

Terrorism

by

Dercq J.P.¹

Abstract

Terrorism comes in different forms and from various origins; via the media we hear it every day. The West needed the shock of the events of 11 September to become conscious of its vulnerability. As a democracy in which one can freely move around, Europe was evidently not saved from the threat.

Next to the political or international measures aiming to fight terrorism or to deprive it of its means to produce weapons, measures to protect the civil population have been taken.

Those protective measures are based essentially on the principle of fully exploiting existing structures and contain specific measures (for example the smallpox vaccination) as well as aspecific measures aiming to organize the information, coordination and communication between the existing structures, and to do this at national, European and international level.

Keywords

Terrorism, bioterrorism, biological warfare.

Correspondence: Federal Public Service Public Health, Food Chain Security and Environment, Quartier Vésale – Vesaliusgebouw, 649, Cité administrative de l'Etat – Rijksadministratief Centrum, 1010 Brussels.

Introduction: the new rules of an old game

Evaluating the risk of a terrorist attack is important. The action undertaken by the intelligence services is equally essential. Having a look at information which history and the press have left us, is also useful, for it allows us to prepare for risks more probable than others and to use better the available means.

Terrorism – of which daily reports originate from the Middle East – would still seem to us well away if it were not for the hijacked airplanes and the destruction of the Twin Towers which have had a negative impact on the security and the economy of the western world. Particular imbalance between the capacity to evaluate the risks and the unforeseen destructive effects of macabre fanaticism. With all eyes focused on the preparation of Star Wars, the United States had their weak spots exposed by fundamentalist terrorism and discovered, as other states did, their vulnerability.

Terrorism has been defined as the recourse to violence or to the threat of violence in order to sow panic in society, to weaken or to overthrow authorities and to give rise to political changes. It resembles, in certain aspects, guerrilla, although, in contrast to the guerrillas, the terrorists are incapable to seize territories or at least are not willing to do so. Sometimes even, it substitutes war between States. At all times, terrorism has shown itself in very different guises and at present, society sees itself confronted with a terrorism which takes many different forms (1).

Whether of fundamentalist (Jihad), protest (Red Brigades), ethnic or separatist (ETA, WILL GO, FLNC) origin, or pertaining to organized crime (Mafia), terrorism knows to take advantage of the intrinsic brittleness of democratic countries (2).

Publications relating to terrorism are extremely numerous, and often date from before the events of 9/11.

Collected facts, imagination and history recall and designate new dangers, which are often forgotten.

To evaluate the risk, it is necessary to collect all available information on the use of biological arms.

The "Classics" among terrorism

Bioterrorism

In ancient times, corpses of humans who died of diseases were catapulted to the enemy or used to contaminate the enemy's drink water resources.

The repeated visits of certain air pirates to American crop-duster airplane hangars adds to the fear of a new threat of bacteriological type.

The uncertainty on what became of the preserved smallpox stems, in spite of the eradication of the disease, in Russian laboratories, revives the frightening image of the absolute bacteriological weapon.

Genetic engineering can also serve to destroy in a very targeted manner cultivated vegetables or farm-raised animals, if the goal is to ruin the economy of a country. The new genetic engineering techniques furnish a very diverse range of weapons which could be used to very diverse military ends, from terrorism and anti-insurrectional operations to large scale war against entire populations (3).

The Centers for Disease Control and Prevention classified the biological infectious or toxic agents (bacteria, viruses, toxins) in categories A, B and C.

Category A consists of infectious agents or bacterial toxins easily disseminated or transmitted from one person to another, causing a high mortality with an important impact on public health, able to stir a panic or social agitation and requiring special preparatory initiatives (anthrax, botulism, plague, smallpox, tularemia, viral hemorrhagic fevers);

Category B contains infectious agents or toxins which are less easy to disseminate, lead to lower mortality and morbidity rates and necessitate specific actions aiming to improve the supervision and diagnosis levels (Q Fever, brucellosis and toxins of bacterial origin);

Category C contains infectious agents which could be "produced", are easy to disseminate, causing both high mortality and morbidity (hantavirus, yellow fever, multidrug-resistant TB, viral hemorrhagic fevers, viral encephalitis, coccidiosis, histoplasmosis);

The best known biological agent is anthrax.

