5.3 Medical Considerations

Components of a Juvenile Hall Visit

- Entry
- Pre-booking
- Triage
- Intake screening – Custody/Medical
- Upfront - Rejection
- Sick Call
- SP/ Restraints
- Medication Isolation
- Transfer - No camp
- Release - Red Flag
SERVICES PROVIDED AT JUVENILE HALL

- Med pass (LVN/RN)
- RN sick call
- PA sick call
- MD sick call
- OB/GYN
- Dental
- Phlebotomy (Labs)
- X-Ray/EKG
- Immunization clinics
- Wellness Team
- STAT Team services

San Diego County Probation
WHAT ARE WE SEEING IN THE MEDICAL CLINICS?

- ASTHMA
- FACIAL/HEAD TRAUMA
- REC/SPORTS INJURIES
- MRSA
- HEPATITIS C
- SEIZURES
- STD’S

San Diego County Probation

ASTHMA:

- Narrowing of the bronchioles of the lungs

- Symptoms:
  - Wheezing (musical type of noise)
  - Inability to speak in full sentences
  - Bluish discoloration of lips or nail beds
  - Use of accessory muscles
  - Anxiety

San Diego County Probation
What does a wheeze sound like?

San Diego County Probation

How are asthma attacks diagnosed?

- Auscultation of lungs for signs of wheezing or lack of air movement
- Oxygen saturation levels (O2 sats)
- Ability to speak in full sentences

How are they treated?

- Rescue inhalers (Albuterol)
Diabetes:
The inability to regulate insulin production

Hypoglycemia:
Low blood sugar

Signs & Symptoms:
• Inability to concentrate
• Dizziness
• Clammy/sweaty

Treatment: If patient is awake & alert give them something to eat that is high in sugar content. (Orange juice, candy)
Always be sure they take in carbs, proteins, & fats as the body uses the sugars very quickly and the blood sugar could fall again in a short period of time. (Peanut butter sandwich and milk are good choices)
If the patient is unconscious NEVER PUT FOOD IN THEIR MOUTH—CALL MEDICAL EMERGENCY
Hyperglycemia: High blood sugar/not enough insulin

Signs & Symptoms:
• Confusion
• Coma

Treatment: Insulin

Medical Emergencies

San Diego County Probation
Emergency:

- sudden, urgent, usually unexpected occurrence or occasion requiring immediate action
- a state, esp. of need for help or relief, created by some unexpected event

What is a fracture?

- the breaking of a bone, cartilage, or the like, or the resulting condition
When is a fracture considered an emergency?

1. Loss of circulation-no pulse distal to the fracture

   *If not seen immediately,*
   
   *limb could be lost—*
   
   This is a 911 CALL!

2. Loss of sensation-could indicate severing of nerve

   *If nerve function is not restored, the patient can have permanent loss of use of limb.*

   This is a 911 CALL!
3. Open fracture—bone sticking out of skin. Potential for severe infection that can result in loss of limb

This is a 911 CALL!

Signs/Symptoms of fractures:

- Pain or tenderness
- Deformity in area of injury
- False (unusual) motion in area of injury
- Decreased motion or inability to use affected limb
- Bone protruding from skin
- Swelling
- Bruising
Most IMPORTANT first aid for a fracture is to IMMOBILIZE the limb—remember it is MOST painful when the bones are moving!

Seizures
TYPES OF SEIZURES

• PSEUDO SEIZURES
• CLONIC TONIC SEIZURES
• ABSENT
• NEW ONSET
• PAST HISTORY – HEAD INJURIES
• DRUG USE

What does a seizure look like?

• Aura- warning sign of impeding seizure—seen only in seizures caused by epilepsy
• Falling to the ground & loss of consciousness usually accompanied by a hoarse cry
• Muscle tenseness of entire body for 5-30 seconds
• Spasmodic, jerky muscle contractions
• Cessation of breathing during muscle-tensing period, followed by labored breathing during rest of seizure.
• Face becomes blue or gray at height of seizure.
• Biting of tongue or foaming of the mouth
• Loss of bladder & bowel control
• Deep sleep afterwards (Post-ictal period)
• NEVER TRY TO PUT ANYTHING INTO THE MOUTH OF SOMEONE HAVING A SEIZURE

Treatment:
• Move patient from anything they could injure themselves on
• Loosen clothing around throat and waist
• Protect their head-place pillow if possible
• CALL MEDICAL EMERGENCY!

