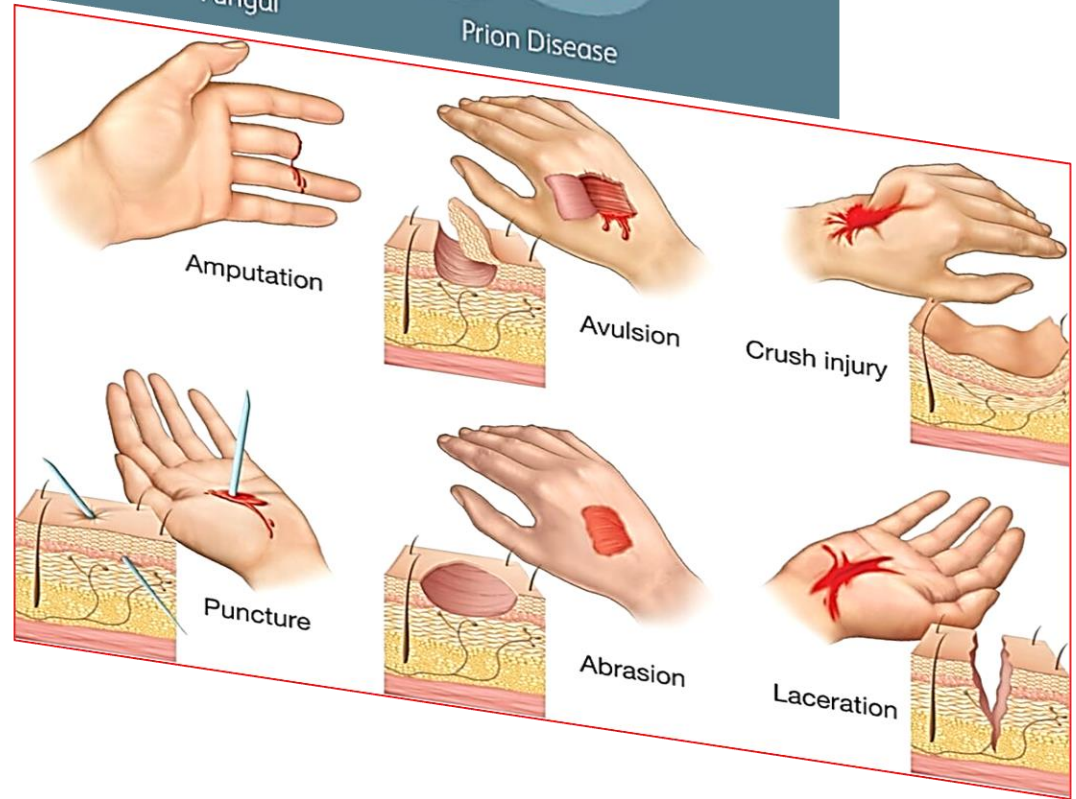
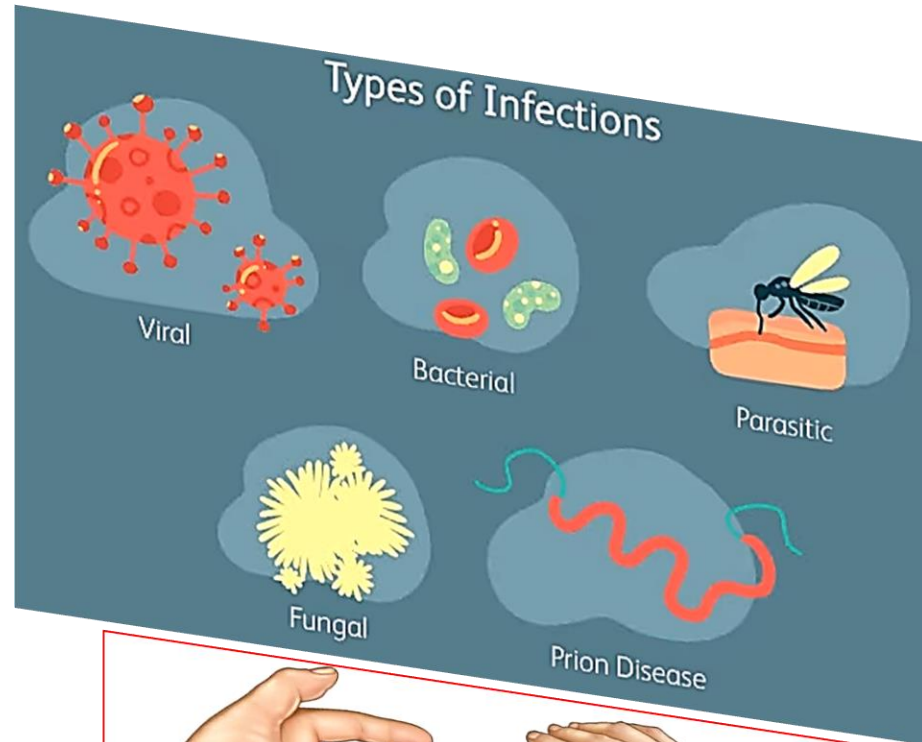


