



## EMERGENCY MANAGEMENT

# Hand Trauma

University of Iowa Hospitals & Clinics provides 24/7 microvascular surgical repair for hand injuries.

### Injuries that may require transfer

- Amputations
- Blast/high-pressure injuries
- Crush, avulsions, and detachment injuries
- Complicated lacerations
- Tendon and nerve injuries
- Hand and wrist fractures
- Pediatric upper extremity trauma

### Patients who may benefit from replantation

- Any pediatric patient

Patients with any of the following:

- Amputation through the hand, proximal to the hand
- Thumb amputation
- Multiple-digit amputation

### Patients unlikely to benefit from replantation

Those with:

- Mangled limb or crush injury with extensive tissue loss
- Segmental amputation
- Medical instability
- Severe tissue contamination

### Pre-transfer care of injured parts (adults and children)

Amputated parts should be:

1. Placed in saline-soaked gauze
2. Sealed in plastic bag and transported on ice

Non-amputated limb:

1. Limb should be dressed and kept warm, with hemostasis achieved.
2. Prophylactic tetanus and antibiotics should be administered.

### Replant pre-operative patient education

The replantation process is augmented by patient education at the initial stage of injury. The final decision regarding replantation versus amputation will be made intra-operatively. Patients should be informed that replantation:

- Cannot be confirmed until the surgeon has evaluated the injury in an operative setting
- Will likely result in a 5- to 7-day hospitalization
- Requires additional surgical procedures in more than 60% of cases
- Will likely require 3 to 6 months off work with return to limited duty and extensive physical therapy
- Will result in altered motor, sensation, and cold tolerance; deficits that improve with time

### Patient Transfer Protocol

1. **Call the admission and transfer center at 866-890-5969.** You will be connected with a hand team member on call who can discuss the patient's condition and accept transfer if indicated.
2. **Email pictures of the injured extremity to [handtrauma@uiowa.edu](mailto:handtrauma@uiowa.edu).**