During the Second World War, Gruinard Island (Highlands of Scotland) was used for anthrax bomb tests on a flock of sheep, which, according to the filmed documents, was efficiently and completely decimated three days after the explosion. The island was put in quarantine during 48 years (BBC News, 25 July 2001).

The Soviets used the Isle of Vozrohdeniye situated in the Aral Sea for tests and stockage of biological arms. The isle has not had any military protection since 1992 and belongs to Uzbekistan and Kazakstan. Hundreds of tons of anthrax spores would have been stored there (New Telegraph, 10/04/2001).

The reason of the dispersion of anthrax in the United States, ascribed, according to rumours, to a researcher who was disappointed by the small budget awarded to him, has not been made public.

Atomic terrorism

The fear of atomic terrorism is still alive. A report by the United States Department of Defense published in April 1996 signals that "most of the terrorist groups have not got the financial resources and techniques necessary to obtain nuclear weapons, but they could obtain materials allowing them to make radiation devices".

In Europe as well, the possibility of an aerial attack on a nuclear plant is not remote. France deployed aerial military units and held its military airforce standby to intervene in case of an aerial attack on these plants.

The diffusion of radioactive substances (which are easier to obtain and do not necessitate important scientific knowledge), possibly coupled to other chemical or biological agents (in case of attacks using explosives) has also been foreseen.

Chemical terrorism

Nitrogenous mustard gas or other gases used in combat entered history together with Sarin gas.

Mustard gas (or yperite), synthesized in 1822, was used for the first time as a toxic war gas in July 1917 in Ypres in Belgium (hence yperite). These mustard gas bombs mark an important step in chemical warfare. This blistering toxic gas attacked any part of the body causing burns. Because of the persistent nature of the gas, the wearing of a gas mask

alone was not enough; one had to carry impervious protective clothing. As early as its apparition, mustard gas became the principal combat gas.

Sarin was discovered in Germany in 1939. It borrows its name from the names of the pioneer chemists who created it: Schrader, Ambros, Rudrigger and Van der Linde. Sarin was used during World War II and during the war between Iraq and Iran. Sarin is a colourless and odourless non-persistent liquid. If vaporised, it is also colourless. Its last mediatized use dates back to March 20, 1995 when the Aum sect diffused it in the subway of Tokyo, at rush hour, resulting in 12 deaths and 5,500 injured.

The capacity of terrorists to call upon chemical techniques depends more on the characteristics of the target, the toxic agents they can obtain and the conditions necessary for them to distribute and disseminate these agents than on the intrinsic toxicity of the chemical substances [...] the use of chemical agents would result in the least life losses (in all classes of mass destruction weapons) caused by the necessity to have a precise and vulnerable target and by the difficulty to spread the agent (Mengel 1976: 446).

The principal advantages of chemical weapons are the abundance of available information, the relatively low number of required resources and the possibility to test the product. No serious supervision of the access to chemical substances does exist. Without any doubt the most important factor is that the chemical agents can be produced under the guise of a commercial business which appears to be legit, such as a small research corporation, a manufacturer of fine chemicals (Berkowitz et al.).

The less frequent forms

Computer terrorism

An official of the United States intelligence services declared anonymously that he could bring the united States to a total stop with the single use of twenty capable computer scientists and billion dollars. A terrorist can certainly do as good. Confidentiality hardly exists in a ICT-driven society and protective measures revealed themselves to be of limited value: young ICT pirates have accessed top secret systems in all domains. The possibilities to create chaos already are virtually unlimited. The terrorists will change targets. Why murder a politician or kill people blindly if an attack on an electronic switch can produce more spectacular and more durable results? The switch of the seat of the

electronic network of the Federal Reserve Bank, in Culpeper (Virginia), that deals with all financial operations of the state, would be a very specific target. If the prime target of the new terrorism had been ICT, its destructive strength would have been infinitely greater than the one exercised by terrorism in the past, greater still than if it would concentrate on biological or chemical weapons (1).