First Aid for Infection Control & Wounds

Autumn Semester 2023-2024
Course Name : **Basic Emergency Life Support**
Stage : 2 Lecture 7: First Aid for **Infection Control & Wounds**
Lecture: Dr. Soma Majedi



Common Types of Infections



- ✓ **Colds**
- ✓ **Glandular fever**
- ✓ **Hepatitis**
- ✓ **Meningitis**
- ✓ **HIV infection**
- ✓ **Measles, Mumps, Chicken Pox**

How They Are Passed On

- ✓ **Blood and body fluids:**

Saliva, Sneezing, Vomit, Pus from infected sores, Urine, Feces, Vaginal and Seminal fluids.

- ✓ **Hypodermic needles:**

Sharing a Needle, Teaspoon, or being stabbed by an infected needle.

- ✓ **Blood transfusions with infected blood or plasma.**

Before administering First Aid

- Wash hands.
- Use latex, vinyl or disposable gloves.
- Use plastic apron.
- Use safety glasses to protect the eyes.
- Use a resuscitation mask if available.

During First Aid Treatment

- Wear gloves that are not thin, worn, or torn.
- Wear two pairs of gloves if possible.
- Do not cough or sneeze onto the casualty's wounds.
- Use clean bandages and dressings.
- Clean wounds and try not to get dirt into them.
- Wash off any body fluids immediately.

After Administering First Aid Treatment

- ✓ Dispose of gloves, blood-soaked bandages and pads properly.
- ✓ Wash facemasks and any contaminated equipment in bleach. Soak them in the bleach solution for a minimum of 30 minutes.
- ✓ Wash hands thoroughly.
- ✓ Wash blood off any clothes or surfaces with bleach.

Contamination by Body Fluids

- ❖ **Eyes and mouth:** wash thoroughly with cold running water and seek medical advice immediately.
- ❖ **Hands:** Wash thoroughly with soap and running tap water. Wounds wash with antiseptic, cover and seek medical advice immediately.

Injection

Procedure for Needle Stick Injuries

- ✓ **Wash** the injury immediately with cold running water.
- ✓ **Promote** bleeding.
- ✓ **Apply** antiseptic solution to injury.
- ✓ **Dress** the wound.
- ✓ **Go** to the hospital immediately where they will arrange pathology tests and counselling.
- ✓ **Try not** to panic. The calmer you are the slower your heart will beat.



General rules for preventing infection

- ✓ **Wear gloves:** Before you touch a wound or other body fluids (e.g., vomit or saliva) wash your hands, or use hand sanitizer, and put on disposable gloves.
- ✓ **Avoid direct contact with body fluids:** If you don't have gloves, put a plastic bag over your hands, or use the person's hands when you need to apply pressure to the bleeding area.
- ✓ **Cover any cuts on your hands:** If you have any cuts or wounds on your hands, make sure they are covered by a waterproof plaster or dressing.
- ✓ **Wear a mask:** Cover your nose and mouth to help prevent breathing in or out infectious droplets. Use a disposable face mask if you are concerned. We encourage you to wear a face mask in closed, crowded and confined spaces.



