

## Goal of the Summit

“Enhancing ambulance transport safety through shared knowledge of technical data”



## Ambulance Transport Safety Summit

### Bridging the gap between what we do and what is known

EMS Subcommittee of the TRB Ambulance Transport Safety Summit

October 29<sup>th</sup>, 2009



## Ethics & Capabilities

EMS and Public Safety Communications Perspective

Historical relationship & ethical challenges:

- HIV & Universal Precautions
- H1N1 Responder Safety Issues



## Ethics & Capabilities

Present and future comparisons and ethical challenges:

- Emergency Medical Dispatch (EMD)
- Next Generation 9-1-1 (NG9-1-1)



## What is NG 9-1-1 and what Ethical and Capabilities issues will it present?



## What Is NG 9-1-1?



## NG 9-1-1 Capabilities

NG 9-1-1 Broadband access will expand the way public safety service providers access emergency services to include sending text messages, photos and videos into 9-1-1.



**Protect Our Protectors with Smart Response Technologies**

Smart Response technologies help emergency responders travel more safely and arrive on scene more quickly.

**Present crashes and increase crash survivability.** New tools for safety technologies such as the use of smart driver condition alerts, and improved communication reduce the chance that responders will be injured or killed on the highway.

**At the Scene**

- Control scene access.** Smart Phones send instant text messages to control scene access and in labelling responders.
- Manage incident-related traffic.** Traffic Management Centers (TMC) use the control provided by ITS systems. The TMC can alert responders by adjusting traffic light controls and changeable message signs to assist in scene access and control, or to help clear the scene once the emergency responders arrive.
- Access real-time incident information, maps, and databases.** Real-time incident information, computer-generated maps, and databases provide on-scene responders with access to incident information, maps, photos, maps, and data bases.
- Share video, photos, graphics and text data with other responders and their control centers, in real-time.** Regional Emergency Communications Centers can in place, responders have the ability to share video, information, images, and video with other field responders and with their control centers.

**Post-Incident**

- Simplify record keeping and retrieval.** Incident information is captured directly to a standardized format and can be stored easily.

**For more information**  
 For a complete report and handbook, please log on.

## NG 9-1-1 Capabilities cont..

This would allow emergency responders and health professionals to receive and utilize information in the critical hour of need, based on how we as a community communicate and interact every day.



**Forecast Systems Laboratory**

Transferring science and technology to operational weather services

Observing Systems: Satellite, Balloon, Aircraft, Surface

Modeling, Assimilation, & Computing: Assimilate, Model

Operational Forecast: Human Interaction and Value-Added, Visualization, Public

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## NG 9-1-1 Future Capabilities

How beneficial would be to have the ability to receive all of the vehicle crash data, the patients medical information, and pictures or video of the accident scene automatically forwarded to you and the receiving Hospital ER in real time?



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## NG 9-1-1 Capabilities cont..

Additionally, this technology would ensure that 9-1-1 continues to operate even if the local 9-1-1 facility is incapacitated by a natural or manmade disaster.

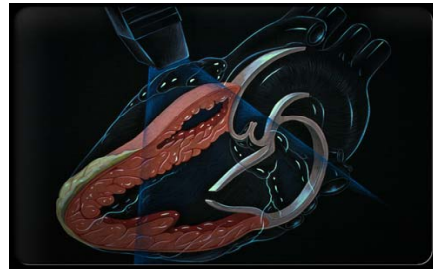


## NG 9-1-1 Future Capabilities

Imagine a Heart Monitor synthesized through Bluetooth Wireless technology to a patient's cellular telephone. Then imagine the cellular telephone automatically calling 9-1-1 reporting an anomaly along with the caller's location information.



## NG 9-1-1 Capabilities



## NG 9-1-1 Future Capabilities

In the event of a shelter in place order during a Pandemic how critical would be for operators/dispatchers to continue to be answer 9-1-1 calls for medical emergencies?



## Virtual 9-1-1 Centers?



## NG 9-1-1 Capabilities

NG 9-1-1 creates an infrastructure that could allow communities to create “virtual” 9-1-1 centers!



## What are the ethical implications for EMS in this new information age?



## Questions Without Answers

- What information do we really want versus all of the potential information available?
- How do we want to receive and display the information?



## Questions Without Answers

- Who and how will we use all of this information?
- How do we protect the privacy of those persons who entrust personal medical information?



## Questions Without Answers

- In this new age of instant communications and information, how do first responders balance the public's expectations for service against your personal protection and operational limitations?



## Questions Without Answers

- Finally, what are the ethical issues that pictures, text and video expose public safety responders to?

## Summary

What we know

What we don't know

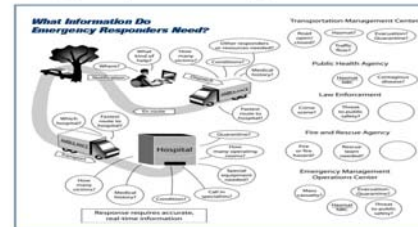
What we need to know

## What Do We know?

- Creating a broadband, IP-based infrastructure for the nation's 6000 9-1-1 systems will allow public safety officials across the country to gain access to the tools they need to provide more effective 9-1-1 service to their citizens.

### Help us Develop a National Strategy for Building Regional Emergency Communications Networks

Today, we know more about a Fed Ex package than we do about a patient en route to a hospital. Response can be different, with your help, more communication technology is now available that has the power to totally transform emergency incident response. Thanks to a convergence of recent advances in networking technology, communications device availability, and public safety equipment availability, for the first time it is possible for emergency responders to share video, photos, graphics and text data in real time.



## What Do We Know? cont..

- NG 9-1-1 will make it easier for the public to access emergency services from any device, from anywhere, at anytime.

## What We Don't Know

Since we have not tapped the full potential of this technology. We do not yet fully understand what potential ethical issues this new era of advances in public safety communications represents.

## What We Need to Know

There are several groups that are actively working to answer the many questions that have presented.



## Questions??

Please raise your hand or type in the message

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