Agroterrorism

In Luxembourg, David Byrne, the European Commissioner for Health and Consumer Protection, called the fifteen Agriculture ministers to remain “vigilant” to the risk of terrorists triggering epizootics and food poisoning.

“Our agricultural and food production systems could be vulnerable to this form of bioterrorism”, he declared. He considered the painful experiences of the latter years – mad cows disease, foot-and-mouth disease, ... – to show to which extent all the European flocks are in danger. Referring to the “dioxin crisis”, the commissioner also underlined the “potential vulnerability of the production of food and of the distribution systems to bioterrorist attacks”. The prevention against “agroterrorism” should therefore figure in the future action plan against bioterrorism as developed by the Brussels Commission (4).

Other less frequent forms

Certain NBC (Nuclear, Biological, Chemical) agents that are basically not considered as biological or chemical “weapons” because they are not an important potential pathogen, but can perturb seriously the functioning of our society (salmonellosis, ...) can complete our overview of the less frequent forms of terrorism.

Security measures

Most governments took security measures: intelligence services were in state of preparedness, the aerial space and airport security measures were reinforced, international collaborations were reinforced, radioactivity checks were performed as well as stock checks of certain chemicals ...

Non-specific sanitary measures

If the terrorist nature of certain events (such as 9/11), associated with a brutal and visible fact, is beyond doubt, it is certainly more difficult to identify the terrorist nature of certain forms of terrorism, especially biological terrorism. Considering the enormous mobility of people, the starting date and place of the transmission can be masked completely. It is very well possible that the alarm threshold would only be reached after a long latency period and after numerous contaminations. Only special epidemiological attention can lead to early detection.

The diseases linked to bioterrorism are no longer part of the daily practice of our health professionals, laboratories and hospitals.

This poses a twofold challenge: to increase detection speed of unrecognized or forgotten pathologies – with very few financial means.

Information

Collecting, structuring and broadcasting the information

The international information sources relating to bioterrorism are numerous and effective. One can only praise the broadcasting speed and ease of access to the information. The Centers for Disease Control and Prevention (CDC) are a remarkable example in this respect.

The structuring of information implies the collaboration of different experts: university experts, infectious disease workers, biologists, clinicians, specialized laboratories (CODA-CERVA), specialized institutes (Scientific Institute of Public Health (IPH), Pasteur Institute).

A collaboration with national and international laboratories that have a certain expertise in category A biological agents on environmental and clinical level and that have secure equipment is set up. Special attention is given to the laboratories that have access to PCR methods. Methods for taking and transporting suspicious samples are being developed.

For each pathology, a specific bilingual file of around ten pages has been composed by the IPH, containing clinical symptoms, warning signs, the description of the disease, epidemiological information, the clinical

chart, the diagnosis, the differential diagnosis, all sanitary interventions, and the treatment.

You can find an up-to-date synthesis of the necessary information on the website «Webtox» (<http://www.health.fgov.be/biotox/>).

Furthermore, every hospital received the essential documents by e-mail. A weakness of this system is the difficulty with which we could obtain generic addresses for hospitals (a permanent address linked to functions or to hospital services rather than to individuals, thus offering guarantees that urgent documents would be read quickly).

Specific information meetings have been organized at the hospitals. They were asked to assure the formation of their personnel, notably concerning protection guidelines. It is not clear whether these measures have proven successful.

What has been made clear, is the difficulty with which the long-lasting nature of the information could be communicated: most of the hospitals believe that the state of alert is over, that the emergency structures were dissolved, and that the transmission of certain facts or data is no longer obligatory. It is difficult to maintain services (either sanitary or administrative) in a permanent state of alert.

Command centres and communication plan

Command centres

At the governmental level, it is the Governmental Coordination and Crisis Centre (CGCCR) that conferred a mandate to the Ministry of Public Health. It is at the level of the GCCR that the coordination between the Federal Public Service of the Interior, Justice, Defense and Public Health takes place.

Whatever the type of sanitary crisis (bioterrorism, chemical terrorism, agroterrorism, terrorism aiming at animals, drink water or food) we could be confronted with, the aspects of human health will always be present.

