

WASH Minimum Standards and guidelines for rural health facilities and nutritional centers in resource-poor environments.

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Thematic	No	Standards	a. Yes=1 No=0	b. Rank	Score= a*b
<u>Water supply</u>	1	Clean glasses or cups must be available next to drinkable water sources and regularly cleaned with either dishwashing product or chlorine solution.		3	
	2	All water sources must be protected and treated: has to be treated with chlorine (HTH, Aquatab or other chlorinated products. Sodium hypochlorite can be used if its concentration is verified first). Water has to contain 0,2-1mg / L of free residual chlorine at the water points-of-use (tap, drinkable water container) In the absence of chlorine: - Drinkable water is boiled during 3 minutes and stored in closed containers with a tap. - Filters can be used in non-epidemic context (ceramic...). Sand filters should be avoided.		3	
	3	Water turbidity < 5NTU. If excessive water turbidity: use of sachets of PUR, alumina sulfate or filters.		3	
	4	Drinkable water presents 0 E.coli / 100m neither at the water source, at the tap, or in the water containers.		3	
	5	Distance between buildings and the nearest drinkable water collection site is <100m		2	
	6	Each center has an improved water point (hand pump, wells, tap...) with protected access from animals.		3	
	7	If there is no drinkable water source on the site, the site should have drinkable water storage of 2 days in a closed container.		2	
	8	Small-sized containers of drinkable water are cleaned once per week (use a brush with detergent, sodium hypochlorite or chlorine solution at 0.2%). Large-sized containers (elevated, buried) in the center are disinfected every 6 months (chlorine water 2%, brushes, protection equipment)		3	
	9	Necessary quantities of water (person = patient, staff, visitor): • Center with day service (OPD): 5 L / person / day • Center with night service (IPD): 50 L / person / day • Nutritional products distribution point (unprepared food): 0.5L / person / day (5L if waiting time is long) • Nutritional products distribution point (food prepared on site): 15 L / person / day • For therapeutic nutritional centers: 30 L / person/ day, including staff, children and visitors.		3	
<u>Latrines</u>	10	For a health center with night service (IPD), assuming that each patient is accompanied: - Number of latrines = 2 for staff + 2 latrines / 20 beds + 2 latrines /50 patients in day-time consultation - At least 6 toilets: 2 for staff(male and female) + 2 for hospitalized patients (male and female) + 2 for consultations (male and female)		3	

	11	For health centers with day service: - 1 latrine for 50 patients separated by gender + 1 for the staff - Toilets: 1 for staff + 2 for patients (male and female) + 1 adapted to children		3	
	12	There is a cleaning and maintaining routine (everyday), which guarantees clean and available toilets at any time.		3	
	13	Latrine without flies, smell or traces of excrements.			
	14	Defecation pots area available for children close to/in every center.		2	
	15	There is a separation between female latrines and male latrines.		3	
	16	At least one latrine is adapted to elderlies or disabled (enough space for 2 people, a pole to take hold and help standing up in the latrine, a movable reducer seat with a hole...)		2	
	18	Distance from the building to latrines is between 5m and 30m, and at more than 30m from food preparation/consumption sites with an easy access.		2	
	19	Lights are available and functioning at night next to the latrines and other WASH infrastructures.		2	
	20	Latrine pits and septic tanks are situated at > 30m, further down the groundwater sources (wells, drilling, hand pump...) and the bottom of the pit at 1.5m from the water table level.		3	
	21	If latrines with a pit are used: - The pit hole is covered by a lid all the time, preferably not in wood, and cleaned at the same time as latrines. - The openings of the latrines' cabins are entirely closed with mosquito nets, also placed on top of the ventilation pipe. - There is a large opening equipped with a concrete cover behind the latrine for a potential draining when filled.		3	
	22	Infrastructures for hand washing and wastewater drainage are available at the latrines' exit. Soap/liquid soap mixed with water/water containing chlorine is available next to it.		3	
Shower/washing area (only for infrastructures with a night service)	23	Showers are separated by gender and available with a ratio of 1 for 50 users: Supposing that each patient has 1 visitor using the facilities: No of showers = 2 for staff + (N ° of beds x 2) / 50		2	
	24	Washing areas are equipped with a proper drainage preventing stagnant water and are not accessible to animals.		2	
	25	Separated washing area for dishes and laundry are available in every center, equipped with a concrete slab and an operational drainage (e.g. grease trap + sedimentation trap + sump).		3	
	26	Dishes and laundry must be dried at a raised place (hanging dish drainer, clothesline, drying area)		3	
Waste water Waste water is	27	All waste water has to be evacuated by closed drainage systems to a storage and infiltration system on site (sump, infiltration trenches) or off-site by an underground sewage system.		2	

