Introduction

During both day-to-day operations and disaster circumstances, EMS personnel must have reliable, redundant communication with hospitals in order to coordinate effective patient care and transport. Although most routine patient data is transmitted electronically via the Patient Tracking System (PTS), voice communication is still required when supplemental information is requested by the hospital, when Medical Control orders are required for EMS, and in order to manage the healthcare response to any major incident.

This Field Operations Guide (FOG) describes use of the RISCON 800MHz and HEAR radio systems for EMS-to-hospital communications. A comprehensive guide to all healthcare tactical communications is available in the Rhode Island Statewide Healthcare System Tactical Communications Guide. Sample radio scripts are also available as a separate document to assist those less familiar with radio communications.

NOTE: In Rhode Island, it is common practice to refer to 911-dispatched ambulances as “rescues.” To avoid confusion with national standards, the term “ambulance” applies to all transporting EMS vehicles for purposes of this plan.

Contact Information

Rhode Island Department of Health – Center for Emergency Preparedness and Response
24/7 On-Call Number: 401-222-6911 RISCON: HEALTH-1 or Wide Area-3

Rhode Island Department of Health – Communications Technical Support
E-mail: comms@health.ri.gov Phone: 401-222-1169

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The two primary radio systems addressed by this FOG are:

- The **RISCON 800MHz radio system** is a digital, trunked, 800MHz radio system that serves as Rhode Island’s primary statewide interoperable voice radio communication system during major incidents as well as day-to-day operations. The RISCON system is available to law enforcement, fire/EMS, hospitals, public works, and emergency management across the state. Many agencies use the system as their front-line voice communication system, while others use it exclusively for interagency communication.

- The **Hospital Emergency Agency Radio (HEAR)** is a two-channel high-band VHF simplex voice radio network. It provides communications hospital-to-hospital, EMS-to-hospital, hospital-to-HEALTH, and hospital-to-RIEMA and is intended as a redundant backup system. *(NOTE: As of January 1, 2013, DTMF tones are no longer used with the HEAR radio system.)*

**Radio Communications Equipment**

*NOTE: All hospital and EMS personnel must be adequately trained in general radio etiquette as well as the specific equipment available to them. Before using RISCON radios, individuals must complete training as specified by the Rhode Island Interoperable Communications Committee.*

**EMS Radios**

EMS regulations require that all transporting ambulances have two-way voice communication with hospital facilities in order to contact Triage and/or Medical Control. *(NOTE: EMS units are still required to transmit patient information electronically through PTS and ePCR.)* All transporting ambulances providing “911” response should be equipped with a portable or mobile RISCON radio. When possible, ambulances should also be equipped with a high-band VHF mobile (not portable) radio programmed with the HEAR-2 channel as well as the Fire Intercity and other VTAC/VMED channels *(see Radio Programming below).*

It should be noted that cellular telephone communications have for many years been the predominant EMS-to-hospital voice communication method. However, EMS providers should anticipate limited availability of cellular service during widespread emergency situations. Cell phones also limit responders’ situational awareness because they are only capable of providing one-on-one communication. Accordingly, and to ensure consistency between routine and emergency operations, the **RISCON radio system is now the preferred means of EMS-to-hospital voice communication.**

**Hospital Radios**

Hospital emergency departments (EDs) are equipped with two RISCON base radios and a HEAR base radio. EDs monitor RISCON Wide Area 3 and their RISCON hospital-direct “Home Channel” at all times. HEAR is not monitored under normal circumstances but should be monitored during any loss of RISCON service.

**Regional Control Centers**

Each Regional Control Center (RCCs) is equipped with a dedicated RISCON radio for EMS/hospital communications. Primary RCCs are additionally equipped with a HEAR base radio. All RCCs monitor RISCON WA3 at all times and have the ability to switch to one of the direct hospital home channels should the need arise.
RISCON Wide Area 3
The RISCON “Wide Area 3” (WA3) talkgroup is the designated statewide talkgroup for hospital and EMS communications. WA3 replaced the former Hospital Nextel system as of December 11, 2012 and is used by EMS and hospital emergency departments for diversion status notification, inter-hospital resource coordination, and scene-to-hospital coordination.