At the level of public health there is the regional crisis cell which has the following missions: approval and update of the plan, contribution to the division and follow-up of the tasks, resolving budgetary problems, human resource management and the collaboration with the Scientific

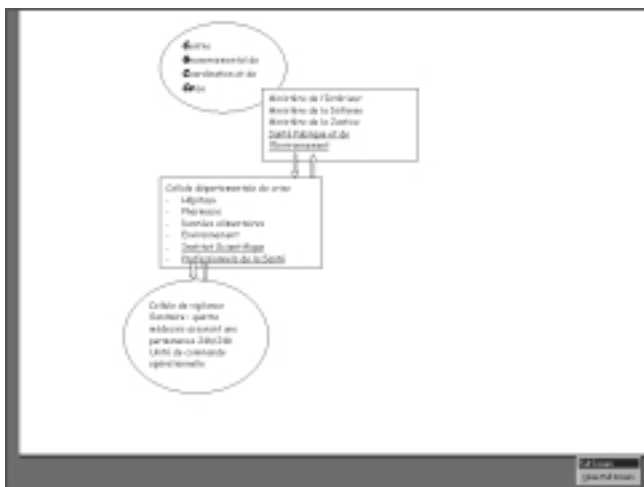
Institute of Public Health, collaboration with the nuclear agency, coordination of environmental aspects, coordination of veterinary aspects, food quality supervision, coordination with the regions and the communities, drink water supervision, priority and other communications (call centre).

There is also a medical security cell: four doctors assuring a permanence via GSM.

The operational command centre for human health is provisionally, i.e. as long as no events occur, placed at the level of the medical security cell.

A specialized call centre has been installed in the vigilance cell. During the anthrax crisis, the call centre is responsible for linking the "Anthrax" analyses results executed by the CODA-CERVA and the notifications by the police force relating to suspicious envelopes, in order to inform certain institutions (embassies, private mail delivery firms) and to prepare the communication (via the mayors) of the results relating to the persons that were in contact with these envelopes. The number of suspicious envelopes or packages reached 1200. At the date of final redaction of this article, all suspicious packages containing powder did undergo analysis (direct examination and culture).

The call centre replies to various and varied questions emanating from police, from civil protection services, and in certain cases, from the general public.



Communication plan

The method according to which a bioterrorist action could already be detected in hospitals, has been accepted in most countries. It appeared therefore important that every physician, in particular clinical ones, quickly transmits elements which point to an atypical disease possibly of bioterrorist origin to a central point.

Already in the early 90s, our division, basing itself on the numerous publications on “bacteriological war”, attempted to establish a secure way of data transmission from doctors to federal Public Health authorities. This direct transmission of data to the federal authorities breached with the habitude of data transmission to the Communities who were in charge of prevention as imposed by the 1980 and 1988 laws on the reform of the state and was rejected by the Communities. The timing was evidently not so good.

Thanks to a good understanding with the Communities, this time an agreement could be made, the context clearly being more alarming.

The care centres have access to electronic forms of declaration of unusual diseases that can be sent electronically to the Scientific Institute. These electronic messages are automatically scanned on the presence of keywords – any keyword will cause an alert.

Simultaneously, the physicians of the medical security cell are to be warned by dialling a unique cellular phone number.

Depending on the nature of the facts, the minister’s office and the crisis centre are informed.

Intervention strategy

The mobile taskforce

The constitution of a multidisciplinary team (epidemiology, laboratories, sample collectors, clinicians, toxicologists, prevention measures) with expertise in crisis management, that can, on the demand of the governmental crisis centre or of local or European authorities, quickly help to make a diagnosis or to implement the correct measures, on the spot or from a remote location.

Coordination

At national level, the “terrorism” plan coheres with the:

- intra- and extrahospital emergency plans
- provincial emergency plans and “Seveso” plans
- nuclear emergency plans

The different emergency plans form a coherent unit. There is also a link between the measures relating to the sanitary aspects and to the general emergency plans, both in case of a conventional terrorist attack (e.g. using explosives) and in case of an attack using nuclear, chemical and biological agents.

