

Terrorism in France

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Abbreviations:

ALS = advanced life support

BIOTOX = The Biotox Plan

BLS = basic life support

CBRN = chemical, biological, radiological, and nuclear

EMS = Emergency Medical Service

EMT = Emergency Medical Technician

MCI = Mass-Casualty Incident

MICU = mobile intensive care unit

PIRATOX = national plan for the emergency response to chemicals and biological events

PTSD = post-traumatic stress disorder

SAMU = *Service d'Aide Médicale Urgente*

SARS = Severe Acute Respiratory Syndrome

SCBA = self-contained breathing apparatus

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Abstract

France has experienced two waves of major terrorist bombings since 1980. In the first wave (1985–1986), eight bombings occurred in Paris, killing 13 and injuring 281. In the second wave (1995–1996), six bombings occurred in Paris and Lyon, killing 10 and injuring 262. Based on lessons learned during these events, France has developed and improved a sophisticated national system for prehospital emergency response to conventional terrorist attacks based on its national emergency medical services (EMS) system, *Service d'Aide Médicale Urgente* (SAMU). According to the national plan for the emergency medical response to mass-casualty events (White Plan), the major phases of EMS response are: (1) alert; (2) search and rescue; (3) triage of victims and provision of critical care to first priority victims; (4) regulated dispatch of victims to hospitals; and (5) psychological assistance.

Following the 1995 Tokyo subway sarin attack, a national plan for the emergency response to chemical and biological events (PIRATOX) was implemented. In 2002, the Ministries of Health and the Interior collaborated to produce a comprehensive national plan (BIOTOX) for the emergency response to chemical, biological, radiological, and nuclear events. Key aspects of BIOTOX are the prehospital provision of specialized advance life support for toxic injuries and the protection of responders in contaminated environments. BIOTOX was successfully used during the 2003 Severe Acute Respiratory Syndrome (SARS) outbreak in France.

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Introduction

France is a country of 60 million inhabitants where terrorism and mass-casualty incident situations unfortunately are as common as in any other developed nation. However, compared with management of such incidents in many other countries, one of the major differences in France concerns the early medical care of victims, since there is early involvement of trained physicians at the incident site to provide triage and advanced life support (ALS). Thus, mass casualties are managed on-site using the same emergency medical system that is in operation every day in normal prehospital care. During the early 1970s, the

authorities in France decided to involve physicians in the rescue organization and coordination of prehospital and in-hospital care. The French emergency medical service, *Service d'Aide Médicale Urgente* (SAMU), is described in detail elsewhere.^{1,2} The essence of the system is the provision of mobile intensive care units (MICUs) carrying physicians to provide care for patients with life-threatening problems. A regional dispatching center, controlled by an emergency physician, receives the calls, dispatches medical units, and organizes admission of patients to specialized centers.

Date	Place	Location	Victims	
			Injured	Dead
Dec 1985	Department Store	Paris	51	0
Feb 1986	Sports Store	Paris	15	0
Feb 1986	Shopping Mall	Paris	51	2
Sep 1986	Post Office	Paris	21	1
Sep 1986	Fast Food Restaurant	Suburbs of Paris	43	0
Sep 1986	Restaurant	Paris	1	2
Sep 1986	Police Station	Paris	45	1
Sep 1986	Crowded Street	Paris	54	7
Total			281	13

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Table 1—Terrorist bombings in Paris, first period 1985–1986. Principles of on-scene management, triage, and dispatching of casualties were laid down and improved during this period.

Date	Place	Location	Victims	
			Injured	Dead
Jul 1995	Underground Train	Paris	119	8
Aug 1995	Street	Paris	17	0
Sep 1995	School Entrance	Lyon	14	0
Oct 1996	Underground Station Entrance	Paris	16	0
Oct 1995	Underground Train	Paris	35	0
Dec 1996	Underground Train	Paris	61	2
Total			262	10

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Table 2—Second wave of terrorist bombings. Patients were managed according to the plans resulting from 1986 experiences. In all these events, the same type of hand-made bomb was used: a 12 L gas bottle filled with explosives, nails, and various metal parts.

The emergency response to mass casualties is based on local fire and emergency medical plans, respectively known as the “Red” and “White” plans. These are the first steps of a regional response coordinated jointly by the Ministry of the Interior and the Ministry of Health. Possible terrorist attacks using the so-called “weapons of mass destruction” recently have been integrated into a nationwide strategy called *le Plan Biotox* or “BIOTOX”.

