

Checklists to assess vulnerabilities in health care facilities in the context of climate change

The WHO publication *Checklists to Assess vulnerabilities in Health Care Facilities in the Context of Climate Change*, along with other checklists, is available on the WHO website at www.who.int/publications/i/item/checklists-vulnerabilities-health-care-facilities-climate-change.

DROUGHTS

Checklist for assessing climate hazards

ARE THESE AREAS IMPACTED?					
X Current observed impacts O Possible impacts with changed conditions					
CLIMATE HAZARD TYPE	IS HAZARD OR EXPOSURE PRESENT? Yes/No	Health workforce	WASH and health care waste	Energy services	Infrastructure, technologies, products, processes
Flood					
Storm					
Sea-level rise					
Drought					
Heatwave					
Wildfire					
Cold wave					

DROUGHTS: checklist for assessing vulnerabilities

WORKFORCE	Vulnerability level		
	High	Medium	Low
High: unprepared; unable to respond (Higher risk)	High	Medium	Low
Medium: basic or incomplete preparation; low level of response (Medium risk)			
Low: prepared; able to respond (Lower risk)			
Is the health workforce,			
<i>(Human resources)</i>			
participating in drought, water and climate change adaptation plan and policies?*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
equipped with a plan to identify minimum needs for health workers to ensure operational sufficiency care services?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
equipped with a plan for scheduling outdoor work for cooler time of the day and reducing physical demand during hot days?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
provided with sunscreen, hat and plenty of drinking water for staff carrying out outdoor activities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
provided with drinking water and stimulated regularly for appropriate water intake?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>(Capacity development)</i>			
trained to identify health conditions made worse by drought?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
equipped with knowledge, experience, training and resources to manage emergency preparedness plans and response measures to reduce drought risks and impacts at the facility and in the local communities?*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
trained in multihazard assessments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
trained to manage hazardous chemicals?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
trained on how to treat stored water for human consumption?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
trained or prepared to quantify drought-sensitive diseases taking into account the special drought patterns?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
able to convey protective strategies for public health emergencies, in case of high temperature effects, and water and food contamination to patients, staff and communities?*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
trained to an appropriate standard to maintain the correct level of safety of electrical power supply, in both routine and emergency/disaster situations?*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>(Communication and awareness raising)</i>			
aware of the different impacts of drought on human health?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
informed of air pollution advisories and warnings?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
prepared with clear messaging about water and food safety during and after a drought?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
informed on how to use and follow a surveillance system to track health outcomes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
following guidance on risk assessments to assist in the identification, planning, monitoring and evaluation of risk reduction and adaptation strategies associated with direct and indirect impacts of drought?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
regularly participating in community disaster planning committees to: improve knowledge on how to reduce risks, as well as be prepared and respond to direct and indirect impacts of drought hazard through adaptation measures?*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

following an educational strategy to improve knowledge in the community on the social and economic aspects of drought impacts, and how to reduce health risks and impacts?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
provided with an effective emergency risk communication plan?*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
aware of keeping the facility environment cool (e.g. keep windows that are exposed to the sun closed during the day and open at night when the temperature has dropped; close curtains that receive morning or afternoon sun; turn off nonessential lights and electrical equipment that generate heat; sleeping in a cooler room or use electric fans for some relief if temperatures are below 35°C)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

WATER, SANITATION AND HEALTH CARE WASTE	Vulnerability level		
High: unprepared; unable to respond (Higher risk)	High	Medium	Low
Medium: basic or incomplete preparation; low level of response (Medium risk)			
Low: prepared; able to respond (Lower risk)			