General rules for preventing infection

- ✓ **Wash any splashes:** If you are splashed by body fluids, wash the area with soap and water, and then contact your doctor for advice. If any splashes onto your clothes, remove it and soak in household bleach diluted with water.
- ✓ **Throw away used dressings:** Put any dropped or used dressings, bandages and gloves into a plastic or paper bag and seal it. Throw the bag away.
- ✓ **Clean equipment:** Clean any equipment (e.g., scissors) thoroughly under running water. Use a nailbrush to scrub serrated edges. Then disinfect the equipment by soaking in household bleach (follow the instructions on the bottle).
- ✓ **Wash your hands:** After removing your gloves always wash your hands thoroughly with soap and water for 20 seconds. Dry your hands well after washing.

WOUNDS FIRST AID



Stop the bleeding



Rinse the wound



Apply an antibiotic



Cover with a bandage



Change it every day

WHEN TO VISIT A DOCTOR



It continues to bleed



Shows signs of infection



Has dirt in the wound



Seems large or deep

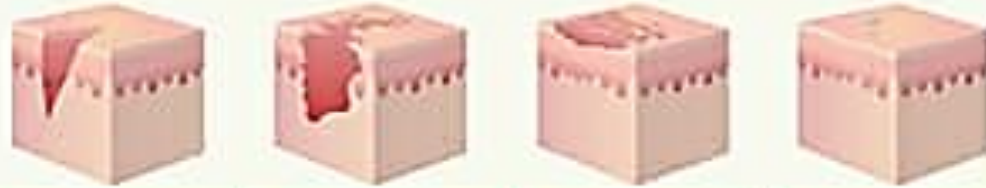


It's a bite

WOUND TYPES

Classifying Wounds

Open wounds:
involve a break in the skin,
internal tissue exposed



Incision

Laceration

Abrasion

Puncture

Pressure wounds may be
open or closed depending
on their stage.



Pressure

Closed wounds:
skin remains intact,
internal tissue not exposed



Contusion

Hematoma

Types of Wound Closures

Primary intention

Wound edges are approximated,
either on their own or by
intervention. Fastest type of wound
closure, low risk of infection/
scarring.

E.g.: surgical incisions, paper cuts



Clean incision

Early suture

Secondary intention

Wound edges cannot be
approximated due to significant
tissue loss. Granulation tissue and
wound contraction occur to close
the defect. Higher risk of infection/
scarring.

E.g.: lacerations, burns, ulcers



Gaping irregular
wound

Granulation

Tertiary intention

Wound is left open and later closed
due to risk of infection or risk for poor
healing. Wound is cleansed, monitored, and
surgically closed when appropriate.

E.g.: animal bite, avulsion



Wound

Increased
granulation

Late suturing
with wide scar



BLEEDING AND WOUNDS

If your skin gets broken or cut, blood comes to the surface where you were the injured. These injuries are also called blood loss, cuts, scrapes, lacerations, abrasions, puncture wounds and open injury bleeding. These are examples that may result in external bleeding. Sometimes blood also leaves through natural openings in the body like the mouth, vagina or rectum. These may be signs of internal bleeding.



SOME FACTS about Bleeding & Wounds

- Bleeding can be either internal or external. Sometimes the injury/wound causes visible blood. In other instances the injury is internal and the bleeding is not easily seen.
- The amount of bleeding does not always indicate how serious the injury is. For example, a small cut on the scalp might bleed more than a deep puncture wound (a pointed object entering the skin).
- A small cut can become a serious medical problem if not cleaned and treated correctly. Keeping an injury clean helps prevent infections.
- Bleeding is more serious if you have a bleeding disorder or are taking blood-thinning medication such as aspirin or coumadin.
- People with diabetes and other chronic diseases often heal slowly.