produced from sinks, showers, hand wash stations (grey water) and flushing toilets (black).	28	All waste water drainage systems have to be covered to prevent risks of disease vector spread and direct contact contamination.		2	
	30	« Grease traps » are installed between the wastewater discharge point and the drainage system to prevent oil, grease and solid waste from entering the drainage system. These traps have to be checked and cleaned every week.		2	
	31	Wastewater slumps have to be built > 30m and further down groundwater sources. The pit bottom has to be at least 1,5m above the water table level.		3	
	32	Basic drainage network (gutter, channels) and natural drainage (slope) function to evacuate rainwater and water run-off.		2	
Solid waste management General standards	33	Wastes in facilities are placed in different waste containers (plastic or metal) depending on the type: non-sharp non-organic waste, organic waste, sharp waste.		3	
	34	There are two sets of containers for each type of waste relevant for each room in the center, to allow usage even during collection of waste and cleaning/drying of containers.		2	
	35	Daily collection, draining and disinfection of all waste is ensured.		3	
	36	All waste containers are installed at a maximum walking distance of 5m from users.		2	
	37	An elimination zone for specific waste exists, where waste can be stored and eliminated in an efficient and safe manner. See annex for the waste elimination zone design.		3	
Non-sharp, non-organic waste management (paper, packaging, plastic, dry or a bit humid bandages, needle free syringe, single use gloves etc.)	38	These wastes must be disposed in black waste containers of at least 20L with a lid.		3	
	39	Daily collection and storage in the waste zone for a maximum of 24 hours before incineration. Storage must be done in covered barrels of 60L maximum and disinfected with chlorine after each use.		3	
	40	<u>Disposal during acute emergency:</u> - Incinerator in metallic barrel and waste pit - Ashes and other final residuals are placed directly in an ash pit equipped with a lid.		3	
	41	<u>Disposal during chronic emergencies and stable situations:</u> - De Montfort incinerator (or equivalent) : 2 ash/waste pits + ashes and other final residuals are placed directly in an ash/waste pit - Covered pit if (very) small quantities of waste and/or lots of available space + possible disposal off-site if the zone is urban/dense/without space.		3	
Organic waste management Placenta, aborted fetus, amputated limb, blood, humid bandage, food	42	Organic waste must be placed in green bags or containers (capacity of 20-40L with a lid), which should be emptied, cleaned, disinfected and replaced after each intervention.		3	
	43	Organic waste are buried in a pit with a sealed cover and a ventilation pipe (NOT burned or thrown in the waste water drainage system) For maternity hospitals, a pit for specific organic waste (e.g. placenta pit) is available nearby.		3	