Does the health care facility,
(Monitoring and assessment)

verify water safety conditions, which include updated risk assessments to map water resources and water supplies for the facility?*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
have an updated plan to map risks to the water and sanitation infrastructure to identify where services could be disrupted from water scarcity?*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
regularly inspect the rainwater harvesting system for damage and contamination?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
have an evaluation system to monitor water drips, leaks and unnecessary flows in bathrooms, laundry facilities, kitchen, etc.; and perform prompt repairs to avoid loss?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
verify safety conditions and proper functioning of all elements of the water distribution system in preparation for drought (e.g. storage tanks, cisterns, valves, pipes and connections, and water disinfection)?*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
have information on the water system installation that ensures lower risk of being contaminated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
have a water quality monitoring plan for human consumption?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
have a monitoring plan for potable water?*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(Risk management)

have a water management plan to identify water contamination?*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
have a contingency plan for monitoring and reducing contaminant concentrations in the facility water system supplies?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
have a water management system to avoid or reduce vector breeding sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
have anti-mosquito breeding measures to avoid vectorborne diseases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
have a rainwater catchment system with safe water storage?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
have water storage tanks with appropriate covers to prevent contamination?*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
have water storage that is protected from direct sunlight?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
have chemicals stored away from excessive heat?*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
provide sufficient drinking water to staff, patients and visitors?*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
have onsite water purification equipment to provide safe drinking water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

have a surveillance system for diseases related to water quality and sanitation?*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>(Health and safety regulation)</i>			
have a long-term drought management plan, including the identification of available alternative safe water sources?*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
have established procedures for procuring, transporting and safely storing water?*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
work with water utility agencies to prevent suspension of services?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
have a water safety plan in place, in case of water contamination?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
have a plan to conserve and manage water to reduce water usage, specifically in case of prolonged drought?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
have a cross-sectoral water management plan to conserve and protect local or alternative water sources?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
have a mechanism or regulation to carry out sanitary inspections of alternative forms of water supply (e.g. wells, dams, cisterns, fountains and water trucks), and when necessary, establish a temporary ban on use, until improvements are made to sanitary conditions?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
have a contingency plan to ensure effective and timely delivery of safe water during drought and emergencies over the short- and long-term?*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

ENERGY	Vulnerability level		
	High	Medium	Low
High: unprepared; unable to respond (Higher risk)			
Medium: basic or incomplete preparation; low level of response (Medium risk)			
Low: prepared; able to respond (Lower risk)			

Does the health care facility,
(Monitoring and assessment)

regularly assess its energy system to ensure it can cope with drought conditions?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
have an emergency backup generator (including fuel, where relevant) that is able to cover at least all critical service areas and equipment during and after the event?*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
periodically check the emergency backup generator (including fuel, where relevant)?*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
assess regularly heating, ventilation and air conditioning systems?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
assess whether renewable energy (if available, such as solar) is sufficient to power critical equipment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(Risk management)

have appliance thermometers in the refrigerator and freezer to determine if food, vaccines and other essential refrigeration-dependent medical supplies are safe?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
have adequate daylight to ensure proper visibility during a power outage?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
work with energy utility agencies to prevent suspension of electricity services?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
have power-operated doors that can be opened manually to permit exit in case of power failure?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
have a clear guidance on heat-risk management for the maintenance of critical infrastructure (e.g. air-conditioning, medical devices, computers, diagnostic equipment, boiling water)?*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(Health and safety regulation)

have an emergency plan for power outages in the short- and long-term?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
have a plan or regulation to determine ways to reduce overall energy use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
work with energy utility agencies to prevent suspension of electricity services?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
have an emergency plan to ensure availability of adequate lighting, communication and information systems, and refrigeration and sterilization equipment during a drought?*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
have a plan to evacuate patients to a cooling station if the facility has lost power and has no other source of energy?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
have a plan to ensure that the walls and roofs of the facility are insulated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

INFRASTRUCTURE, TECHNOLOGIES, PRODUCTS AND PROCESSES	Vulnerability level		
High: unprepared; unable to respond (Higher risk)	High	Medium	Low
Medium: basic or incomplete preparation; low level of response (Medium risk)			
Low: prepared; able to respond (Lower risk)			