Eye Injuries:

Signs/Symptoms: (one or both eyes)
• History of injury or exposure
• Vision changes
• Swelling
• Pain
• Bleeding in the eye
• Foreign material/object in eye
• Change in size or shape of pupil
• Darkening of iris (colored portion of the eye)
Eye Infections:

**Signs/Symptoms:**
- Redness
- Pus/drainage in eye
- Swelling
- Itching or burning

Pink Eye:

Penetrating Eye Injuries:

- If there is a penetrating injury to the eye (pencil or foreign object stuck in eye), DO NOT remove it.
- Take a cup, cut out the bottom of it and tape over the penetrating object to prevent movement.
- Also, remember to cover the “good eye” to keep the eyes from moving.

- THIS IS A 911 CALL
Techniques for controlling External Bleeding:

• Direct pressure
• Place a dry, clean dressing over the wound and hold it in place while applying pressure (If you don’t have a dressing, use your bare hand until a dressing is found.)
• If you can’t a clean dressing—use a towel, shirt, or sheet—the objective is to stop the bleeding!
• On most parts of the body, you can use a pressure dressing to hold dressing in place—if blood soaks through the dressing, place another dressing on top of the first one—Do not remove the first one!
• Never use a tourniquet!

San Diego County Probation

Lacerations and Punctures:

• Use Basic First Aid
• Cover the laceration with the cleanest available dry dressing
• Do not remove any foreign objects or materials
• Control bleeding
• If any tissue has been amputated: Wrap it in sterile gauze soaked with cool water place in Ziploc bag and send it to the Emergency room with patient.

San Diego County Probation
Nosebleeds—common causes:

- Fractured skull
- Medications (side effects of anticoagulants)
- High blood pressure
- Dry air
- Blowing nose too hard
- Foreign body in the nose
- Injury—including picking nose
- Infection

Treatment:

- Have patient pinch nose just below bridge of nose and hold firm pressure for 15-20 minutes.
- Can place ice on forehead and back of neck.
- Educate to avoid blowing nose for an hour after—avoids disrupting clot formation.

Obstetrics:

- Any pregnant minor with vaginal bleeding or abdominal pain should be taken out to the designated hospital or to their private doctor.
• **What are those bugs?**
  Lice live for approximately 3 weeks but they can’t live long when away from the scalp.
  The eggs are called nits. They are small and white and live on the hair shaft.

• **How do you get lice?**
  It is usually head to head contact, or mutual use of brushes, combs, etc.

• **If my friend has lice should I be treated?**
  No, have someone check you over the next three weeks. Lice shampoo is a medicine and can have side effects. You should not have any medication unless you need it.
• If they order the shampoo for me, will they go away?

90% of cases are resolved with the first treatment. It is essential to use the comb and comb the hair from the roots to the ends to remove nits. If it is needed, you can be treated again.

• What else will they do here at Juvenile Hall?

After you have the shampoo treatment, an MTO will be sent to your unit for a change of clothing and bed sheets.
San Diego County Probation

Nit

<----Nit

Hard to see, it's oval-shaped

San Diego County Probation
Scabies:

- **Scabies** is a skin infection characterized by superficial burrows, intense itching and secondary infection. The word *scabies* comes from the Latin word for "scratch" (scabere).
Scabies Mite

San Diego County Probation

Scabies Rash to Hands

San Diego County Probation
Scabies up close

Hyperventilation
Hyperventilation:

- The state of breathing faster and/or deeper than necessary, thereby reducing the carbon dioxide concentration of the blood below normal.
- Causes: stress/anxiety
- Symptoms: numbness or tingling in the hands, feet and lips, lightheadedness, dizziness, headache, chest pain, slurred speech and sometimes fainting are common.
- *Sometimes hyperventilation is induced for these same effects.*

Things we commonly see:

- Lacerations
Fractures:

San Diego County Probation

Dislocations

Signs/Symptoms:
- Pain in joint
- Possible swelling in joint
- Deformity of joint
- Loss of movement/pain when attempting to move joint