residue, expired drug, pharmaceutical waste	44	In acute emergency situation if the waste volume is low, latrines can be used as final deposit. Placentas, fetuses and limbs must not be discarded in latrines.		3	
Sharp waste management Mainly needles	45	Yellow containers (metallic or very solid plastic, sealed equipped with a small triangular opening) cover for sharp waste are available. Containers are not re-used but disposed with sharp waste.		3	
	46	Before final disposal, sharp-waste containers are stored in a safe place non accessible to public/patients. They are discarded in a suitable pit for sharp waste, built in the center: sealed concrete pit or adapted metallic barrel (the latter in case of acute emergency or for a small health post).		3	
Solid waste management Elimination zone of waste	47	Waste disposal area must be fenced.		3	
	48	There must be a water point source with soap/detergent and disinfectant to wash hands and clean and disinfect recipients with installations for drainage in a sump or sewer system.		3	
	49	The waste disposal area must be located at more than 30 meters minimum from groundwater sources.		3	
	50	If an incinerator is used, it must be located in order to allow an efficient functioning with minimum local air pollution in health centers, housing and agricultural crops or market gardening.		2	
	51	The zone must be large enough to allow expansion if new pits or other installations must be built.		2	
Vector control Guidelines when following vectors are problematic: Mosquito (Malaria, yellow fever, dengue). Flies (intestinal infection, eye infection) Sand-fly fever (leishmaniosis) Lice (Typhus, trench fever) Flea (Typhus) Rodents (Lassa fever, salmonellosis, leptospirosis)	52	Consider IRS (Indoor Residual Spraying) in health center's buildings and latrines twice a year, as well as in housings located in a zone of 2km around the center. Note that any use of chemical insecticide requires advice from experts at the Ministry of Health.		3	
	53	All patient beds must be equipped with impregnated mosquito net, well taut and with the edges inserted under the mattress. Mosquito nets (or a grid thin enough to block mosquitoes) must be installed on all windows and openings of the buildings.		3	
	54	Mosquito nets impregnated are washed and re-impregnated every 6 months if they are used for non-infectious patients. For patients with infectious diseases (cholera, hemorrhagic fever...) mosquito nets must be washed and re-impregnated between every patient and if soiled.		2	
	55	Buildings' doors close automatically (counter spring) and open on the outer side to limit the entry of insects.		1	
	56	There is no suitable place for mosquito breeding within a radius of 3km around the health center (puddle, standing water, old tire where water can stagnate...)		2	
	57	Beds are more than 70cm high		2	
	58	Poison or mousetraps are used against rats.		2	
59	Patients with vector-transmitted diseases (Malaria, Lassa fever, typhus...) must be treated or protected in order to prevent vectors from transmitting diseases to other individuals in the health center.		2		

<u>Medical utensils disinfection</u>	60	<ul style="list-style-type: none"> - Sensitive medical utensils (surgery, childbirth) are pre-disinfected with chlorine (1% solution), then autoclaved or sterilized with pressure cooker. See precise procedure in annex - Non-sensitive medical utensils are pre-disinfected with chlorine (1% solution), then immersed within a 0.1% solution during 20min. See precise procedure in annex 		3	
<u>General hygiene</u>	61	Walls, floors, ceilings, furniture and equipment used for patient care must have a smooth surface and be made of non-porous materials, easy to clean and not prone to pathogen development or survival.		2	
	62	All horizontal surfaces are cleaned with detergent or chlorine solution at 0.2% at least every day and when they are dirty.		3	
	63	All zones contaminated with blood or organic liquids are cleaned and disinfected immediately.		3	
	64	<ul style="list-style-type: none"> - Beds, mattresses and pillows are cleaned with disinfectant solutions (e.g. chlorine solution at 0.2%) between each patient and every time they are spoiled by body fluids and treated for lice, bedbugs... - Bed covers or sheets are cleaned once a week or after each soiling or between each patient. 		3	
	65	<ul style="list-style-type: none"> - Dirty laundry is washed with water detergent/chlorine, rinsed and dried at height/off floor. - Clean and dirty laundry are transported and stored separately in different suitable bags - Waterproof bags carefully closed are used to transport laundry soiled by biological substances or other fluids and manipulated with minimum moves to avoid releasing pathogenic agents. 		2	
	66	Health structures have all the general and adapted cleaning material (sponge, bucket, broom, mop...) and a stock of consumables (detergent, soap...) for 15 days.		3	
	67	In therapeutic nutritional centers (TNC) and at the beginning of the stay, mothers receive a minimum hygiene kit for them and their children containing consumables for the length of stay: cup, spoon, covered bucket, soap for hand and body wash, and soap for laundry...		3	
	68	Keep drinkable water and hand washing facilities far from electrical connections to avoid risk of electric shock.		1	
<u>Hand washing</u>	69	There is a hand-washing station (tap, jerry cans with tap...) always with water and soap next to each latrine and critical locations (laboratories, kitchen, operating room, showers, laundry room...)		3	
	70	Hand washing sites must be equipped with a drainage system or a recipient for wastewater collection.		3	
	71	There is soap available at each hand washing installation. Each health center must have a stock of soap for 15 days (water with chlorine, liquid soap or ash can be used as well depending on context)		3	
	72	No towel must be placed near the hand washing sites due to the contamination risk.		3	