In the first place there are the 4 principal actors of the urgent medical aid system (the 100 emergency centre, ambulances, Mobile Emergency and Resuscitation Unit, emergency services) of which the legal framework is stipulated in the law of 8 July 1964 relating to urgent medical aid (published in the *Moniteur Belge/Belgisch Staatsblad* on 05/25/1964), whether for individual or large-scale emergencies. The competencies of the “Service Secours sanitaire et Protection de la Population civile” of the Federal Public Service of Public Health lie in the field of urgent medical aid. There are medical intervention plans in case coordination between more than one 100 call centre is necessary (several ambulances or Mobile Emergency and Resuscitation Units). Before the arrival of the medical emergency officer in charge, the doctor of the Mobile Emergency and Resuscitation Unit who first arrived at the scene coordinates the medical action in case of large-scale emergencies.

These medical intervention plans fit in the medical part of the provincial emergency plans (provincial medical emergency plan). As described in the circular letter of 11 July 1990 by the Minister of the Interior concerning disaster plans (in execution of the Seveso law – law of January 21 1987 concerning the risks of major accidents in certain industrial activities, published on 09/05/1990), urgent medical aid and the psycho-social follow-up are part of the tasks which belong to the functional medico-sanitary discipline (discipline 2). The hygiene inspector is part of the provincial crisis cell in that case, supervised by the governor (phase 3).

The hospitals must have an internal and external emergency plan, as stipulated by the safety standards, under supervision of the Hygiene Inspection of the Communities (Royal Decree of 10/17/1991 modifying the Royal Decree of 10/23/1964 detailing the fixed norms which hospitals and their services must respect (published on 12/06/1991)).

The hospital emergency plan is an action plan aiming to remedy important accidents at the hospital. Three important elements have to be considered:

First, the functioning of the hospital as a care centre must be guaranteed (functioning of all services and hospital installations, consultation by and care for patients).

Next, the security of patients, personnel, visitors, suppliers, etc. must be guaranteed. In other terms, they must be preserved from all possible consequences of a major accident, breakdowns, damages to the installations and rests homes due to either a defective device, fire, explosion in the building, either to exterior threats such as flood, bomb scares ... Finally, different hospital installations constitute a potential environmental danger themselves (waste incinerator, radiographic isotopes, chemical losses, ...). Concerning the internal emergency plan, conform to the circular letter of 11/04/1993, it is included in the emergency and intervention plan at community or provincial level.

In addition, every hospital likely to play a role in urgent medical problem solving must make an external emergency plan. This action plan aiming to confront accidents outside of the hospital is entitled "Mise en Alerte des Services hospitaliers", better known as MASH. The governors must approve the MASH plan of their province's hospitals.

This has been perfected in the circular letter of 11/04/1993 by the then Ministers of Public Health (M. De Galan) and the Interior (L. Tobback) to the chief hospital doctors who must preside the permanent committee wharged with elaborating, updating and validating the MASH plan (circular letter of 11/04/1993 to the chief doctors of the hospitals relating to the MASH. Application of the royal arrest of 17 October 1991 (Minister of social Integration, Public Health and the Environment and Minister of Interior)). The circular letter defines a serious accident as an unforeseen event with an elevated need of hospital beds, that overloads in a critical and long-term manner the activity of the hospital.

The governor integrates all MASH plans in the provincial medical aid coordination plan. For external emergencies, the care potential of every hospital forms an integral part of the medico-sanitary aid in case of catastrophe. The hygiene inspector is responsible for the aid.

The nuclear emergency plan was published as a royal arrest "installing the emergency plan for nuclear risks for the Belgian territory"

(published in the *Moniteur Belge/Staatsblad* on 01/21/1992, p. 1004) and completed by the royal arrest “on the general regulation of the protection of the population, workers and environment against the danger of ionized radiance” (*Moniteur Belge/Staatsblad* of 08/30/2001, p. 28,909). The SPRI/SSTIN for nuclear incidents are controlled by the Federal Agency for Nuclear Control (Federal Public Service of the Interior). In case of a serious accident involving ionized radiation, phase 4 of the disaster plan is triggered. The coordination is assured by the minister of the Interior and the governmental crisis cell, in which representatives of Public Health have a seat, is involved in the management of the event. Iodine pills are distributed to the inhabitants in a radius of 10 km, pills are in stock in all pharmacies situated in a radius of 20 km. In case of a nuclear attack, the Hygiene Inspection plays an important role in the communication with the health establishments and the government.