San Diego County Probation
### Sprains & Strains:

<table>
<thead>
<tr>
<th>Sprains (Signs/Symptoms)</th>
<th>Strains (Signs/Symptoms)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Pain on movement</td>
<td>• Pain especially with movement</td>
</tr>
<tr>
<td>• Swelling around joint</td>
<td>• Some swelling (not as much as a sprain)</td>
</tr>
<tr>
<td>• Discoloration around injury</td>
<td></td>
</tr>
<tr>
<td>• Tenderness</td>
<td></td>
</tr>
</tbody>
</table>

Treatment for both:
RICE—Rest, Ice, Compression & Elevation

---

### Ankle Sprains

San Diego County Probation

---

San Diego County Probation
Types of Hepatitis

- There are several different types of hepatitis.
- In the United States, the most common types of hepatitis are:
  - hepatitis A
  - hepatitis B
  - hepatitis C
• Hepatitis is
  • A liver disease

• What does the liver do?
  • The liver is an organ that helps your body digest food and acts as a filter for poisons or anything toxic in the body.
How Do You Know You Have Hepatitis?

- A person with hepatitis will have
  - flu-like symptoms
  - tiredness
  - muscle aches

Viral Hepatitis A

- Hepatitis A is a liver disease caused by the hepatitis A virus (HAV)
- Hepatitis A can affect anyone
- In the United States, hepatitis A can occur in situations ranging from isolated cases of disease to widespread epidemics
How Do You Get Hepatitis A?

- HAV is found in the **stool (feces)** of persons infected with hepatitis A
- HAV is usually spread
  - Putting something in the **mouth (food, water, hands)** that has been contaminated with the stool of a person with hepatitis A
  - Most infections come from contact with a household member or sex partner who has hepatitis A

Signs and Symptoms of Hepatitis A

- The hepatitis A virus affects people differently
  - Some people have no physical complaints when they are infected with the hepatitis A virus
  - Older persons are more likely to have symptoms than children
Signs and Symptoms of Viral Hepatitis A

- If symptoms are present, they usually occur abruptly and may include
  - fever
  - tiredness
  - loss of appetite
  - nausea
  - abdominal discomfort
  - jaundice
  - dark urine

Summary of Viral Hepatitis A

- Key Take-Home Points
  - The HAV is spread through contaminated food or water
  - The symptoms are various complaints
  - There is no long-term infection and you cannot get it again.
  - Best way to protect against HAV is vaccination and hand washing
Persons at Risk

- Who is more at risk of getting hepatitis A?
  - People living with HAV-infected persons
  - Sex contacts of infected persons
  - Persons, especially children, living in regions of the U.S. with consistently increased rates of hepatitis A
  - Men who have sex with men
  - Injecting and non-injecting drug users
  - Persons traveling to countries where hepatitis A is present

Long-Term Effects of HAV

- There is no chronic (long-term) infection

- Once you have had hepatitis A you cannot get it again

- About 15% of people infected with HAV will have sustained or re-occurring symptoms over a 6-9 month period
Preventing HAV Infection

- Vaccination
  - Hepatitis A vaccine
  - Immune globulin
- Personal Hygiene
  - Hand washing
  - Wearing disposable gloves

Summary of Viral Hepatitis A

- The HAV is spread through contaminated food or water
- The symptoms are various complaints
- There is no long-term infection and you cannot get it again.
- **Best way to protect against HAV is vaccination and hand washing**
**Hepatitis B**

- **Mode of transmission bloodborne**
- Flu-like symptoms from mild to severe
- Causes inflammation of the liver and may severely damage the liver, leading to cirrhosis & death
- Also sexually transmitted
- Infects 280,000 in the U.S. each year according to the CDC
- Prevented by the Hepatitis B vaccine

**Hepatitis C**

- Most common **bloodborne** infection in the U.S.
- Symptoms are similar to HBV
- Results in severe liver damage (cirrhosis and liver cancer, more frequently than HBV)
- Approximately 50% of those infected progress to either a carrier or an active disease state
- Transmitted through infected blood fluid & sexual contact
- **NO VACCINE AVAILABLE**
Bloodborne Pathogens:

• Bloodborne pathogens are disease causing organisms present in the blood of exposed and infected individuals.