<u>Operation & Maintenance, Sustainability</u>	73	Before any WASH intervention in a health structure, a Memorandum of Understanding ¹ for all WASH works is signed with the hospital management and local representatives of ministries of Health and Water/Sanitation.		3	
	74	WASH human resources are available, trained and equipped: - Small health facility: 1 cleaning person + 1 focal point WASH / hygiene promotion - Large health facilities: 2 cleaning persons + 1 technician + 1 WASH manager + 2 hygiene promoters		3	
	75	A management committee gathering the center's staff and possibly representatives of local communities are trained at the technical level and for financial management, and received the equipment and tools necessary to the functioning of WASH infrastructures in health facilities.		3	
	76	All the staff has a job description, adequate clothing and appropriate equipment and tools for cleaning and hygiene including tools for waste management (shovel, wheelbarrow, forks...).		3	
<u>Hygiene promotion</u>	77	Hygiene promotion sessions are carried out with patients and visitors at the beginning and during their stay in the health center.		3	
	78	Hygiene promotion posters or mural paintings are available in health centers in strategic places (waiting room, toilets...). Old dusty or torn posters are removed from the wall and replaced.		2	
<u>Food hygiene</u> Food preparation and handling	79	People handling food must be trained at basic food hygiene.		3	
	80	People handling food have to wash hands before handling food and after using. Soap and water are available at any time.		3	
	81	Surfaces and equipments used for food preparation are washed and sanitized after each use. Surfaces can be dried with a clean cloth but equipments are air dried to prevent contamination.		3	
	82	Food waste, particularly food leftovers have to be stored in bins with closed covers. These bins must be emptied every half-day with other organic wastes (to avoid contamination, rodents and insects).		3	
	83	In many hospital settings, visitors bring food to patients or prepare food in the health center. In this case, the staff must ensure that the food is prepared in a hygienic manner and that cooked food is immediately consumed.		2	
<u>Food hygiene</u> Raw food and cooked food separation	84	Separate equipment and utensils (knives, cutting board) are used for handling raw foods or they must be washed and disinfected between uses.		2	
	85	Prepared and raw food is stored in separated containers to avoid any contact.		2	

¹ This memorandum should give details on the work to be done by ACF, the share of responsibilities between each party regarding operation and maintenance of infrastructures, and hygiene procedures to apply, and the estimation of the annual and monthly budget necessary for operation, maintenance and application of hygiene procedures after completion of work/NGO project, as well as a notice on the source of funding.

Food hygiene Cooking and serving	86	Every part of cooked food must reach 70°C to kill all dangerous microorganisms. To ensure this, soups and liquids must be boiled and meat has to be heated until juice becomes clear not pinkish.		3	
	87	Cooked food is reheated thoroughly.		3	
	88	Cooked food is kept warm (more than 60°C) between cooking and service.		2	
Food hygiene Food preservation	89	Cooked or perishable food is not left at room temperature for more than 2 hours and must be prepared or delivered fresh every day. All food must be preserved covered for protection against flies and dust.		3	
	90	Non-perishable food has to be safely stored in a closed shop which is dry with good ventilation and protected from rodents and insects.		2	
Food hygiene Food washing and water use	91	Fruits and vegetables have to be washed with drinkable water or peeled. If there is any doubt on cleanliness of raw vegetables and fruits, they must be peeled.		3	
			TOTAL	234	
			SCORE PERCENTAGE	(/234)*100 =	%

Note:

- This list of minimum standards has been elaborated to fit most of ACF's programs, in which health centers are managed by the Ministry of Health and ACF brings only technical support.
- Prioritization in 3 categories allows setting up the standards in several steps, while acknowledging the challenge due to lack of funding and to the usually weak HR and financial capacities of health centers in rural areas. This doesn't mean that standards from categories 2 and 3 are not important or shouldn't be implemented.
- In special context and CTC (cholera treatment centers) please check the *Cholera Practical Manual*(2013) from Action Against Hunger

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Based on documents from MSF and WHO.