Does the health care facility,

(Adaptation of current systems and infrastructures)

have health workforce preparedness and training for periods of extreme drought in place?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
perform assessments of drought conditions – current, past trends and future changes – to implement preventive actions?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
assess the performance and vulnerabilities of each critical part of the facility (structural and nonstructural elements) that can be affected by hot temperatures?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
have a monitoring and early warning system integrated with other areas to manage risks related to drought impacts on the facility?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
have a mechanism to rapidly supply or restore water services to the facility?*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
conduct ongoing and postdrought evaluations to identify success and weakness to improve preventive measures?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
assess the capacity of heating, ventilation and air-conditioning systems to deal with increasing heat?*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
have exterior shading devices, trees or other architectural features that mitigate heat and dryness?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
have openable windows to provide for ventilation and to maintain habitable conditions?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
install reflective white roofs to reduce heat impacts?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
have pavements and roofs designed to withstand extreme temperatures or solar radiation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
have a mechanism to filter indoor and ambient air pollutants?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
have a system for cooling the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
identify vulnerabilities to implement actions to reduce impacts?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
stimulate increase of water intake by staff and patients?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
store chemicals away from excessive heat?*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
have a coordinated team across the health sector with a key stakeholder group including different levels of government to manage the risks of public health emergency related to	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

droughts?			
have an effective risk communication plan to communicate clear messages of the danger of heatwaves and dehydration emphasizing health protection as a priority?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>(Promotion of new systems and technologies)</i>			
have an information system between the health sector and meteorological services to communicate about the climate hazard?*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
have a syndromic surveillance system for drought-related illnesses?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
have an assessment plan for identifying vulnerability conditions considering the degree or extent of potential damage or loss in the event of a drought?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
have identified capacities, resources and needs to better cope and manage a drought event?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
have an established set of procedures to continually evaluate and implement risk management plans to stay responsive to the needs of the facility in ongoing and postdrought events?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ensure information and communication flow between health workforce and policy makers, particularly, during high stress situations and demands created by emergencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
have trees and plants which are resilient to drought surrounding the facility?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
have an information system for tracking and monitoring diseases following drought events?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
have measures that improve health performance, based on a history of climate variability in the region or locality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>(Sustainability of health care facility operations)</i>			
have procedures for procuring, transporting and safely storing water supplies?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
have a defined and sustained budget as part of core budgeting for emergency preparedness and response to drought risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
have established partnerships between the facility, community and local authorities to reduce vulnerabilities in the surrounding areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
have trees and leafy plants near windows to provide natural cooling?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
have a plan to conserve and manage water to reduce water usage, specifically in case of prolonged drought?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
have a plan for relocating supplies and services in case of outbreaks and epidemics that may overwhelm the facility or increase demand due to severe drought?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
have established requirements or provide incentives to encourage water conservation in the facility and also in the communities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
have a coordinated plan with health municipal department heads to ensure appropriate preparations for ongoing drought conditions?*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
explore the relationship between social learning and adaptation measures in the face of drought threats to identify and implement the best behavioural responses from successful health facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
undertake risk assessments of the supply chain for essential medical and nonmedical products?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
have secure access to essential backup food sources via multiple agreements with different vendors and through cooperative agreements with other health care facilities?*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**For further details see Hospital Safety Index (Reference 2 in the Checklist Guidance).
For WASH and health care waste details see WASH FIT (Reference 3 in the Checklist Guidance).*

