

STAGE ONE: IDENTIFY AND CONTAIN

A FRAMEWORK FOR A FIRST GLOBAL RESPONSE TO THE CURRENT EBOLA VIRAL INITIATIVE

The following documentⁱ is released to the United Nations Organization, all member states of the United Nations Organization, all other Global Organizations and Regional Bodies, all Major Organizations and Institutions and all known Disaster Management Centers.

This document was prepared on the 16th of October 2014, and was subjected to technical reviewⁱⁱ processing several Countries, by specialists indifferent disciplines related to the Emergency who ensured that all required and relevant technical information was included. The document does not relate to developments subsequent to the 16th of October 2014.

THE EBOLA VIRAL INITIATIVE OF DECEMBER 2013

Regardless of calculated probabilities, the possibility and likelihood of one or more persons infected by the Ebola Virus entering any given country in the course of the currently ongoing Ebola Viral Initiative cannot be ruled out.

EDUCATION

The public to be informed that:

- a) Ebola Virus Disease (EVD), formerly known as Ebola hemorrhagic fever, is a severe, often fatal illness in humans
- b) The origin of this virus is currently unknown. Its spread through the human population is currently assumed to be through contact with infected bodily fluids.
- c) The average EVD case fatality rate is around 50%. Case fatality rates have varied from 25% to 90% in past outbreaks.
- | d) The first EVD outbreaks occurred in remote villages in Central Africa, near tropical rainforests, but the most recent outbreak in West Africa has involved major urban as well as rural areas and the virus has shown itself to be adept at transcontinental travel via infected persons using airline routes.
- | ~~d)e)~~ The knowledge that is available regarding the evolutionary logic of viruses is very limited and hence the dynamics and likely outcomes of the current Ebola Initiative are largely unknown.
- | f) There is at the moment no guaranteed treatment for infection by Ebola and the strain involved in the current Viral Initiative brings with it a 50-70% Mortality rate.
- | ~~e)g)~~ There is at the moment no definite knowledge about the reservoir and origins of the Ebola Virus.

There is no definite knowledge about modes of transmission of the Ebola Virus and assumptions being published and circulated do not as yet have a sound basis in research. At present it is assumed that contact between infected body fluids and damaged skin or with mucus membranes, allowing the virus to enter the body is the most likely mode of transmission and preventive procedures are being based on this assumption. There is at present no compelling reason to assume the existence of other forms of transmission (e.g airborne spread). Diligent observations are required until all possible modes of transmission are tested and verified

All individuals of the species Homo sapiens as well as their governing institutions, structures and processes are therefore informed that it is necessary to act with utmost caution and take every measure required to identify and contain the spread of this viral pathogen regardless of the costs that may have to be met, the losses that may be incurred and the inconvenience that may be caused.

PREVENTION:

Attempts at prevention may include the following:

1. The identification of likely points of embarkation of passengers who may have been exposed to the Ebola Virus or persons infected with the Ebola Virus and the screening of all passengers on such vehicles.
2. Airline crews must rapidly acquire the skills to perform preventive exams during the duration of the flight; however, monitoring stations are to be maintained on key airports to carry out screening procedures **onboard** suspected flights arriving from high risk Countries.ⁱⁱⁱ
3. Establish and continuously update information related to flight connections that may be taken by potentially infected passengers.
4. Flights originating from these countries can therefore carry persons who have been exposed to the Ebola Virus and all persons on such flights should be subjected to onboard screening by airlines personnel, including local mandatory follow up for a twenty one, (21) day period.
5. Refusal of entry to any person who has had contact with a person infected with the virus. This information has to be obtained and supplied to local authorities by the carrier and may also be obtained from the passenger in the process of structured questioning of passengers identified as posing possible risks.
6. Refusal of entry to any person who has resided for any length of time within the twenty one, (21) day period, prior to the day of attempted entry- in a country or location where the Ebola Virus has been active. This information has to be obtained and supplied to local authorities by the carrier and may also be obtained from the passenger in the process of structured questioning of passengers identified as posing possible risks.
7. The airplane used on Frontier Flight 1143 on October 13th has been removed from service because a passenger on that flight has since been found to have been infected with the Ebola Virus at the time of making the flight. Following this precedent it is likely that the withdrawal of vehicles possibly contaminated by Ebola may have to be adopted as standard operational practice.

8. Facilities, airplanes, vessels and any other transport vehicle are to be released to service by a technical Commission formed by health authority and decontamination specialists.
9. Today there are volunteers from many countries and NGO's traveling to areas where the Ebola Virus is active, to collaborate in various fields (not only to fight the disease). It is essential to avoid the spread of the infection, supply adequate technical information, conduct formal training and provide certification to these professionals. This may also be considered mandatory for anyone traveling to high risk countries.