• These include: hepatitis B, hepatitis C, and HIV
Human Immunodeficiency (HIV):

- Attacks immune system, causing Acquired Immune Deficiency Syndrome (AIDS), which is fatal
- Symptoms may not develop for several years, but AIDS eventually develops
- When symptoms appear, they are flu like symptoms. Opportunistic infections such as thrush, esophageal candida may also occur
- Transmitted through infected body fluids & sexual contact
- NO VACCINE AVAILABLE

Body fluids that carry the virus include:

- Saliva in dental procedures
- Semen
- Vaginal Secretions
- Cerebrospinal fluid
- Synovial fluid
- Pleural fluid
- Peritoneal fluid
- Amniotic fluid
- Any body fluid visibly contaminated with blood
Body fluids that DO NOT carry viruses:

- Saliva
- Feces
- Urine
- Sputum
- Nasal secretions
- Tears
- Vomit
- Sweat

Important facts:

Bloodborne pathogens infect by:

- Sexual contact
- Contact with blood & some body fluids which carry viruses
Remember:

• To cause infection the bloodborne pathogens must enter the body through a port—skin breaks/mucus membranes
• Punctures with sharps such as needle, scalpels, broken glass etc.
• Open cuts, skin abrasions, dermatitis and acne.

How can we protect ourselves?

UNIVERSAL PRECAUTIONS!!
Airborne Pathogens:

• Chicken Pox
• TB

Chicken Pox (Varicella):

• A contagious infection with the varicella-zoster virus that produces a characteristic itchy rash, consisting of small, raised, blistered or crusted spots.
• Causes: Infection with the virus. It is spread person to person by airborne droplets or contact with a skin eruptions on an infected person. Incubation after exposure is 7-21 days.
Facts about Chicken Pox:

- Symptoms begin 10-21 days after infection.
- May have headache, fever, & loss of appetite.
- 24-36 hours after first symptoms begin, a rash of small, flat red spots appear.
- New spots usually stop appearing by the 5th day—most are crusted by the 6th. (Majority are gone in fewer than 20 days.)
- Keep child isolated until all are crusted over.
- Keep any female of child bearing age away from child.

San Diego County Probation

Treatment:

- Topical anesthetics and topical antihistamines (Calamine)
- Tylenol for fever—NEVER give aspirin to children
- Activity—let them whatever they feel up to doing/they may sport by themselves/they may shower
- No special diet is needed

San Diego County Probation
Tuberculosis

- Tuberculosis is an airborne pathogen that is spread from droplets from an infected person.

- Risk factors for inhaling TB from a person with infectious TB disease depends on the:
  -- length of time spent near the person
  -- distance between you and the person
Can you get TB?

YES, if you...
• Shoot drugs
• Have a weakened immune system
• Live or work in crowded conditions
• Spent time with someone who had active TB
• A healthcare worker

HIGH RISK GROUPS:
• HIV
• Previously infected persons (TB or ppd reactors)
• Minority groups
• Low income/homeless
• Foreign born

TB pathogens can be spread when a contagious person:

• Coughs
• Sneezes
• Sings
• Shouts

San Diego County Probation
TB pathogens CAN NOT be spread by:

- Brief contact
- Sharing dishes/utensils
- Using towels/linens
- Handling food

TB Infection—what does it mean?

- TB germs are sleeping and body defenses are keeping them from growing.
- TB skin test was over 10mm
- Chest XRAY – Normal
- The person has no symptoms and is not sick.
- Yes, the person is infected, but is not infectious to others.
- If no preventive treatment, 10% chance of developing active TB. (JH Treatment INH for 9 months)
Active TB Disease:

- TB germs are in the body and growing
- TB skin test positive (over 10mm)
- Chest XRAY positive
- Sputum culture positive
- Treatment: Multiple Meds/repeat CXR & sputum cultures.

**Signs/Symptoms:**
- Cough
- Weight loss
- Fever
- Lots of sputum
- Night sweats
- Loss of appetite

San Diego County Probation

**MRSA Video**

San Diego County Probation
THE END

THANK YOU!

San Diego County Probation