The Burden of Terrorism in France

Significant Past Terrorist Events

During the past 15 years, France has experienced many minor terrorist events related to Corsican nationalist movements or other regional minorities. These events were aimed essentially at the national administration, but were not designed to injure people. Consequently, they had a relatively small impact on the population. France also has experienced several major terrorist bombings, carried out by international Islamic extremists over the past two decades (Tables 1 and 2). These bombings occurred in two distinct waves separated by almost 10 years (1985–1986 and 1995–1996). Almost all of these bombings occurred in the capital city of Paris in crowded public places, producing relatively large numbers of victims. In all of the bombings during the second wave, the same type of handmade explosive

device was used—a 12 liter gas bottle filled with explosives, nails, and various metal parts. During the first wave of bombings, principles of on-scene management, triage, and dispatching of casualties were laid down and improved. Consequently, the Red and White Plans were modified based on important lessons learned. During the second wave of bombings, patient management clearly improved as a result of these experiences. These plans are described below.

Three of the bombings that occurred in underground trains at a station platform or in a tunnel during the second wave were analyzed closely to assess the effectiveness of EMS response.⁷ The particularly devastating effects of bombings inside confined spaces environments have been reported elsewhere.³

The initial evaluation performed on-scene by a senior physician of the SAMU proved to be accurate and was confirmed in each case during the final debriefing of the event. The on-site triage unit was located on the nearest platform and, in order to facilitate patient transfer to ambulances, a casualty-collecting point was established at the largest exit of the station. In these events, the difficulty of triage on-scene was evaluated. It was noted that while burns and penetrating trauma often are relatively simple to categorize, blast injuries may be more difficult to diagnose.



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Figure 1—Map of France and surrounding countries (reprinted with permission)

Type of Injury	% of Patients
Tympanic perforation	85
Pulmonary blast	44
Abdominal blast	20
Traumatic amputation of limbs	35
Burns	82
Severe head injury	15
Secondary death	18

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Table 3—Pattern of injuries observed afterwards in 34 patients triaged as first priority (absolute emergency) after three cases of bombings attacks in underground trains and stations in Paris (1995–1996). The victims frequently had several associated injuries.

Because tympanic membrane injury confirms that victims have been exposed to the blast wave, otoscopy has become part of the initial examination of these patients in the triage unit. The injury frequency and mortality rate of severely injured victims, triaged as first priority on scene, is described in Table 3. A significant number of medical teams were available on-scene in each case. All the severely injured victims received immediate treatment from a mobile intensive care unit (MICU) team including an anesthesiologist or an emergency physician. Victims were dispatched to several of the largest hospitals in the Paris area, and consequently, no overcrowding of the facilities

was observed. Immediate psychological assistance was offered to all lightly-injured victims, and if needed, was continued in the hospital or as part of out-patient care.

Since 1996, no major terrorist incident resulting in mass casualties has occurred in France. However, two events are relevant to the development of mass casualty management:

1. In September 2001, a chemical factory exploded in Toulouse (in the south of France) (Figure 1) injuring more than 3,500 persons and killing 20. Following the explosion, some hospitals were partially destroyed and were overcrowded by lightly-injured victims who presented spontaneously to the emergency rooms. The subsequent analysis of medical management led to the addition of a regional level (called Defense Zone Level) to the White plan coordinating all of the medical facilities and placing prehospital medical teams of this area under a unique authority.
2. Since October 2001, there have been thousands of “white powder” episodes involving letters suspected to be contaminated with anthrax. No cases of anthrax were recorded but, on these occasions, the plan for biological weapons attacks was used all around the country, and as a result of the experience, was shown to be significantly improved.

The Risk of Future Terrorism

The French authorities consider terrorism to be a major concern for the future. This is not related to specific internal problems in France, but more as a consequence of international terrorism operating through small extremist groups in the country. The level of alert remains high, and the national security plan for prevention of terrorism (Plan

Number of patients = 62
Mean ISS = 24
ISS >16 in 80% of cases
Time from event to hospital admission = 78 minutes
Mean of on-scene times = 38 minutes
Intubation success rates (%)
Chest trauma = 52
Brain trauma = 95
Time interval to first (minutes)
Chest x-rays = 16
Pelvic x-rays = 17
Abdomen-sonogram = 10
Brain CT-Scan = 38
Length of stay (days)
Hospital = 33.4
ICU = 9.9
Ventilator days = 5.4
Mortality (%)
24h = 4.8
Hospital mortality (%) = 8.1

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Figure 1—The numbers are taken from the statistics of the German Society of Trauma Surgery (GSTS) 2000 for the University Hospital-Mainz (ISS = injury severity score; ICU = intensive care unit)

Vigipirate) is permanently activated. Medical management is the last line of defense for the government. Most of the preventative work is done by the intelligence services that are charged with the detection and destruction of terrorist teams before they are able to strike. Recently, several terrorist attempts have been discovered and thwarted. Cooperation between the various European and international agencies has been shown to aid the effective response to terrorist networks.