DETECTION

1. Any person entering the country who exhibits symptoms consistent with infection with the Ebola Virus **must be approached assuming they may have Ebola and they must** be immediately subjected to isolation. They must be tested and if they test positive for Ebola Virus they must be held in isolated and treated and release only when free of the Ebola Virus.
2. Any person who having entered the country exhibits such symptoms and on examination is found to have possibly been in contact with an infected person or in an environment where the virus may have been present, **must be approached assuming they may have Ebola and they must** be immediately subjected to isolation. They must be tested and if they test positive for Ebola Virus they must be held in isolated and treated and release only when free of the Ebola Virus.

THE EBOLA HOT LINE

1. No person found to exhibit symptoms consistent with infection by the Ebola Virus may be manipulated and transported in any way other than by an Ebola Rapid Response Team. These teams must have official and technical support, advanced skills, resources and credentials to be deployed rapidly and get immediate access to areas that normally will have limited accessibility. The detection of symptoms consistent with infection by the Ebola Virus must therefore be communicated to health authorities on a special EBOLA HOTLINE set up for the purpose and the instructions provided to be followed in detail.
2. The person exhibiting symptoms consistent with infection by the Ebola Virus shall on becoming cognizant of them immediately self-isolate himself or herself until the Ebola Rapid Response Team arrives.
3. All other persons within the habitat of the person exhibiting symptoms consistent with infection by the Ebola Virus and all those who are cognizant of their having come into contact with such person shall immediately self-isolate themselves and inform the EBOLA HOTLINE of their locations.

REMOVAL OF SYMPTOMATIC AND ASYMPTOMATIC PERSONS TO ISOLATION, TREATMENT AND QUARANTINE.

1. The Ebola Rapid Response Team's shall be officially authorized and legally empowered, to remove persons found to exhibit symptoms consistent with

infection by the Ebola Virus, to individual isolation and testing units set up especially for this purpose that are compliant with standards set by each country, following global recommendations from the World Health Organization. The removal of such persons found to exhibit symptoms consistent with infection by the Ebola Virus shall be done with the use of specially dedicated vehicles, the use of which are governed by carefully designed procedures that avoid secondary contamination and the spread of contaminated material. (Review transport vehicle procedures).

2. The Ebola Rapid Response Team's must receive all support needed for their mission from public and private organizations.
3. Isolation and transportation units shall be designed to contain ONE individual ONLY at a time (infected or suspected), and shall be decontaminated and secured after each use in order to ensure that isolation does not lead to the transmission of the virus to those whose symptoms may turn out on testing to be unrelated to infection by the Ebola Virus – and the consequent resistance that may arise to being placed in isolation.
4. Infected individuals or those suspected to be infected should be dressed in PPE during transportation, to limit projection of fluids and avoid spreading the infection. New CDC guidelines require that no skin be unprotected.
5. Failure to ensure that persons are placed in isolation shall be considered a criminal act, and the officials and institutions responsible for the isolation process may be held criminally liable.
6. The removal of such persons found to exhibit symptoms consistent with infection by the Ebola Virus, or those suspected to be infected, shall at all times be conducted with the highest standards of respect, deep humanity, civility, with provisions for the preservation of dignity and stringent standards of humanitarian conduct. Such persons shall at no time be treated as being guilty of an offence and their placement in isolation for testing and treatment shall at no time be viewed as punitive incarceration and shall at all times be viewed as a humanitarian intervention in their own best interests as well as the best interests of the species Homo sapiens.
7. Any violation of number six (6) above shall constitute a criminal act punishable according the laws of each country, and all persons dealing with infected persons or those suspected to be infected shall be rigorously trained in the relationship skills set out in number six (6) above prior to their deployment.

SANITIZATION OF CONTAMINATED MATERIAL AND HABITAT:

1. Following the removal of persons found to exhibit symptoms consistent with infection by the Ebola Virus to isolation units, and persons who have come into contact with BUT who do not themselves exhibit symptoms consistent with infection by the Ebola Virus to individual quarantine units, the habitat occupied by the persons found to exhibit symptoms consistent with infection by the Ebola Virus shall be sealed pending sanitization.
2. Special Ebola De-contamination teams empowered to enter and sanitize such habitat and to remove and destroy and dispose of the remains of material deemed to be contaminated, shall then enter and do so.

3. The sanitizing team shall then re-seal the habitat and such habitat shall not be unsealed, until declared free of the Ebola Virus and fit for human habitation.

4. DECON – PPE – GENERAL PRECAUTIONS – WASTE MANAGEMENT

- a. Responders in contact with suspected and/or confirmed EVD patients must consistently apply appropriate infection control procedures during tactical operations, depending on the degree of exposure (infected condition, existing of fluids, ongoing projectile vomits, ongoing bleeding, diarrhea etc.), location of the victim, area ventilation, (interior, exterior, vehicle, airplane, train, ship, etc.), etc.