RISCON Hospital-Direct “Home Channels”
Each hospital facility also has its own “Home Channel” for direct communication between that hospital and another facility or EMS units operating in the field (inbound rescue, local incident command, etc.) If programmed, these talkgroups will be found in the “D” bank of RISCON portable radios (see Radio Programming). The Hospital Home Channels include:

Bradley Hospital
Butler Hospital
Fatima Hospital
Hasbro Children’s Hospital
Kent Hospital
Landmark Medical Center
Memorial Hospital
Miriam Hospital
Newport Hospital
Rhode Island Hospital
Roger Williams Medical Center
South County Hospital
Providence VA Medical Center
Westerly Hospital
Women & Infants Hospital

HEAR-1 Channel
HEAR-1 should be used for hospital-to-hospital communication in place of RISCON WA3 in the event of a failure of the RISCON system.

HEAR-2 Channel
HEAR-2 should be used for EMS-to-hospital communication in place of RISCON WA3 in the event of a failure of the RISCON system. HEAR-2 may also be used to communicate with agencies not on the RISCON system.

General Communications via RISCON Wide Area 3 (WA3)
To contact a hospital (including the Host Hospital) via Wide Area 3, the calling party switches their radio to Wide Area 3, hails the intended hospital facility (or simply Host Hospital), and conducts their conversation as usual. Upon the conclusion of their conversation, the calling party switches back to their normal talkgroup (or may continue to monitor WA3 if desired).

Direct Communication via a RISCON Hospital “Home Channel”
To contact a specific hospital directly via their Home Channel, the calling party (EMS unit or hospital) switches their radio to the desired hospital’s Home Channel and hails them. The conversation is conducted on the hospital’s Home Channel. When the conversation is concluded, the caller returns to their normal talkgroup. (If for some reason a hospital doesn’t respond over their Home Channel, the calling party should switch to Wide Area 3, hail the desired hospital, and ask them to switch over to their Home Channel to complete the conversation.)
Pre-Arrival Notification
To provide pre-arrival notification during PTS downtime, or to provide supplemental information for critical patients, EMS units will use RISCON as follows:

- Switch to the receiving hospital’s Home Channel (see associated procedure above) and communicate directly with the hospital on their talkgroup, OR
- Hail the receiving hospital on Wide Area 3 (WA3) and provide the necessary information via WA3 when the hospital answers.

PTS Call-Back Requests
At times, a hospital may request that an EMS unit call them to provide additional information regarding a patient entered in the Patient Tracking System (PTS). The receiving hospital initiates the call-back request on their PTS screen, which generates a pop-up alert on the EMS unit’s PTS screen. In such cases, EMS may respond to the call-back request via RISCON just as they would for a pre-arrival notification (see Pre-Arrival Notification above).

Hospital Requests for Information from Scene
Adequate incident information from the scene is critical to hospitals’ ability to properly prepare for the patients they may receive during a major incident. If additional updates or incident information are needed, hospitals may request it by one of the following means:

- Contact the scene directly using WA3, noting that WA3 may or may not be actively monitored by responders on scene, depending on staffing.
- Contact the appropriate Regional Control Center via WA3 and ask them to contact the local incident commander for an update.
- Contact HEALTH via WA3 and request assistance (the on-call staff person may also be reached by calling 401-222-6911).

NOTE: During any major incident involving multiple hospital facilities, all hospitals should direct their information requests through the Host Hospital. This prevents responders on scene from becoming overwhelmed by redundant information requests from multiple hospitals. See the Rhode Island Hospital Diversion Plan for more information regarding procedures for the Host Hospital.