The Emergency Management of Terrorist Events

National Planning Initiatives

The medical management of terrorist events is determined by several special laws and directives created by the Ministry of the Interior and by the Ministry of Health. These regulations apply nationwide and comprise several levels and specific arrangements for chemical, biological, radiological, and nuclear (CBRN) events. Indeed, like in many other countries, the use of so-called weapons of mass destruction against a non-protected civilian population is feared in France.^{4,5} All of the CBRN directives and the plans either were updated or created during 2002, and then were assembled in the BIOTOX plan. Considering the possibility that, in such circumstances, thousands of victims will need medical support, a special program has been added to the existing basic training of personnel to improve prehospital and in-hospital emergency preparedness. This continuing national program, the result of several years of planning, is funded by the Ministry of Health, and includes medical training, realistic exercises, personal protective equipment, and the stockpiling of drugs.

Conventional Terrorism: Prehospital Management

The prehospital plan is under the overall command of the Prefect (The supreme national authority for a specific area). The Prefect coordinates all of the services (including rescue and medical care) and reports directly to the government. The SAMU physicians, the fire services (who provide their own emergency medical technicians), police, and hospital administration work closely in the Red and White plans to provide medical assistance to mass casualties on-site and in the hospitals of the area. The various phases of patient management are the following:⁶

1. *Alert*—An emergency call reporting a mass-casualty incident (MCI) situation is received by the SAMU dispatch center either directly from the general public (emergency access number 1-5), the police, or the fire brigade headquarters, and a primary medical team is sent to the scene immediately. The physician on this team has the unique task of evaluating briefly the seriousness of the problem and estimating the number of people injured. The presence of a physician at this early phase of the plan is crucial to implement and control medical care at the scene.
2. *Search and Rescue*—During this phase of the response, medical management frequently is limited to Basic Life Support (BLS) provided by Emergency Medical Technicians (EMTs). The use of Advanced Life Support (ALS) may be indicated if the victims are trapped or need life-saving procedures, such as airway control and ventilation. Given the possible difficult access to victims, provision of medical equipment on-scene must be adapted (e.g., equipment may be transported by using specially designed backpacks).
3. *Triage Unit/Advanced Medical Post*—Within the plans, the provision of a triage unit as near as possible to the scene of the disaster is the most important part of the early phase. The setting must be chosen with care, not only to ensure safety, but also to provide convenient patient care and evacuation. Access to the triage area is strictly controlled by the police. This unit is a field-based, medical facility devoted to triage, provision of emergency medical care, and preparation for transport. All of the casualties are transported by field personnel to this unit and registered at the entrance to the unit. No one can leave it without medical control and notification of a specific destination hospital. Consequently, mass casualties are controlled at the site and not just simply transferred to the nearest hospital. The major point of triage is classification of victims based on the severity of injuries. Patients with life-threatening injuries are considered as a first priority or "Urgence Absolute" (Absolute Emergency). Less severely injured patients are considered as a second priority or "Urgence Relative" (Relative Emergency). People who are present on-scene, but obviously are not injured physically, are categorized as "Involved" and only are considered for immediate or secondary psychological assistance. The triage unit is fully equipped to provide critical care to first-priority patients (respiratory and circulatory support, analgesia

and sedation). Triage also determines the priority order for evacuation of the victims—from the scene to the designated hospital. Severely injured patients are treated and transported before the slightly wounded and the ambulatory victims. The evacuation priority always is high for patients with penetrating injuries or unstable haemodynamic status. Every victim in the triage area is tagged and wears an identification card including his name (or if the name is unknown, an identification number), severity of injuries, and, as soon as it is decided, hospital destination and the ambulance number. This tag represents the first medical record for the patient. It confirms the patient's status on-scene, and may be of legal significance in any subsequent litigation. In France, all victims of terrorism have free access to any medical care they need, and the costs of such care is covered by a national insurance fund.