Considering this, it will be the Emergency Response Team that will be responsible for selecting the right PPE. In some cases, probably level A will be the right choice, in other cases, probably level B –encapsulated, or Level C-encapsulated with PAPR.

The use of inner-gloves and boot covers is critical to reduce contamination. Also, Entry Teams should avoid unnecessary contact with infected persons or persons suspected to be infected and should take extreme precaution with splashes or other contact with infected materials, during scene evaluation, patient DECON, patient transportation and patient isolation.

There are a few prevention guidelines available for medical and transport personnel who may be exposed to EVD patients or their bodily fluids.

For example: <http://www.cdc.gov/vhf/ebola/hcp/index.html>).

However, there are not too many guidelines available for advanced or First Responders. In this case and when in doubt, the best recommendation is to increase the level of protection and De-contamination procedures.

*“Given the apparent low infectious dose, potential for high virus titers in the blood of ill patients, and disease severity, **higher levels of precaution are warranted to reduce the potential risk posed by contaminated surfaces in the patient care environment**”.*^{iv}

Vehicles that have transported persons infected or persons suspected to be infected with EVD:

DECON Specialist Team must decontaminate the vehicle immediately after completion of each deployment.

Decontamination must be performed with a level of protection depending on the vehicle exposure level. (Level B – Encapsulated or Level C - Encapsulated with PAPR).

- b. Donning and doffing of PPE are critical steps in the prevention of exposure and it is imperative that personnel carefully remove PPE after working in potentially contaminated environments to avoid exposure of non-protected skin and mucous membranes. It is highly recommended that donning and doffing of PPE is

performed under a certified Specialist supervision to minimize potential for unprotected exposures. Double gloving and boot covers are strongly recommended, and DECON process must consider potential contamination of inner-gloves and boots and sealed seam suits at all time.

- c. **Surface Preparation.** Before disinfecting a surface, cleaning should be performed to remove all bodily fluids, trash and dust build-up. In contrast to disinfection where specific chemicals are used, soap and water can be used for the cleaning process. Gross debris, if contaminated, is and will likely remain potentially infectious, so its management is important. Use disposable cleaning cloths, mop cloths, and wipes to manually clean the surfaces with the soap and water solution. Dispose of used materials along with any trash and debris in leak-proof bags. Use a rigid waste receptacle designed to support the bag to help minimize contamination of the bag's exterior. Care should be taken to prevent splashes and/or spread of fluids beyond the area of contamination.
- d. **Selection of decontamination method.** There are a number of procedures and materials that can be used to decontaminate surfaces suspected of Ebola virus contamination. Not all decontamination methods are suitable or amenable to the material/item that is suspected of contamination. The best method to use will depend on the type of material that is contaminated, how the material is contaminated, the ability to obtain decontamination supplies, and other factors specific to the location. One key element impacting decontamination is the type of material (porous or nonporous) and whether electronics are present.

Porous

These materials will allow liquid and gas to pass through them. These will vary in hardness, density and porosity. As a result, liquids spilled or applied to these will absorb into the material making it more difficult to remove or decontaminate. Examples of porous materials include paper, fabric, and wood.

Non-porous

These materials will limit or prevent liquid and gas from passing through them. Liquids spilled or applied to these materials will pool or run off the material. Examples of non-porous materials include glass, metals and plastics.

Electronics

These are items containing electronic circuitry, switches, batteries, wiring, and so forth. These may or may not be installed or manufactured in a manner to prevent exposure to vapors and liquids such as contaminants and materiel used for decontamination.

Chemical decontamination

Selected disinfectants and bleach are recommended for killing the Ebola virus. Note that while alcohol is part of any hand sanitation/infection control program (alcohol-based hand sanitizer), it is not effective for decontaminating objects that have been in contact with the Ebola virus.

- a. **Commercial disinfectants.** The U.S. Environmental Protection Agency (EPA) has identified a number of disinfectants suitable for Ebola virus decontamination. The disinfectants on *List G: EPA's Registered Antimicrobial*

Products Effective against Norovirus have been identified as being acceptable for use against Ebola virus.

A large number of these are peroxide and acidic/alkaline-based cleaners.^v Prepare and use commercial disinfectant per the directions on the package.

Table. National Stock Numbers for Some EPA-Approved Disinfectants

NSN	Trade Name	Nomenclature
6840-01-389-6088	Dispatch [®]	Disinfectant-Detergent, General Purpose
6840-01-491-4889	Dispatch	Disinfectant-Detergent, General Purpose
7930-01-084-3103	Spray Nine [®]	Cleaner, Industrial, Multi-Purpose
7930-01-177-0795	Spray Nine	Cleaner, Industrial, Multi-Purpose
7930-01-346-5280	Spray Nine	Cleaner, Industrial, Multi-Purpose
7930-01-346-5281	Spray Nine	Cleaner, Industrial, Multi-Purpose
7930-01-346-5284	Spray Nine	Cleaner, Industrial, Multi-Purpose
7930-01-393-6747	Spray Nine	Cleaning Compound Solvent Detergent Liquid Disinfectant 25oz 12s

Notes:

Dispatch is a registered of The Clorox Company.