Medical Control
To contact Medical Control via RISCON:

- Hail the desired hospital on their Hospital Home Channel and request a physician for Medical Control, OR
- As a last resort when a Hospital Home Channel is unavailable, hail the desired hospital on WA3 and request a physician for Medical Control.
- The person answering the radio at the hospital will summon a Medical Control physician to the radio.

Use of the HEAR Network
In the unlikely event of a RISCON system failure, all hospitals and primary regional control centers will monitor the HEAR network. The HEAR radio network may also be used to communicate with units not on the RISCON system (such as EMS helicopters or out-of-state mutual aid resources).

- HEAR-1 is the designated channel for hospital-to-hospital communications.
- HEAR-2 is the designated channel for EMS-to-hospital communications.
Efficient flow of information and coordination of healthcare resources are critical during major incidents (MCI or otherwise) as well as routine operations. During any major incident, roles and responsibilities related to EMS/hospital communications are as follows:

**Local Dispatch Centers:** Dispatch initial resources to a local incident and manage tactical communications in accordance with local protocols.

**Regional Control Centers:** Coordinate requests for mutual aid resources, monitor hospital diversion status, serve as a point of contact between local responders and hospital facilities.

**Host Hospital:** Initiate roll calls/bed counts, notify affected hospitals, and facilitate the flow of information between hospitals and responders on-scene (either directly or through Regional Control).

**Department of Health (HEALTH):** Monitor Patient Tracking System (PTS) MCI activations, maintain situational awareness, ensure flow of information between hospitals and local responders, serve as a liaison to healthcare subject matter experts, and coordinate the overall response of the statewide healthcare system as needed.

**Hospital Association of RI (HARI):** Provide emergency preparedness assistance and subject matter expertise to hospitals, assist hospitals with requesting information updates through HEALTH or the Host Hospital, and assist HEALTH with specific response tasks when so directed.

When a major incident occurs, the primary responding EMS agency is responsible for the following notifications (see flow chart on page 8 for additional details). These notifications may be made directly from the scene, by the local dispatcher, or by the Regional Control Center.

- **Immediately notify the Host Hospital via RISCON Wide Area 3** (the statewide EMS/hospital talkgroup). The Host Hospital should be the initial point of contact for notifications, bed count requests, and other purposes. Provide a brief initial summary of the incident including the estimated number of casualties and nature of illness/injuries (if known). Request an HCS roll call in accordance with the Rhode Island EMS Major Incident protocol.

- **Notify HEALTH’s Center for Emergency Preparedness and Response** via RISCON Wide Area 3 or by calling (401) 222-6911 (answered 24/7).

**NOTE:** Should a dispatcher be unable to reach the Host Hospital via Wide Area 3, they should immediately proceed to contact HEALTH as described above.

The following points should be noted with respect to EMS/hospital communication during a major incident:

- **WA3** will be used for scene-to-hospital communications throughout the incident unless otherwise directed by HEALTH or RIEMA.
- For smaller incidents where only one hospital is involved, communications may be moved to that facility’s Home Channel in order to free up WA3 for other traffic.
- If a Transport Officer is identified on scene, that individual should monitor WA3 throughout the incident for purposes of coordinating patient destinations and providing pre-arrival information (in conjunction with PTS and HCS). Individual EMS units should generally NOT be communicating directly with hospitals under such circumstances, other than transmitting patient information via PTS.
- If appropriate, notify RIEMA by calling 401-946-9999.
When necessary, HEALTH will reach out directly to Regional Control Centers and/or local dispatchers for situation reports. When necessary, HEALTH may also take over the Host Hospital’s role with respect to coordinating information between hospitals and local responders. **During a major incident, any hospital requesting additional information will route that request through the Host Hospital and/or HEALTH so as to minimize redundant or superfluous requests.**

The Hospital Association of Rhode Island (HARI) provides emergency preparedness support to hospitals, but is not responsible for hospital/EMS coordination during an incident. During a major incident, HARI will help affected hospitals coordinate their resources and will route all related information requests through HEALTH on the hospitals’ behalf.