4. *Dispatching and Hospital Choice*—A very positive aspect of the White Plan is the on-line contact between the SAMU headquarters and the hospitals. This ensures that hospitals will have adequate time to prepare for the incoming patients. The medical dispatcher in the SAMU control room receives accurate information from the chief physician of the triage unit, alerts the hospitals of the area relative to the victim's status, and determines the bed availability. A major characteristic of the plan is the regulated dispatch of the victims to several hospitals in the area in order to avoid overcrowding of the nearest facility. It only is when the possible bed availability does not match the number of victims, that individual hospitals may be obliged to call-back personnel and to activate their local plan for mass casualties. In the same way, if the capabilities of the local SAMU are overwhelmed at the site of the incident, units based in the nearest location are called to provide backup assistance. Armed with accurate information about the patient's status from the triage unit, the medical dispatcher designates a hospital destination for each first priority patient.

5. *Psychological Assistance*—It now is established that patients involved in a mass-casualty incident related to terrorism are at risk for the development of the post-traumatic stress disorder (PTSD). Consequently, a specialized team of psychiatrists has been added to the SAMU response teams. Their task is to identify which patients in the triage area are at risk for the development of post-traumatic stress disorder. This team works closely with the psychiatrists based in hospitals that later continue to provide psychological assistance to patients.

These plans are different from those in other countries in which prehospital care is based on the "scoop and run" theory in which patients are transported to the nearest hospital as quickly as possible with no or minimal care.² In the case of mass casualties, prompt transport without control results in overcrowding of the receiving facility. Consequently, inter-hospital transport from the receiving hospital may be needed a few hours after admission.⁷ The

White Plan is used by the entire EMS system in France, and medical personnel have been extensively trained in its use. However, even if the management on-scene is quick and efficient, there will be circumstances in which walking victims will refer themselves spontaneously to the nearest hospital. Thus, mass casualty plans are mandatory for hospitals.

Hospital Organization

Every hospital in France is required to prepare, write, and test its own disaster and mass-casualty plan. General rules for this plan are given by a national directive, and the effectiveness of the plan is controlled by regional and national authorities. The aim of the plan is to provide adequate medical care to a large number of victims arriving unexpectedly at the hospital. The plan is under the control of the hospital director and a senior medical officer. A Crisis Cell coordinates the several tasks that must be undertaken immediately according to a quick reference guide. This includes at least the following points: (1) alerting hospital staff, SAMU headquarters, and the authorities; (2) recall of personnel according to a prearranged medical organization of the emergency room and the wards; (3) cancellation of all non-urgent hospital activities or elective surgical procedures; (4) evaluation of bed and medical team availability immediately and shortly after the start of the emergency; (5) provision of logistical support to dispatched units and teams to increase their operating capacity; (6) control of access to the hospital by the police; (7) establishing an admission system for the victims; (8) control of the hospital telephone and computer center; (9) informing relatives and the media; and (10) provision of a special CBRN organization.

Plan Preparation

The plan is prepared by a joint group of administrative and medical staff. All of the medical staff must be aware of the plan, and individuals must know their specific tasks. A training program must be implemented for personnel involved in the plan, and realistic exercises must be conducted to test the ability of the hospital to admit massive numbers of casualties.

Unconventional Terrorism—Rationale

Two points guide the organization of the general management strategy for use of medical resources during and following a CBRN terrorist event.⁸ The difference from conventional terrorist incidents is essentially in the protection of the medical personnel and the recognition of initial signs, which can be achieved by special training. Standard procedures for Advanced Life Support (ALS) still are required for the victims even if the cause of the life-threatening problems may be unconventional.^{9,10} Therefore, adequate supplies of personnel protective equipment, stockpiles of antidotes and drugs, and additional ALS medical equipment are available for both SAMU and hospital emergency rooms.

The real target of chemical, biological, and probably radiological agents really is the medical infrastructure. The use of these weapons will not necessarily create "destruction"

in civilian environment, but may cause many casualties including a large number of lightly injured who are suffering either from toxic effects or infection depending on which agent was used.⁴ The medical infrastructure is in the front line to receive victims, and the biggest risk is overloading, secondary contamination, and finally, failure to provide efficient medical care. Consequently, the medical response to a CBRN release cannot be provided only by one or a limited number of institutions, but by a network that combines expertise through dedicated reference centers and a sufficiently large EMS response that involves all of the emergency medical services. The network will cover a large area. In France, this area is one of the nine "Defense Zones" defined within the country. For specific risks in each zone, special reference centers have been designated and equipped. These centers are the focus of a network that draws together medical experts and hospitals. Within the network, expertise (diagnosis, analysis of suspected cases) and information are shared; there is application of therapeutic guidelines provided by the Ministry of Health, along with participation in training. Similarly, the SAMU based in the reference centers (in France the headquarters for each departmental EMS always is located in a major hospital) is in charge of the coordination and training of all SAMU in the surrounding defense zone.

