The human hand has the unique ability to interact with and manipulate the environment. The exquisite balance among the joints, ligaments, tendons and muscles allows complex hand movement.

Hand injuries are common in the pediatric population. Toddlers tend to injure their finger-tips when their hand or fingers get caught in a door, while older children often incur breaks during active play or sports. An accurate diagnosis requires a thorough history and physical examination, which can be challenging in an injured child.

**History and physical exam**

The following information is important: hand dominance (may not be developed yet), school level, hobbies, sports, exact mechanism of the injury (hyperextension, forced flexion), initial treatment and radiographs if any.

Physical exam begins upon entering the room and without making any physical contact with the child. Observation is often the only way to approach a younger child. With the entire extremity visible, assess the range of motion of the shoulder, elbow and forearm. Inspection is especially important: Assess color (pink, pale, ecchymotic), and capillary refill, edema, posture (normal cascade of digits vs. abnormal). Ask the child to make a fist if possible. This will indicate range of motion, which can be impaired because of edema and pain and not necessarily secondary to the actual injury. A clear indicator of bone injury is “scissoring” on attempts at full fist-making.

**Radiographs**

Radiographic examination complements the clinical exam but not all injuries will be evident on the hand X-ray. Given the amount of cartilage in children’s hands, some injuries will present without obvious osteoarticular damage. One view of the hand is “no view,” three views of the hand are mandatory.

**Treatment**

Lacerations should be closed as long as the patient is seen within 24 hours, appropriate irrigation was provided, and injuries are not associated with other complex conditions like dog bites. Comminuted fractures may require specialized treatment. For a fracture or tendon injury, apply a dressing and splint the extremity.

Elevation is the cornerstone of patient comfort and expeditious healing. The child should elevate their hand “above their heart” for effectiveness. Slings can provide temporary support as long as the parents and patient understand the necessity of strict elevation.

Pain control and antibiotic therapy are prescribed depending on the injury. Antibiotic coverage is normally preferred for fractures associated with soft tissue and tendon injuries, and animal or human bites.

**When to refer**

Generally, any injury that compromises the blood supply (such as a “circumferential laceration” or burn), and multiple fractures, massive soft tissue or bony injuries that cause severe swelling or compartment syndrome, require a prompt visit to an emergency room with access to a hand surgeon.

A pediatric hand surgeon must evaluate simple hand fractures (with normal circulation), and tendon or nerve injuries within one week. Children regenerate tissue (including bone) faster than adults. Therefore, fracture manipulation needs to be done usually within a week. The younger the patient is, the quicker the healing potential. Referral should be made early to examine, diagnose and plan the procedure.
Below is an update on key items of interest to physicians as of Dec. 23, 2013.

**Medi-Cal Physician Payment Increase**

The California Department of Health Care Services has begun making enhanced payments to physicians for eligible services provided to individuals enrolled in Medi-Cal fee for service. The first interim payment issued on the check write represents estimated increases retroactive to dates of service on or after Jan. 1, 2013. Subsequent weekly interim payments will be issued until final settlement of payment owed is dispersed, as early as July 2014.

Regarding eligible services provided to Medi-Cal managed care enrollees, physicians should expect to begin receiving the higher payments in early 2014.

As a reminder, the Affordable Care Act requires that states reimburse eligible Medi-Cal physicians at rates not less than Medicare rates for calendar years 2013 and 2014 for E&M codes 99201 through 99499 and Vaccine Administration codes 90460, 90461, 90471, 90472, 90473 and 90474.

You can find more information on the state’s implementation of the rate increase by visiting [http://files.medi-cal.ca.gov/pubs-doco/aca/aca_form_landing.asp](http://files.medi-cal.ca.gov/pubs-doco/aca/aca_form_landing.asp)

**State Legislation**

Legislation signed into law by California Gov. Jerry Brown this past legislative session includes a) Assembly Bill 565 that tightens eligibility for the state’s Steven M. Thompson Physician Corps Loan Repayment Program by directing more of the funding to the Central Valley and b) Senate Bill 493 that increases the scope of practice for pharmacists by allowing them to administer drugs and perform other functions and procedures.

For more information on these and other issues, visit [www.childrenscentralcal.org/CAN](http://www.childrenscentralcal.org/CAN), or contact Tim Curley at 559.353.8610 or TCurley@childrenscentralcal.org

How To Connect With Children’s

**Children’s Access Center** – 24/7 Access for Referring Physicians 866.353.KIDS (5437).

**eReferral** – Complete the eReferral Form and Submit Electronically at [ChildrensCentralCal.org/refer](http://ChildrensCentralCal.org/refer)

**Outreach Centers**: Merced Subspecialty Pediatric Center 209.726.0199 / Modesto Subspecialty Pediatric Center 209.572.3880

Children’s Physician Liaison David Chuhlantseff is available to answer questions or assist you at (559) 353-7229 or physicianrelations@childrenscentralcal.org.