SIGNS & SYMPTOMS

The most obvious sign of a wound may be bleeding. *Blood-loss, both internal and external, should also be considered if there is/are:*

- Bruising
- Signs of Shock
 - Paler than usual
 - Clammy skin
 - Dizziness, light-headedness or low blood pressure
 - Trouble breathing
 - Confusion, disorientation and weakness
- Dark tarry stools
- Painful or swollen stomach
- Blood-loss from openings like the mouth, ears etc...
- Blood in stool, urine, vagina (more than normal menstruation) or vomit

BLEEDING AND WOUNDS



CAUSES

Bleeding may be the result of an injury, medical condition, or certain medications. Some medical conditions that result in bleeding are: ulcers, cancer and urinary tract infections. Examples of medications include: aspirin, motrin/ibutropin and coumadin.

The following injuries might cause bleeding:

- Falls or blows from tripping, car accidents, sports injuries etc...
- Sharp objects that puncture the skin, such as knives, scissors, nails, pencils etc...
- Shaving cuts
- Bites from animals or humans
- Very dry skin that cracks and bleeds
- Side effect of some medications like coumadin



PREVENTION

- Try to prevent Falls (See Fact Sheet No. 11)
- Be Careful using Knives and Scissors
- Do not pick up Sharp Objects like broken glass - use a broom
- Shave when alert and not in a rush
- Stay away from animals unless you know they are friendly. They might bite or scratch
- Check Skin: use lotion if it is very dry to prevent cracking

BLEEDING AND WOUNDS



WHAT TO DO

Clean all MINOR cuts.

- Wash your hands with water and soap
- Wash the cut with mild soap and water
- Remove LOOSE dirt or objects from the wound
- Put pressure on the wound to stop bleeding
- Once bleeding stops, use antibacterial ointment (if ordered by doctor)
- Bandage the wound if it is likely to get dirty

For larger, more serious cuts

- Apply pressure directly or with a dressing
- Seek medical attention immediately
- Observe for signs of shock

Check that they are up-to-date on their Tetanus vaccine



CALL THE DOCTOR

Call the doctor or the nurse if:

- The **wound is large or deep**, even if it is not bleeding a lot.
- **Stitches** might be needed
- The wound is on the **face or reaches to the bone**
- The person was **bitten** by an animal or a human
- The wound looks **infected**
 - it is red, warm, painful, throbs, pusses or swollen
 - It is accompanied by a fever
 - red lines spread from wound towards the heart
- The person's **last tetanus shot** was more than 5 years ago



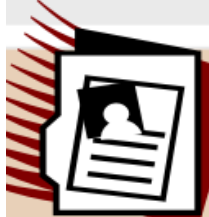
WHAT NOT TO DO

DO NOT remove objects that are stuck in the body. Place pads around the object and tape it so that it doesn't move. Then, seek medical help.

DO NOT clean very big wounds. Try to stop the bleeding and seek medical help.

DO NOT assume a wound is clean. **CLEAN IT** if it is a small wound!

DO NOT remove bandages to see if the wound has stopped bleeding. This might open the wound.



DOCUMENT

Keep a record of how the injury happened and how it was treated. Also note what will be done to prevent it from getting infected.

File an Incident Report (if required) and complete other documentation such as writing down a description in the logbook if the person requires emergency medical care.



EMERGENCY

CALL 911 IMMEDIATELY IF:

- There is a **lot of blood** and you **can not stop it with pressure**
- The injury is **serious**
- There is a known **bleeding disorder**
- You suspect **internal bleeding**
 - The person vomits a red or black substance
 - The person passes a black bowel movement
 - The person has a distended (swollen) stomach
- The person is in **shock**



TO LEARN MORE - Go to these websites:

- <http://www.webMD.com>
- <http://health.allrefer.com/health/bleeding.html>



References

- ✓ <https://www.hatraining.com/first-aid/infection-control/>
- ✓ <https://www.stjohn.org.nz/first-aid/first-aid-library/infection-control-in-first-aid/>
- ✓ https://portal.ct.gov/-/media/DDS/FactSheets/FS_Bleeding_and_wounds.pdf