### Patient Privacy

The Health Insurance Portability and Accountability Act (HIPAA) allows the transmission of protected health information over the phone or radio for the purpose of emergency response, which includes patients being transported by ambulance or transferred between hospital facilities. HIPAA does not require encryption of healthcare-related radio communications nor does HEALTH recommend such practices. The best practice is for all communications to remain in the clear. This avoids confusion and radio equipment incompatibility.

Nonwithstanding the above, there are few (if any) occasions when it is necessary to transmit a patient’s identifying information (name, date-of-birth, etc.) when making pre-arrival notification or contacting Medical Control. Such information is already conveyed securely via the electronic Patient Tracking System (PTS) and EMS personnel should restrict transmission of identifying information to such rare occasions when it is truly necessary.

### Radio Programming

To utilize the communication modes described in this plan, EMS services should ensure that their radio equipment is programmed as follows:

- **RISCON radios** should have the Hospital Home Channels programmed. For portable radios, these should be located in the D-bank, and all personnel must be trained to access the D-bank from the A/B/C banks. **Any RI-licensed ambulance service has permission from the Department of Health to program the Hospital Home Channels in their radios and use them as described herein.**

- **Units equipped with high-band VHF radios** should, at a minimum, be programmed with the HEAR-2 channel as follows:

<table>
<thead>
<tr>
<th>Label</th>
<th>Tx Freq</th>
<th>Tx PL</th>
<th>Rx Freq</th>
<th>Rx PL</th>
<th>N/W</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEAR-2</td>
<td>155.3400</td>
<td>CSQ</td>
<td>155.2800</td>
<td>CSQ</td>
<td>N</td>
</tr>
</tbody>
</table>

Consideration should also be given to programming VHF radios with national interoperable VTAC and VMED channels as defined in the U.S. Department of Homeland Security’s current *National Interoperability Field Operations Guide (NIFOG)*. Rhode Island’s HEAR-2 channel corresponds with the national interoperable channel known as VMED-28, which may be utilized...
during a disaster for communication with out-of-state EMS units not on the RISCON system. Rhode Island’s Fire Intercity channel similarly corresponds with the national interoperable channel VFIRE-21.

NOTE: The HEAR network is a point-to-point radio system with no repeaters or other infrastructure. The radios installed at each hospital and regional control center include powerful (110W) transmitters and large, 20’ Station Master antennas. Unlike the digital RISCON system, portable radios on the HEAR network will not have nearly the same transmitting/receiving capability as base radios and their use should be avoided for all but very short range communications (for example, helipad to inbound helicopter).
RHODE ISLAND MAJOR INCIDENT NOTIFICATION PROCESS FOR FIRE/EMS
In accordance with RI EMS Major Incident Protocol, RI Hospital Diversion Plan, and the Southern New England Fire Mutual Assistance Plan
Mass Casualty Incidents  Hazmat Releases  Search & Rescue  Prolonged Extrication

1. Arrive on scene, recognize major incident
2. Establish Command
3. Notify Regional Control
   - Declare Level-X MCI
   - Provide incident summary
   - Request mutual aid assets*
   - Request MCI trailer*
   - Request CHEMPACK assets*
   - Request incident talkgroup assignment*
4. Declare MCI in Patient Tracking System (PTS)
5. Notify Host Hospital
6. Notify HEALTH and RIEMA
   - Contact HEALTH via RISCON WA3 or call (401) 222-6911
   - Contact RIEMA by calling (401) 946-9999
7. Patient transport begins
   - Enter every patient into PTS and associate with MCI
8. Coordinate patient destinations with hospitals
9. All patients transported
   - Contact Host Hospital via RISCON WA3 with notification that all patients have been transported
10. Notify Host Hospital

* if applicable