that used by risk management should be adopted to analyze threats and vulnerabilities, assess risks to the organization, and develop recommendations for enterprise-wide risk mitigation. Senior management also needs to engage with the security agenda to set its risk appetite in navigating the risk landscape.

**Corporate Security Programs**
In greater detail, the following corporate security programs should form the baseline security initiatives that a CSO should focus on the following:

- Security strategy planning
- Security planning for significant events
- Security review/capability assessment/gap analysis
- Security risk assessment
- Physical security threat and vulnerability assessment
- Emergency response planning
- Crisis management planning
- Travel security program
- Private executive protection program
- Pandemic planning
- Business continuity planning
- Security education and awareness workshop/training
- Privacy and information protection
- Corporate investigation
- Drills and exercises

**A Risk-Intelligent Chief Security Officer**
A risk-intelligent CSO should understand the dynamics between corporate security and enterprise risk management. All primary asset classes should be duly considered for a total asset protection under ERM. According to the FIBER security concept, the consequence analysis should cover any impacts on facility, information, business, employees, and reputation. A simple, consistent, and effective security risk assessment methodology, an early security warning system, and the supporting major corporate security initiatives that a CSO should focus on in his/her everyday professional life are important elements for enterprise security risk management to be successful.

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**See Also:** Reputational Risk; Risk Assessment; Risk Treatment.

**Further Readings**


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**Cholera**

Following every natural disaster, one of the most common and rapidly spreading outbreaks, affecting hundreds of people around the developing countries of Africa, Asia, and Latin America, is cholera, contracted after a person is infected by the *Vibrio cholerae* bacterium. Patients suffer from frequent diarrhea, which often escalates into dehydration and even death. Treatment options for the disease generally include oral rehydration and a course of antibiotics to reduce the effects of the disease. However, during any post-disastrous event, providing victims access to both can be challenging and requires proper management; coordination is needed before, during, and after an outbreak occurs.

**Pre-Outbreak Management**
In preparing for any disastrous situation, the key step that needs to be taken is to identify the people who will likely be affected by the disaster, the services and resources that are likely to be needed, and, finally, the responsible party who is willing and has the capacity to provide the required services. Before a cholera outbreak occurs in vulnerable areas, it is therefore necessary to first identify highly populated areas with possibly contaminated drinking water and poor
sanitary conditions. Once these areas are identified, the next step is to form a monitoring team that can confirm possible outbreaks. Members of this team should include doctors, epidemiologists, microbiologists, and water contamination and sanitation experts. Using modern database and mapping software, including geographic information systems (GIS) and remote sensing, the team should try to identify the locations of the possible victims, locations of the contaminated water sources, and locations of sanitation facilities, as well as the nearest possible clinics and hospitals that are able to take care of patients in case an outbreak occurs. GIS can also be used to identify locations that would be suitable for setting up new treatment facilities. Although hospitals and clinics are ideal locations for treating cholera victims, sometimes larger facilities capable of handling large numbers of people (e.g., schools, churches, and mosques, etc.) would be more appropriate. These facilities should keep large quantities of safe running drinking water, good sanitation facilities, medicines, IV and rehydration fluids and energy drinks, and trained medical professionals (a full list of required resources can be found in the World Health Organization's (WHO) required cholera supply list). In situations where clean water supplies are not available, various types of on-site purification chemicals (such as chlorine) would need to be gathered and prepared for any possible outbreaks. Oftentimes, international and governmental organizations, along with local nongovernmental organizations (NGOs), are responsible for taking care of such mitigation and preventive measures.

**Outbreak Management**

Usually, a cholera outbreak is confirmed by epidemiologists and medical professionals once 10–20 cases are reported. Once confirmed, the first step

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*A Centers for Disease Control and Prevention Public Health Prevention Service cholera treatment center in Haiti, November 2010. Cholera is easily controlled in most settings, but because of the poor water quality and sanitation problems in the aftermath of the January 2010 earthquake, cholera had an ideal setting in which to spread. As a result, tens of thousands of Haitians contracted cholera.*
is to notify the nearest health officials as well as the WHO. Emergency management teams need to be formed, and these teams need to collect data on the victims in terms of their locations, attack rate, areal extent of the patients, age, gender, and any other medical conditions they may be reporting. It is also essential that the general public be made aware of the outbreak. Various media outlets, including television and radio, newspapers, flyers, billboards, and loudspeakers, can all be used to notify the public. The public also needs to be notified of the symptoms and the actions they can take to save the lives of victims. The message needs to be clear, concise, and simple to understand so that poor and uneducated people (as this is often the case in developing countries) can understand and follow the instructions. As mentioned above, during the time of the outbreak, careful attention needs to be given to the purity of drinking water supplies. Separate male and female public toilets and latrines also need to be provided if they are not available, and they need to be cleaned on a regular basis. The users should also have access to antibacterial soaps and sanitizers so that the public can clean their hands after defecation. When preparing foods, kitchen areas should be clean, and raw fruits and vegetables should be separated from cooked foods to prevent contamination. The cholera bacterium grows very well in moist environments at room temperature; therefore, foods such as milk, potatoes, beans, and eggs should never be prepared more than an hour before eating. For babies, breast-feeding is the most hygienic choice for food during the outbreak. Victims who die during the outbreak should have proper funerals with preventive measures taken in order to avoid contaminating other people with the bacterium.

Post-Outbreak Management
After any natural disaster and epidemic outbreaks, it is important to reflect on the past events in order to prepare future mitigation and emergency management plans. In cholera-endemic areas, it is essential to monitor rivers, ponds, fish farms, and other virus-causing agents so that an outbreak can be contained. Also, crisis management personnel should study previous outbreaks in order to assess what worked and what did not in terms of saving human lives. Past victims should be monitored for their health conditions and any deaths. Post-outbreak studies should also be conducted in order to identify areas, age groups, and socioeconomic conditions of the affected victims. The agencies that were involved in monitoring, testing the water contaminants, and taking care of the victims, as well as the funding agencies that provided the funds and the appropriate use of such funds, should all be examined. Looking at all of these critical issues will then facilitate effective management of future cholera outbreaks.

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See Also: Epidemics; Infectious Disease; Mass Care; Public Awareness and Education.

Further Readings

Civil Protection

In the field of emergency response, basic terminology is used somewhat loosely and often in ways that translate poorly between one language and another. Although the following two basic definitions may not be adhered to in the naming of particular services, they are used for the sake of developing logical arguments. Civil defense signifies an emergency response system that is centralized at the level of national government and is designed to protect vital national institutions and their functionaries, and eventually the general public, against acts of armed aggression by foreign powers or particular groups. Civil