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Version: Supplemental Material

Article:

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Supplemental materials

S1 – *full search terms, peer-reviewed literature*

Environmental health: ("water" OR "sanitation" OR "sanitary" OR "plumbing" OR "sewage" OR "sewerage" OR "latrine" OR "latrines" OR "toilet" OR "toilets" OR "hygiene" OR "hygienic" OR "shower" OR "showers" OR "soaps" OR "soaps" OR "hand hygiene" OR "handwashing" OR "hand washing" OR "laundry" OR "menstrual hygiene" OR "waste management" OR "waste disposal" OR "landfill" OR "landfills" OR "dump" OR "dumps" OR "drainage" OR "wastewater" OR "waste water" OR ("energy" OR "power" AND ("electricity" OR "solar" OR "generator" OR "fuel" OR "petrol" OR "gas" OR "gasoline" OR "diesel" OR "lighting" OR "light" OR "lights")) OR "environmental health" OR "environmental condition" OR "environmental conditions" OR "environmental exposure" OR "environmental exposures" OR "environment and health" OR "vector control" OR "vectors" OR "pest control" OR "pest" OR "pests" OR "rodent" OR "vermin" OR "integrated pest management" OR "infestation" OR "infested" OR "infest" OR "air quality" OR "indoor air" OR "airborne" OR "ventilation" OR "filtration" OR "HVAC" OR "Heating ventilation and cooling" OR "particulate" OR "particulates" OR "allergens" OR "dampness" OR "mold" OR "mould" OR "moisture" OR "food safety" OR "undercooked" OR "unwashed" OR "food handling" OR "food storage" OR "food preparation" OR "foodborne" OR "food hygiene" OR "food poisoning" OR "overcrowding" OR "lead poisoning" OR "surface" OR "surfaces" OR "fomite" OR "fomites" OR "chlorine" OR "disinfect" OR "disinfectant" OR "cleaning" OR "cleanliness")

AND

Displaced populations: ("refugee" OR "refugees" OR "internally displaced person" OR "internally displaced persons" OR "internally displaced people" OR "immigrant" OR "immigrants" OR "asylum seeker" OR "asylum seekers")

$S2-Grey\ literature\ search\ terms\ and\ results$

Database	v	Search terms used	Number of results	Number of papers for full text review	Method of paper extraction	Notes
IRC WaSH	12/23/17	("refugee" OR "refugees" OR "internally displaced person" OR "internally displaced persons" OR "internally displaced people") - 8 results; ("immigrant" OR "immigrants" OR "asylum seeker" OR "asylum seekers") - 0 results	8	5	PDF download directly from site	Character limit on search bar; had to divide into two search strings
WHO IRIS	12/23/17	"refugee" OR "refugees" OR "internally displaced person" OR "internally displaced persons" OR "internally displaced people" OR "immigrant" OR "immigrants" OR "asylum seekers"	8	4	PDF download directly from site	
DisasterLit	12/28/17	(water OR sanitation OR hygiene OR environment) AND (refugee OR IDP)	20	7	PDF download directly from site	
International Rescue Committee	01/03/18	(water OR sanitation OR hygiene OR environment) AND (refugee OR IDP)	22	2	PDF download directly from site	
UNICEF WaSH	01/03/18	Reports by theme Water and Environmental Sanitation (WES)/ Water, Sanitation and Hygiene (WASH)	121	6	PDF download directly from site	
UNHCR	12/27/17	 split up: 1. (Water, sanitation, sanitary, plumbing, sewage, sewerage, latrine, latrines, toilet, toilets, hygiene, hygienic, shower, showers, soap, soaps, "hand hygiene", handwashing, "hand washing", laundry, "menstrual hygiene", "waste management", "waste disposal", landfill, landfills, dump, dumps, drainage, wastewater OR "waste water") 2. (energy, power AND (electricity, solar, generator, fuel, petrol, gas, gasoline, diesel, lighting, light, lights)) in title then ("environmental health", "environmental condition", "environmental conditions", "environmental exposure", "environmental exposures", "environment and health", "vector control", vectors, "pest control", pest, pests, rodent, rodents, vermin, "integrated pest management", infestation, infested, infest) in full text 3. (environmental health, environmental condition, environmental conditions, environmental exposure, environmental exposures, environment and health, vector control, vectors, pest control, pest, pests, rodent, rodents, vermin, integrated pest management, infestation, infested, infest) in title then ("air 	1. 107 2. 287 3. 226	67	PDF downloaded directly from site	