Unconventional Terrorism—Chemical Event

The essential site management of any toxic release is to create three cordoned zones known as "hot", "warm" and "cold".¹⁰ The hot zone corresponds to the point of release where the highest toxic concentrations of the agents are found and usually is entered only by specially equipped rescue workers from the fire service. If the identity of the compound is not known, it must be assumed to be toxic, persistent, and transmissible. Thus, the rescuers are equipped with self-contained suits (Level-A) with self-contained breathing apparatus (SCBA). These responders bring casualties away from the point of release of the agent into a surrounding area, called the warm zone, which has a lower level of contamination than does the hot zone. Here, specially trained and protected medical personnel (wearing lightweight Level-C suits and filtration masks) sort the casualties into those who have been exposed and those who require immediate emergency medical treatment. Decontamination in this zone is performed and controlled by the fire service, which also is responsible for the identification of the toxic agent released. Following decontamination, casualties are moved into the contamination-free, cold zone for further stabilization, transfer to a hospital and continuing medical care.

In 1996, a national plan for the emergency response to chemical and biological events (le plan Piratox or "PIRATOX") was implemented to provide a framework for coordinated joint action between the fire services and the SAMU. PIRATOX resulted from an analysis of the medical management of sarin attack in Tokyo.^{11,12} According to PIRATOX, the triage of casualties was based upon both the need for decontamination and their medical status with the provision for life support of exposed victims in the decontamination zone.

The BIOTOX outlines processes that can be used to enhance the life support that can be provided in the decontamination zone and beyond with the provision of specially trained and equipped SAMU crews capable of operating in a toxic environment, and also provision for the reception of contaminated patients at designated hospitals. This support now is part of a standard response for advanced life support in both conventional and toxic trauma and is called TOXALS.¹⁰ A key feature of this plan was the mass purchase of small, portable, gas-powered ventilators that can assure a high quality of ventilatory care at the scene of the emergency and in hospitals that may receive massive numbers of casualties.⁸

Although the French strategy is to provide decontamination and care on-scene, the possibility that a large number of patients will leave the scene before being evaluated by the EMS system cannot be ruled out. They may go by themselves to the nearest hospital emergency room or to a medical center they think will be suitable to diagnose and treat their condition. Consequently designated reference centers, which are known to the public, are equipped with full-scale decontamination facilities. In addition, all of the emergency rooms are able to provide decontamination with limited equipment.

Unconventional Terrorism—Nuclear Event

The basic scenario for the medical response organization is the explosion of a "dirty bomb" (conventional explosive device containing a radioactive isotope) in a public place, disseminating radioactive material and contaminating casualties. The on-site management follows the same strategy as is used for a chemical event and involves SAMU, the fire services, and the police. However, several differences exist for protection and decontamination. Except in the hot zone, the protection suit for medical personnel is lighter and easier to wear than for a chemical event. Immediate decontamination on-scene is not mandatory for the most severely injured victims. In terms of triage and evacuation, the stabilization of a life-threatening problem is more urgent than decontamination. Consequently, a victim, with a face mask and covered in a paper suit to avoid dissemination of contamination, can be transported to a designated reference center prior to decontamination. The transport is performed using an ambulance covered on the inside with PVC sheeting carrying a medical team clad in protective suits. As for chemical events, the emergency rooms of the receiving hospitals are prepared to receive a large number of contaminated victims, most of them lightly or non-injured. The French plan provides precise directions for the organization of the emergency rooms, and simple protective measures for medical personal and equipment to avoid in-hospital dissemination of the contamination. This protection is based on the use of protective disposable paper suits, covering the walls with plastic sheeting, and the use of monitoring devices. Decontamination consists of the undressing of victims followed by showering. Medical personnel are trained to explain and direct this procedure for the walking casualties (self-decontamination), and to perform it for non-ambulant or unconscious cases. Drugs for internal decontamination have been added to the antidote stockpile.

