt or charcoal can be added with some dabs of simulated blood.
3. Avoid getting simulated blood onto human hair or onto clothing because simulated blood products stain.

## ***Bruises***

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1. Grease liners and eye shadow liners can be used to simulate bruises.
2. To simulate an older bruise, apply a light coating of yellow first and then blend it in; then apply the light green and blend it in.
3. To simulate a healing bruise, combine blue and red to make a light purple color. Apply a small amount of the purple liner to the middle of the bruise site.
4. To simulate a more recent bruise, use red and blue colors without any premixing. Blend the colors right onto the skin. Apply a red eye shadow or grease liner first, and then blend in the blue. Recent bruises have bolder colors than week-old bruises.

## ***Fractures***

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1. Plasteline or wax can be used to simulate closed or open fractures.
2. Apply the material to the simulation patient's skin and smooth it out.
3. Next apply an additional piece on top of the initial coating.
4. Apply natural colored makeup to blend the material into the simulation patient's skin.
5. An open fracture can have pieces of simulated bone embedded into the simulated injury. Add several lacerations and simulated blood for the final touch. Even a hidden bleeder line can be added to heighten the realism of the scene.

## ***Burns***

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1. Apply a thin layer of petroleum jelly to the simulation patient's skin.
2. Apply ripped pieces of tissue paper to the petroleum jelly.
3. Apply an additional thin coating of petroleum jelly on top of the tissue paper.
4. Using a pencil or pen, begin to lift up the tissue paper into little mounds and place small tears in the paper; this creates partial-thickness and full-thickness burn areas.
5. Next, add color to the wound with a red grease liner. Take dabs of the grease liner and dot the outer area of the burn.
6. Use both brown and black grease liners to highlight the partial-thickness and full-thickness burn areas.
7. Apply dirt and gravel to the entire burn area.
8. Apply coagulated blood.

## ***Amputations***

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1. To simulate a thumb amputation, first flex the simulation patient's thumb inward toward the palm. Use tape to hold it in place.
2. Apply a piece of wax onto the bent thumb and mold to simulate a stump.
3. Blend natural grease coloring into the wax to match the simulation patient's skin color.
4. Apply red grease liner to the bent thumb to simulate the detached portion.
5. Apply simulated blood.
6. Place a fake thumb near the simulation patient.

## ***Sucking chest wound***

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1. Apply plasteline or wax to the simulation patient's chest.
2. Make a depression the size of a nickel into the wax.
3. Break pieces of an antacid tablet off and insert them into the depression.
4. Pour several drops of diluted simulated blood onto the tablet and watch the area bubble. The tablet may bubble for 45 minutes.
5. To simulate subcutaneous emphysema, use plastic packing air bubbles. Position a sheet onto the chest, and then have the simulation patient wear a shirt over the bubbles. As a student assesses the chest region, the bubbles will pop and move around just like real subcutaneous emphysema.