RAND	1/6/18	quality", "indoor air", airborne, ventilation, filtration, HVAC, "Heating ventilation and cooling", particulate, particulates, allergens, dampness, mold, mould, moisture, "food safety", undercooked, unwashed, "food handling", "food storage", "food preparation", foodborne, "food hygiene", "food poisoning", overcrowding, "lead poisoning", surface, surfaces, fomite, fomites, chlorine, disinfect, disinfectant, cleaning, cleanliness) in full text ("water" OR "sanitation" OR "sanitary" OR "plumbing" OR "sewage" OR "sewerage" OR "latrine" OR "latrines" OR "toilet" OR "toilets" OR "hygiene" OR "hygiene" OR "shower" OR "showers" OR "soap" OR "soaps" OR "hand hygiene" OR "handwashing" OR "hand washing" OR "laundry" OR "menstrual hygiene" OR "waste management" OR "waste disposal" OR "landfill" OR "landfills" OR "dump" OR "dumps" OR "drainage" OR "wastewater" OR "waste water" OR "gas" OR gasoline" OR "diesel" OR "lighting" OR "lights")) OR "environmental health" OR "environmental condition" OR "environmental exposures" OR "environmental exposures" OR "environmental exposure" OR "environmental exposures" OR "environmental exposures" OR "environmental exposures" OR "lights OR "lig	424	4	PDF downloaded directly from site	
CDC WaSH	12/27/17	refugee refugees "internally displaced person" "internally displaced persons" "internally displaced people" immigrant immigrants "asylum seeker" OR	29	3	PDF download	
		"asylum seekers")			directly from site	
WEDC	12/28/17	(water OR sanitation OR hygiene OR environment) AND (refugee OR IDP)	39	2	PDF download directly from site	
ICRC	12/28/17	water, sanitation, hygiene, environment	259	3	PDF download directly from site	
Total			4311	105		With duplicates removed, $n = 87$

S4 – Breakdown of publications by country, grouped by SDG region

SDG Region	Total count	Percentage
Northern Africa and Western Asia	74	35%
Sudan	21	10%
Lebanon	16	8%
Palestinian Territories (West Bank and Gaza Strip)	14	7%
Algeria	12	5%
Jordan	12	5%
Iraq	6	3%
Turkey	4	2%
Syria	3	1%
Azerbaijan	1	0.5%
Egypt	1	0.5%
Iran	1	0.5%
Israel	1	0.5%
Libya	1	0.5%
Yemen	1	0.5%
Sub-Saharan Africa	71	33%
Kenya	22	10%
Uganda	13	6%
Somalia	10	5%
Ethiopia	9	4%
Malawi	6	3%
Democratic Republic of the Congo	5	3%
Sierra Leone	5	3%
Chad	3	1%
Ghana	3	1%
Liberia	3	1%
South Sudan	3	1%
Tanzania	3	1%
Central African Republic	2	1%
Nigeria	2	1%
South Africa	2	1%
Zambia	2	1%
Zimbabwe	2	1%
Benin	1	0.5%
Burundi	1	0.5%
Djibouti	1	0.5%
Guinea	1	0.5%
Mali	1	0.5%
Namibia	1	0.5%
Republic of Congo	1	0.5%
Rwanda	1	0.5%
Central and Southern Asia	26	12%
Pakistan	12	5%

Bangladesh	7	3%
Afghanistan	3	1%
India	3	1%
Nepal	1	0.5%
Sri Lanka	1	0.5%
Eastern and Southeastern Asia	23	11%
Thailand	19	9%
Myanmar	2	1%
Philippines	2	1%
Malaysia	1	0.5%
Latin America and the Caribbean	6	3%
Haiti	5	3%
Costa Rica	1	0.5%
Europe and Northern America	4	2%
Germany	1	0.5%
Kosovo	1	0.5%
Ukraine	1	0.5%