At the European level, the European Commission put forward “the early warning and response system” by connecting the national epidemiology networks (Dr. F. Van Loock) and activates a communication system between the sanitary responsables of every Member State.

Specific sanitary measures

Medication (vaccines, antibiotics, antidotes)

- ❑ The General Pharmacy Inspection has compiled, together with a group of experts in different domains, a list of necessary medicines in case of problems linked to class A agents. Decisions were made for immobilizing or buying stocks. The preferred solution is to sign a convention with medicine-producing factories for them to immobilize a stock of which the management and the maintenance they would continue to assure.
- ❑ The Council of Ministers gave the green light for an order of 1 million smallpox vaccines that are available and stocked.
- ❑ The European Union also takes initiatives and especially on the matters:
 - of pooling of expertise and smallpox vaccine production capacities
 - of research and development of more effective and better supportable vaccines against anthrax and smallpox, and of antitoxins and antidotes.

The smallpox plan (supplement 1)

Despite the eradication of the disease in 1980 and the availability of the vaccine, the possibility of using this virus as a biological weapon poses a real threat. The risk is caused by the infectiousness of the virus, the relative ease to produce it on a large scale and the growth of the non-immunized population. In case of the smallpox virus being used as a biological weapon, the virus could be spread by aerosol, probably by the aid of bombs and of ballistic missiles (Soviet research project dating back to the eighties). It would spread through the air very quickly, considering the relative stability of the orthopoxvirus in aerosols (maximum 48 hours depending on climatic conditions, temperature and humidity). The transmission would also occur by infected persons (10 to 20 persons can be contaminated by a single case during an epidemic). The infected persons are contagious after skin eruption. The stocks of smallpox virus officially remaining are kept under high security at two places: the CDC, Atlanta, USA and the Research Institute of Viral Preparations in Moscow, Russian Federation. It is thinkable that certain groups and countries produced their own virus lots. At the CDC, the last vaccine stocks were to be destroyed in June 2002. Variola major presents a mortality rate of 3% among the vaccinated and 30% among non-vaccinated. If death occurs, it takes place in the first one or second week of the disease. Smallpox minor is responsible for a death rate < 1% among non-vaccinated cases. Certain varieties of smallpox are particularly severe (flat smallpox, confluent variola, hemorrhagic variola) and lead to higher mortality rates.

The smallpox plan deserves a mention, for not only it answers to a plausible risk, but it necessitates so complex and complete measures that several of them can be applied to other crises. The goal of its presentation in this article is to uncover the medical, judicial, epidemiological and societal complexity of a comparable risk.

The application of the smallpox plan does not only concern sanitary workers but also involves people from other disciplines (lawyers, police, the army, politicians, ...) who are generally less familiar with the medical aspects. That of course significantly complicates communication.

Conclusions

Different measures, among which sanitary ones, are taken against the various forms of terrorism. The coordination of this wide range of

measures (public order, limitation of the rights and the mobility of people, civil protection, hospital, pharmaceutical, vaccinal measures, ...) is essential to the success of the plan and is difficult because of different languages spoken by all people involved.

The plan is therefore in constant evolution and in constant controlled imbalance, as is human life. Communication, information, coordination, education and vigilance, those are the keywords and individual attitudes that will allow our society, if necessary, to counter as good as possible the threats that are already posed to it.