DROUGHTS: checklist for assessing impacts

HEALTH WORKFORCE		
Level of impact		
MAJOR	MODERATE	MINOR
<input type="checkbox"/> Increased threat to the health workforce from infectious disease from water contamination and vector breeding sites <input type="checkbox"/> Increased threat to the health workforce resulting in impacts to noncommunicable diseases (cardiovascular, respiratory diseases), from poor air quality and higher temperatures <input type="checkbox"/> Drought-related illness to health workers requiring hospitalization <input type="checkbox"/> Effects on mental health of staff leading to psychological stress <input type="checkbox"/> Interruption of critical programmes or services availability with possible relocation to another facility (municipality or capital) <input type="checkbox"/> Reduced performance capacity of health workforce <input type="checkbox"/> Increased demand for health care due to drought-related infectious diseases (water-, food- and vector-borne diseases), cardiovascular, kidney and respiratory diseases, cancer (skin, bladder, lung), malnutrition and mental health issues	<input type="checkbox"/> Increased threat to the health workforce resulting in impacts related to high temperature, low air humidity and less water ingestion <input type="checkbox"/> Possible illness to health workers requiring medical treatment <input type="checkbox"/> Reduction of health workforce functions <input type="checkbox"/> Reduced capacity of the health workforce to deliver health care due to lack of conditions to perform hygiene procedures and services (personal and work-related hygiene) <input type="checkbox"/> Reduced productivity <input type="checkbox"/> Possible increased risk of dustborne diseases (valley fever, meningococcal meningitis), leading to hospital admissions <input type="checkbox"/> Increased risk of mortality associated with drought impacts (cardiopulmonary and respiratory diseases), and increasing demand for services from staff	<input type="checkbox"/> Drought-related illness among health workers not requiring immediate medical treatment <input type="checkbox"/> Service delivery and programme delays <input type="checkbox"/> Restrictions to provide health care services and programmes <input type="checkbox"/> Reduced capacity for health workforce to perform hygiene procedures compromising safety <input type="checkbox"/> Possible reduced capacity and health workforce performance in case of outbreaks

WASH AND HEALTH CARE WASTE		
Level of impact		
MAJOR	MODERATE	MINOR
<ul style="list-style-type: none"> <input type="checkbox"/> Disruption of the water system supply <input type="checkbox"/> Shortage or lack of water <input type="checkbox"/> Increased water pollution due to pollutant concentration resulting from low flows and reduced water levels (arsenic, iron, manganese, fluoride) <input type="checkbox"/> Increased water pollution due to nutrient concentration (phosphorus) resulting from reduced dissolved oxygen levels caused by higher temperatures, and reduced flows that increase phytoplankton activity <input type="checkbox"/> Increased water contamination by cyanobacterial blooms due to increased temperature <input type="checkbox"/> Water contamination from metals <input type="checkbox"/> Increased water salinity in groundwater resources due to decreased recharge <input type="checkbox"/> No access to potable water for drinking and cooking <input type="checkbox"/> Lack of water availability for washing, cooking and hygiene compromising health service deliveries <input type="checkbox"/> Likelihood of contamination of medical devices, instruments and equipment <input type="checkbox"/> Compromised complex and emergency health care services (surgery, urgent care) <input type="checkbox"/> Compromised routine health care services such as ambulatory, immunization, maternity room, dentistry, and other primary services <input type="checkbox"/> Inadequate wastewater elimination <input type="checkbox"/> Increased rate of broken pipes 	<ul style="list-style-type: none"> <input type="checkbox"/> Insufficient water availability to provide health care services <input type="checkbox"/> Low water quality <input type="checkbox"/> Reduced function of sanitation systems and hygiene practices (flush toilets, showers, sewerage, hand washing, medical procedures) <input type="checkbox"/> Reduced capacity to provide cleaning services (floor, toilets, patient rooms, and other health care facility rooms) <input type="checkbox"/> Reduced capacity to provide water for laundry and dishwashing machines <input type="checkbox"/> Reduced capacity to deliver health care services due to water shortage <input type="checkbox"/> Reduced capacity to access drinking water for health workforce and patients <input type="checkbox"/> Reduced capacity to provide disinfection or sterilization <input type="checkbox"/> Increased dependence on less secure alternative water sources <input type="checkbox"/> Lack of safe water to provide complex health care services <input type="checkbox"/> Reduced efficacy of chemicals to treat water 	<ul style="list-style-type: none"> <input type="checkbox"/> Reduced water availability to provide health care services <input type="checkbox"/> Reduced capacity to maintain hygiene of toilets, showers, etc. <input type="checkbox"/> Reduced capacity to access local agricultural produce <input type="checkbox"/> Possible increase in vector breeding sites due to inadequate water storage in the facility or surrounding areas <input type="checkbox"/> Unable to follow boil water advisories

