Chapter 15
Communications

Overview

- Communication Systems and Components
  - Communication Components
  - System Maintenance

- Procedures for Radio Communications
  - Communication with Dispatch
  - Communication with Medical Direction
  - Verbal Communication

- Interpersonal Communication
  - General Principles
  - Tips for Effective Communication
  - Special Populations
Communication Systems and Components

- Communication components
  - Base station—a radio that is located at a stationary site such as a hospital, mountaintop, or public safety agency

Communication Systems and Components

- Communication components
  - Mobile two-way radios (transmitter/receivers)
    - Implies a vehicle-mounted device
    - Mobile transmitters usually transmit at lower power than base stations (typically 20-50 watts)
    - Typical transmission range is 10-15 miles over average terrain

Communication Systems and Components

- Communication components
  - Portable radios (transmitter/receivers)
    - Implies a hand-held device
    - Typically have power output of 1-5 watts, limiting their range
Communication Systems and Components

- Communication components
  - Repeater/base station—receives a transmission from a low-power portable or mobile radio on one frequency and retransmits at a higher power on another frequency

Communication Systems and Components

- Communication components
  - Cellular telephones
Communication Systems and Components

- Radio frequencies—assigned and licensed by the Federal Communications Commission (FCC)

Communication Systems and Components

- System maintenance
  - Communication equipment needs to be checked periodically by a qualified technician

Communication Systems and Components

- As technology changes, new equipment becomes available that may have a role in EMS systems
Since EMT-Basics may need to be able to consult online medical direction, an EMS system must provide a backup in case the usual procedures do not work.

Procedure for Radio Communication

- General principles
  - Radio is on and volume is properly adjusted
  - Listen to the frequency and ensure it is clear before beginning a transmission
  - Press the "press to talk" (PTT) button on the radio and wait for 1 second before speaking
**Procedure for Radio Communication**

- **General principles**
  - Speak with lips about 2 to 3 inches from the microphone.

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**Procedure for Radio Communication**

- **General principles**
  - Address the unit being called, then give the name of the unit (and number if appropriate) where the transmission is originating.
  - The unit being called will signal that the transmission should start by saying “go ahead” or some other term standard for that area. A response of “stand by” means wait until further notice.

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**Procedure for Radio Communication**

- **General principles**
  - Speak clearly and slowly, in a monotone voice.
  - Keep transmissions brief. If, on occasion, a transmission takes longer than 30 seconds, stop at that point and pause for a few seconds so that emergency traffic can use the frequency if necessary.
  - Use clear text.
  - Avoid codes.
  - Avoid meaningless phrases like “Be advised.”
Procedure for Radio Communication

● General principles
  ➢ Courtesy is assumed, so there is no need to say “please,” “thank you,” and “you’re welcome”
  ➢ When transmitting a number that might be confused (e.g., a number in the teens), give the number, then give the individual digits
  ➢ The airwaves are public and scanners are popular. EMS transmissions may be overheard by more than just the EMS community. Do not give a patient’s name over the air

Procedure for Radio Communication

● General principles
  ➢ An EMT-Basic rarely acts alone: Use “we” instead of “I”
  ➢ Do not use profanity on the air. The FCC takes a dim view of such language and may impose substantial fines
  ➢ Avoid words that are difficult to hear like “yes” and “no.” Use “affirmative” and “negative”
  ➢ Use the standard format for transmission of information

Procedure for Radio Communication

● General principles
  ➢ When the transmission is finished, indicate this by saying “over.” Get confirmation that the message was received
  ➢ Avoid codes, especially those that are not standardized
  ➢ Avoid offering a diagnosis of the patient’s problem
  ➢ Use EMS frequencies only for EMS communication
  ➢ Reduce background noise as much as possible by closing the window
Procedure for Radio Communication

- Communication with dispatch
  - Notify the dispatcher when
    - The call is received
    - Responding to the call
    - Arriving at the scene
    - Arriving at the patient’s side
    - Leaving the scene for the receiving facility
    - Arrival at the receiving facility
    - Leaving the hospital for the station
    - Arrival at the station

Procedure for Radio Communication

- Communication with medical direction
  - EMT-Basics may need to contact medical direction for consultation and to get orders for administration of medications. Radio transmissions need to be organized, concise, and pertinent
  - Since the physician will determine whether to order medications and procedures based on the information given by the EMT-Basic, this information must be accurate
Procedure for Radio Communication

- After receiving an order for a medication or procedure (or denial of such a request), repeat the order back word for word
- Orders that are unclear or appear to be inappropriate should be questioned

Procedure for Radio Communication

- Communication with receiving facilities
  - EMT-Basics provide information that allows hospitals to prepare for a patient’s arrival by having the right room, equipment, and personnel prepared

Procedures for Radio Communication

- Standard reporting format
  - Identify unit and level of provider (who and what)
  - Patient’s age and gender
  - Chief complaint
  - Brief, pertinent history of the present illness
  - Major past illnesses
  - Mental status
  - Assessment findings
  - Baseline vital signs
  - Emergency care given
  - Response to emergency care
  - Estimated time to load the patient for transport
  - Estimated travel time from the scene to the hospital
  - Opportunity for questions
Verbal Communication

- After arrival at the hospital, give a verbal report to the staff
  - Introduce the patient by name (if known)
  - Summarize the information given over the radio:
    - Chief complaint
    - History not given previously
    - Additional treatment given en route
    - Additional vital signs taken en route
    - Give additional information that was collected but not transmitted

Interpersonal Communication

- General principles
  - Form a general impression
  - Interpret the situation
  - Form a communication goal and plan
Interpersonal Communication

- General principles
  - You must understand the surroundings
  - Make and keep eye contact with the patient
  - When practical, position yourself at a level lower than the patient
  - Be honest with the patient

Interpersonal Communication

- General principles
  - Use language the patient can understand
  - Be aware of your own body language
  - Speak clearly, slowly, and distinctly
  - Use the patient's proper name, either first or last, depending on the circumstances. Ask the patient what he wishes to be called

Interpersonal Communication

- Tips for effective communication
  - Verbalize your support
  - Be a good listener when the patient needs to talk
  - Offer a reassuring touch
  - Be respectful
  - Separate personal bias
  - Be silent when appropriate
Interpersonal Communication

- Special populations
  - If a patient has difficulty hearing, speak clearly with lips visible
  - Allow the patient enough time to answer a question before asking the next one
  - Act and speak in a calm, confident manner

Interpersonal Communication

- Communication with hearing-impaired patients, non-English-speaking populations, use of interpreters, etc.
  - Potential for visual deficit
  - Potential for auditory deficit

Summary

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  - Communication Components
  - System Maintenance

- Procedures for Radio Communications
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- Interpersonal Communication
  - General Principles
  - Tips for Effective Communication
  - Special Populations