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SUPPLEMENT 1

Chapter	Section	Comments
<p>Chapter 1: General strategy and priority activities for smallpox outbreak containment</p>	<p>1. Notification</p> <p>2. Epidemiological investigation</p>	<p>Notification <i>Case Definition</i> <i>Classification of cases</i></p> <ul style="list-style-type: none"> • Confirmed • Probable • suspected <p>Confirmation: labs EM ucl CDC</p> <p><i>Definition of contact</i> Identification of contacts, tracing, isolation, source, outbreak characterisation Enhanced hospital based surveillance <i>Classification of patients</i></p> <ul style="list-style-type: none"> • high risk • medium risk • low risk
<p>Chapter 2: Vaccination: “HGR-vaccinatiegroep”</p>	<p>1. Principles of ring vaccination</p> <p>2. Practical aspects</p> <p>3. The vaccine</p> <p>4. Criteria for the release of smallpox vaccine</p> <p>5. Vaccine mobilization and deployment of vaccine</p>	<p>Vaccination of and monitoring a ring of people around each case and contact</p> <p>Vaccine administration with bifurcated needle</p> <ul style="list-style-type: none"> • Safeguard vaccine • Dilution • Variolation in family circle <ul style="list-style-type: none"> • Confirmed cases • Suspected cases after previous confirmation • Large outbreak somewhere • Confirmation of existing circulating virus <ul style="list-style-type: none"> • Number of confirmed cases • Number of contacts • Numbers of areas • Number of public health, medical and response personnel • Supplemental vaccine availability

	<p>6. Indications for smallpox vaccination</p> <p>7. smallpox vaccination and contra-indications</p> <p>8. Monitoring of health status (contacts and vaccination)</p>	<p><i>Prioritized risk groups</i></p> <ul style="list-style-type: none"> • Face to face contacts • People exposed to initial release • Household members • Medical care workers, evaluation team, transporters • Lab personnel • Personnel exposed to hospital waste • Personnel involved in tracing, vaccination, isolation • Persons permitted to enter facilities <p><i>Voluntary vaccination</i></p> <ul style="list-style-type: none"> • Public health personnel involved in evaluation • Logistic/resource/emergency/personnel • Law enforcement, fire fighters, rescue team, security personnel • Immunodeficiency (Aids, chemotherapy, radiation, corticosteroids) • Life-threatening allergies • Eczema • Pregnant women • Chronic or acute skin diseases
<p>Chapter 3: Smallpox vaccination clinics</p>		<ul style="list-style-type: none"> • Strategy (ring to entire) • Resource needs • Vaccination clinic sites (classrooms) • Authorization and standing orders • Training care workers • Public education material • Clinic operations • Registration • Medical assessment • Vaccination • Staff training and management

Chapter 4: Isolation and quarantine (CCRC)

Chapter 5: Suggested immediate pre-event preparations for federal and state health authorities (CCRC)

1. Establishment of an Executive Coordinating Committee
2. Establishment of a rapid response team
3. Command control and management procedures
4. Emergency personnel and resource mobilization and needs
5. Pre-event surveillance and epidemiological activities
6. Preparing for the conduct of smallpox vaccination operations, vaccine management and delivery
7. Recognizing and monitoring adverse events (complications)
8. Isolation and Quarantine Preparations

Facility C (confirmed)
Facility X (suspected)
Facility R (asymptomatic)

Vaccination care workers, patients, transporters, ambulances, masks, gloves, covers

Control of data: Reporting diseases, pharmacies, workplace absenteeism

Controle of property: access, closure of facilities, use of hospitals, rooms, hotels, confiscation or procurement of medicines and vaccines, building decontamination, seizure and destruction of contaminated articles

Management of persons:

- identification of sick and exposed persons
- mandatory medical examinations, vaccination
- tracking of persons
- isolation and quarantine
- identification of vaccinated persons
- identification of health experts and health officers

<p>9. Decontamination</p> <p>10. Communication Plans</p> <p>11. Training</p>	<p><i>Management of Communications</i></p> <ul style="list-style-type: none">- restriction on travel: air, rail, water, motor vehicle, pedestrian- closing of public spaces, public gatherings- cordon sanitaire- movement of materials (food, medical supplies, garbage, utilities, water)- communication- right to access <p>Confidence</p> <p>Minimize panic</p> <p>Rapid and accurate information</p>
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