

## **Communications Systems and Equipment**

- Purpose is to relay information from one location to another when impossible to communicate face to face.
- Results will only be as accurate as information put into the system.

## **Communications Systems and Equipment**

- Communications systems are divided into two categories:
  - Voice communications
  - Data communications

## **Radio Systems**

- Regulated by the Federal Communications Commission (FCC)
- Frequencies are assigned according to function of the organization.

## Radio Systems

- Types of radios
  - Base station – 2 way stationary
  - Mobile radio – mounted in vehicle
  - Portable radio – carried by rescuers
  - Repeater –



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## Telephone Systems

- Primarily convey voice communications
  - Landline phone systems
  - Cellular phones

## Data Systems

- Data can be transmitted through radio or phone systems.
  - Portable computers
  - Personal digital assistants (PDAs)
- Paging systems
- Mobile data terminals (MDTs) reduces time frequency is tied up
- Fax machines
- Telemetry –

## Functions of Radio Communications

- Arrival at the scene
  - Try to give a concise verbal picture of the scene.
- Update responding EMS units
  - Age and sex of patient
  - Chief complaint

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## Functions of Radio Communications

- Transferring patient care to other EMS personnel
  - Describe findings concisely and accurately.
- Postrun activities
  - Report status to communications center.

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## Effective Radio Communication

- Monitor channel before transmitting.
- Plan your message.
- Wait 1 second after pressing push-to-talk (PTT) button before speaking.

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## Effective Radio Communication

- Identify person or unit you are calling first, then identify your unit as sender.
- Acknowledge a transmission as soon as you can.

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## Effective Radio Communication

- Avoid voicing negative emotions.
- Courtesy is assumed.
- For numbers with two or more digits, say entire number first, then each digit.
- Do not use profanity.
- Use EMS frequencies for EMS communications.
- Reduce background noise.

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## Verbal Communications

- External and internal distractions can hinder effective communications.
  - Try to keep noise to a minimum.
  - Don't allow yourself to think about personal matters.
- Verbal communications are an essential part of high-quality patient care.

## Effective Verbal Communications

- Identify yourself.
- Ask the patient's name and use it.
- Make and keep eye contact.
- Use language the patient can understand.
- Speak slowly, clearly, and distinctly.
- Tell the truth.
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## Effective Verbal Communications

- Be aware of your body language.
- Act and speak in a calm, confident manner.
- Treat all patients as if they were a member of your family.



## Communicating With Hearing-Impaired Patients

- Identify yourself by showing your patch or badge.
- Touch the patient, if appropriate.
- Face the patient when you speak.
- Speak slowly and distinctly; do not shout.

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### **Communicating With Hearing-Impaired Patients**

- Watch the patient's face for expressions of understanding or uncertainty.
- Repeat or rephrase comments in clear, simple language.
- Write down your questions.

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### **Communicating With Non-English-Speaking Patients**

- Adapt techniques used with hearing-impaired patients.
- Use a family member or friend as interpreter.
- Use hand gestures, finger pointing, and facial expressions.

### **Communicating With Visually Impaired Patients**

- Look for signs that the patient may be visually impaired.
- Tell the patient what is happening.
- If the patient has a service dog, try to keep the patient and dog together.

### **Communicating With Older Patients**

- Some older patients suffer from hearing or visual impairment.

## Communicating With Pediatric Patients

- Children and parents are often frightened and anxious.
- Familiar objects and faces can help reduce fear for children.
- Explain what you are doing to the child and parents.
- Ask a parent to hold child if illness or injury permits.

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## Communicating With Pediatric Patients

- Tell the child your name and explain what you are doing.
- Squat, kneel, or sit down to the child's level.



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## Communicating With Developmentally Disabled Patients

- Ask the family about patient's level of communication.
- May need to repeat or rephrase statements several times
- Adapt techniques used with pediatric patients.

## Persons Displaying Disruptive Behavior

- Try to determine cause of patient's disruptive behavior.
- Protect the patient and yourself.
- Do not take your eyes off of patient.
- If patient has a weapon, call law enforcement and stay clear until scene is safe.

## Documentation

- Verifies your actions with written record
- Provides a record for others
- Legal record of the actions you took
- Provides basis to evaluate quality of care

## Proper Documentation

- Age and sex of patient
- History of incident
- Condition of patient when found
- Patient's description of injury or illness
- Patient's chief complaint

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## Proper Documentation

- Patient's level of responsiveness
- Status of initial and later vital signs
- Results of physical examination
- Pertinent medical conditions using SAMPLE format

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## Proper Documentation

- Agency and personnel who took over patient care
- Any other helpful facts
- Any reportable conditions present

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### **Documentation Tips**

- Complete run report as soon as possible after each call.
- Be clear, concise, and accurate.
- May use a paper-based or computer-based system
- If you make a mistake on the form, document and correct it.

### **Reportable Events**

- Reportable events include certain crimes and infectious diseases.
- Learn how process is handled in your agency.