Unconventional Terrorism—Biological Event

The emergency system created for a chemical event has been adapted to the potential use of biological warfare agents by terrorists. Various scenarios have been introduced into the Plan including the dissemination of anthrax spores by aerosol in a crowded public place. Anthrax is non-transmissible, but the possibility of the use of a highly transmissible agent has led to the creation of special procedures. In such a case, the initial problem will be to detect the occurrence of the first cases of an uncommon infectious disease in the population as soon as possible. Any severe case of an uncommon infectious disease observed in an emergency room or suspected by SAMU, either as a result of telephone interrogation or a medical response is analyzed. If necessary, the patient is transported to a Reference Center. Awareness and training for the recognition of unusual agents has been added to the training of emergency personnel. General practitioners, distributed among the population, participate in this national alert system. In each Defense Zone, facilities with a biosafety level of 3 or 4 for containment have been identified and integrated into the plan as Reference Centers. These centers are in charge of providing diagnostic expertise, isolation ward facilities, and if needed, critical care to the patients. SAMU personnel, based in these Reference Centers, organize (with a dedicated ambulance and a protected medical team) the transfer of casualties suspected of being infected by a transmissible agent(s). The incubation period between the first cases and the outbreak of the epidemic, provides a window for the distribution of antidotes, vaccination, and isolation of infected contacts.

This strategy is under the control of the Ministry of Health assisted by a committee of national experts and representatives from other government agencies. If these measures fail to contain the epidemic, a plan with several levels for hospitalization and care of casualties is activated. If the hospitalization capacities of the Reference Centers in any one zone are exceeded, all of the remaining available infectious disease services of the zone are required to provide assistance. At the next level, all of the wards of the hospitals, including the infectious disease ward, are mobilized. Finally, all of the medical facilities of the Defense Zone may be used to fight the epidemic. Although no terrorism related biological event ever has occurred in France, the

biological part of BIOTOX has been tested on two occasions. One was the "white powder" letters mentioned above that were suspected of being contaminated with anthrax spores.¹³ The management of thousands of suspected letters, and more than 10,000 potentially exposed patients, has led to a major improvement in the procedures. The respective roles of EMS, the Reference Centers, and the emergency rooms were tested. Ironically, the effectiveness of BIOTOX for biological events tested, not by a terrorist event but by the outbreak of a naturally-occurring epidemic, Severe Acute Respiratory Syndrome (SARS). BIOTOX also was used to manage the suspected cases and the several confirmed cases of SARS in France.

Several measures proved to be crucial in stopping the spread of inter-human contamination. These were: (1) the control of transfers by SAMU and the protection of the transferring medical team; (2) the limitation of hospitals receiving the suspected cases (only Reference Centers received cases); and (3) the provision of medical information to the population by the SAMU dispatching centers. In addition to the management of patients in France, emergency medical teams of the SAMU were sent to the French Hospital in Hanoi to rescue the local medical personnel who were both contaminated and exhausted. The implementation of BIOTOX probably was its key issue for the control of this event, and this was the first official utilization for real cases of infectious disease.

Conclusion

Although in the 1990s, France already had experienced terrorist bombings, these events remained rare. Since then, basic principles of disaster medicine have been included in the training of emergency physicians managing casualties in the prehospital and in-hospital settings. In real terms, awareness among the medical community about terrorism never has been so high as a result of major improvements in planning and preparedness of EMS and hospital personnel as during the past three years. The training of professionals, centered on management of casualties from CBRN weapons, continues. The involvement of the medical community in a civil defense role is considered to be a continuing national priority: the terrorist threat is unpredictable and is unlikely to be eradicated in the near future.

Appendix

Official French Instructions Related to Medical Management of Terrorist Events

- A. Circulaire DHOS/HFD N° 2002/284 du 3 mai 2002 relative à l'organisation du système hospitalier en cas d'afflux de victimes.
- B. Circulaire n°700/SGDN/PSE/PPS du 2 mai 2002 relative à la doctrine nationale d'emploi des moyens de secours et de soins face à une action terroriste mettant en œuvre des matières chimiques.
- C. Circulaire DHOS/HFD/DGSNR N° 277 du 2 mai 2002 relative à l'organisation des soins médicaux en cas d'accident nucléaire ou radiologique.
- D. Circulaire n° 800/SGDN/PSE/PPS du 23 avril 2003 relative à la doctrine nationale d'emploi des moyens de secours et de soins face à une action terroriste mettant en œuvre des matières radioactives.

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