ENERGY		
Level of impact		
MAJOR	MODERATE	MINOR
<ul style="list-style-type: none"> <input type="checkbox"/> Power failure <input type="checkbox"/> Disruption in use of medical equipments that require electricity <input type="checkbox"/> Shutdown of cold storage systems <input type="checkbox"/> Interruption of health care services which require electricity such as dialysis, oxygen supplies, diagnosis equipment <input type="checkbox"/> Loss of vaccines, laboratorial supplies, drugs, pharmaceuticals and other essential refrigeration-dependent medical supplies <input type="checkbox"/> Unable to follow boil water advisories <input type="checkbox"/> Disruption of the fuel supply chain <input type="checkbox"/> Disruption of energy-dependent water pumping and treatment 	<ul style="list-style-type: none"> <input type="checkbox"/> Intermittent power delivery <input type="checkbox"/> Temporary power supply interruption <input type="checkbox"/> Reduced capacity to use medical and diagnostic equipment that require electricity <input type="checkbox"/> Disruption of cooling system for medicines, vaccines, and medical and laboratorial supplies <input type="checkbox"/> Difficulty to provide critical health care service deliveries such as dialysis, oxygen supplies, diagnostic equipment, causing patient transfers to other health care facilities (municipal or regional) <input type="checkbox"/> Reduced capacity to provide cleaning services that need electricity (laundry, dishwashing machines) <input type="checkbox"/> Reduced capacity to provide disinfection services that need electricity (autoclave, microwave) <input type="checkbox"/> Reduced capacity to boil water 	<ul style="list-style-type: none"> <input type="checkbox"/> No ongoing compromise of energy supply <input type="checkbox"/> No ambient cooling <input type="checkbox"/> Loss of food or difficulty in keeping food refrigerated <input type="checkbox"/> Interruption of internal access systems (elevators, automatic doors)

INFRASTRUCTURE, TECHNOLOGY, PRODUCTS AND PROCESSES

Level of impact		
MAJOR	MODERATE	MINOR
<ul style="list-style-type: none"> <input type="checkbox"/> Damage to vital equipment from power outages <input type="checkbox"/> Interruption of health care services delivery and operation <input type="checkbox"/> Disruption of internal communication and information systems <input type="checkbox"/> Reduced capacity of routine health care services such as ambulatory, immunization, maternity room, dental service, and other primary services (from reduced water supply) <input type="checkbox"/> Interruption of diagnostics due to equipment damage <input type="checkbox"/> Interruption of water and food supply chains <input type="checkbox"/> Increased complex and emergency health care services (dialysis, complex treatments, outbreaks, cardiovascular and respiratory hospitalizations, etc.) <input type="checkbox"/> Increased health care costs for attending to all drought-related impacts <input type="checkbox"/> Decreased local food security <input type="checkbox"/> Disruption of local food supply 	<ul style="list-style-type: none"> <input type="checkbox"/> Reduced capacity to deliver critical health care services due to water shortage <input type="checkbox"/> Reduced capacity to deliver basic health care services <input type="checkbox"/> Temporary suspension of service deliveries due to water shortage <input type="checkbox"/> Increase in temperature and reduction in air quality within the health care facility <input type="checkbox"/> No functioning air conditioning system or electric fans or appropriate window position <input type="checkbox"/> Possibility of reduced food supply due to lower access to food production <input type="checkbox"/> Increased hospitalization rates requiring extra medical supplies and health workforce <input type="checkbox"/> Possibility of higher costs to health care facilities due to lower/reduced food supply and higher prices 	<ul style="list-style-type: none"> <input type="checkbox"/> Minimal impact on local operations equipment, with no impact on health care service deliveries <input type="checkbox"/> Minimal impact on the supply chain <input type="checkbox"/> Reduced capacity to provide local food access <input type="checkbox"/> Minor impact from high temperatures and reduction in air quality within the facility due to lack of air conditioning or electric fans or appropriate window position

