it includes compiling factual data to communicate the situation to an anxious public. For public health organizations, it includes collecting communicable disease data from the field. For hospitals, it includes the sharing of vaccination rates to help them make resource management decisions.

Within a few weeks, >60 organizations worldwide joined the network, including state, federal, and international public health organizations. Other disciplines also joined the network including emergency management, law enforcement, energy regulation, transportation, finance, and legislative bodies, providing them with situational awareness and a way to communicate in real-time.

Methods: Using a rugged PDA with a newly developed program, the result of the triage (status of triage, gender, adult or child, and a photo of the face) are transferred on to a coloured (red, yellow or green) wristband that holds an RFID-chip, so that these data stay with the patient. At the same time, these data also are sent to a server defined by the location (dispatch, hospital, etc.). If medical treatment is necessary, infusions and/or medication and, if needed, physiological data can be stored on the patient’s wristband. Once the patient is ready for transportation, the ID of the ambulance car also is stored, and the data are transferred to the authorities.

Conclusions: The benefits of such a system are:
1. The status of the patient is available immediately after the first contact;
2. Only necessary medical data are stored on the wristband. Ventilatory and pulse rates taken about a half hour ago are unnecessary for the treatment at the hospital; and
3. Patients can be tracked from the scene of the MCI until arrival at the hospital—no patients get lost.

In this project, unmanned aerial vehicles will be used to follow an aerial overview of the disaster area.

Keywords: communication; data sharing; mass-casualty incidents; technology; transport

Designated Tools for Management and Control of Medical Information during Mass-Casualty Toxicological Incidents

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The unique challenge of mass-casualty toxicological incidents (MCTIs) is the fact that various poisons can be the source of injury. Identifying the specific toxic substance is of cardinal importance. Without this identification, there is a gap in the precise medical response, the protection and decontamination procedures, and the proper, on-scene, operational risk assessment. Most first responders and hospital personnel lack relevant experience and specific and sufficient education in clinical toxicology. Unlike trauma events, MCTIs are rare and can involve several clinical scenarios. For each toxidrome, different protocol and antidotes can be advised. In Israel, there is widespread use of various designated tools to overcome the imparity in medical knowledge during the immediate response to a MCTI. First responders on the scene carry cards and control schemes of detailed clinical algorithms. In hospitals, there are designated notebooks and dossiers. These tools efficiently and clearly present needed information regarding the clinical identification of the toxic exposure and the proper medical response during a suspected or definite MCTI. The tools are updated regularly and are optimized for each working environment. They are integrated into emergency drills, and enable the capability of delivering fast and relevant information to medical personnel, helping them to handle any MCTI. It is advised that such tools be adopted in any MCTI preparedness plan.

Keywords: control; information; management; mass-casualty incident; tool; toxicology

ALARM: Telemedical Concepts and Innovative Information Technology Solutions to Support Emergency Workers and Services during Responses to Large-Scale Emergencies

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Large-scale emergencies involving large numbers of casualties often lack the timely and precise information needed for adequate emergency response. Medical and logistical processes receive insufficient support in terms of information technology (IT), which delays individual medical care and increases the potential for spreading panic.

The ALARM project is funded by the Federal Ministry of Education and Research and targets the development of an integrated service platform that ensures and accelerates communication and the flow of information and data. Within the project, a modular platform that enables seamless e-documentation, identification and dynamic resource management of rescue materials and equipment to direct telemedical care services as monitoring and instructions will be developed.

In the first step, an overview of prevailing processes, applied technologies and perceived limitations were pre-