SprayNine is a registered trademark of the U.S. EPA.

- a. **Bleach.** Diluted bleach is highly effective at decontaminating surfaces and items contaminated with the Ebola virus. Non-porous surfaces that are relatively free of debris and caked or pooled material can be decontaminated with a solution of 1% bleach [1:100 (~8 teaspoons of bleach added to 1 gallon of water or 10 mL of bleach to 990 mL of water)].

For unclean, soiled, dirty and porous surfaces, or when decontaminating an item via immersion, a solution of 10% bleach solution should be used[1:10 (1 cup of bleach added to 9 cups of water or 100 mL of bleach added to 900 mL of water)].^{vi3} Even at the higher concentration of bleach solution, disinfection will be more successful if gross debris is removed prior to disinfection. Organic matter will neutralize bleach solution. Bleach solution should remain in contact with surfaces/items for at least 10 minutes.

- (1) Full strength bleach emits toxic vapors and should never be used in small or enclosed spaces. Ideally, mix your solution outside. If that is not an option, go to a large, well-ventilated room and open the windows.
- (2) Carefully pour the bleach into the container first, and then add cold water. Mixing the solution in this order will prevent the bleach from splashing up on you. If you do get any bleach on your skin, wipe it off immediately with a damp cloth.

- (3) Place the lid on the container and gently invert the container back and forth a few times to mix. The solution is now ready to use. Never add any other ingredients to the bleach solution because many substances, including vinegar, create harmful fumes when mixed with chlorine bleach.
- (4) Chlorine bleach solution begins to lose its disinfectant power quickly when exposed to heat, sunlight, and evaporation. To ensure the solution is still strong enough to kill germs, mix a fresh batch each day using cold water and discard whatever amount you don't use at the end of the day.
- C. MicroChem PlusTM solution. MicroChem Plus solution is highly effective at decontaminating surfaces and items contaminated with the Ebola virus. Approximately 190mL of MicroChem Plus solution can be added to 1 gallon of water to achieve the correct dilution for decontaminating surfaces. The MicroChem Plus solution should remain in contact with the surfaces/items for at least 15 minutes. An advantage of MicroChem Plus is that it is not believed to be degraded by organic matter to the degree that bleach is. (Micro-Chem PlusTM is a trademark of National Chemical Laboratories, Inc.).^{vii}

Decontamination of non-porous surfaces (e.g., glass, metal, painted surfaces, plastics).

- a. Clean the surface of loose debris, fluids and caked material using soapy water. (See surface preparation section above.)
- b. Spray the surface with disinfectant and let stand for 10-30 minutes. Ensure the surface remains visibly wet for at least 10 minutes. During this time, a disinfectant saturated media (i.e., sponge, rag, wipe) can be used to gently spread the disinfectant across and around the surface.
- c. Wipe clean with a moistened towel or sponge and let dry. Repeat if disinfectant residue is apparent.

Decontamination of porous surfaces. For porous surfaces (e.g., removed clothing, bedding, mattresses, seat cushions), decontamination will require a decision as to whether the item will be reutilized.

- a. Items with porous surfaces that **WILL NOT** be reutilized. Saturate items with disinfectant and place into a leak-proof biohazard bag and secure for disposal.
- b. Items with porous surfaces that **WILL BE** reutilized:
 - 1. Remove debris and free liquids/solids from the item and place in a leak-proof biohazard bag, saturate with disinfectant, and dispose as described below.
 - 2. Immerse the items in disinfectant for 10-30 minutes depending on the size and volume of the item being disinfected.
 - 3. Remove the items from the disinfectant and allow excess fluids to drain.

4. Immerse the items in clean rinse water and allow sufficient time to remove excess disinfectant. One or more rinses may be required depending on the absorbent qualities of the material.
5. Remove the items from the rinse water and allow to dry.

NOTE: If the item is such that it cannot be immersed due to size or detached from a mount, the item will need to be saturated with disinfectant in place. The item would then be rinsed in the same manner one or more times to remove disinfectant residuals.

Disposal of wastewater.

- a. Although decontamination is intended to destroy or inactivate Ebola virus, it is possible that wastewater from decontamination could still contain some active virus. Disposing of the wastewater through sanitary sewers is only a good option if additional disinfection occurs as part of the wastewater treatment process. Local authorities (Environmental and Water Department must participate on the building of this procedure.
- b. Using a soakage pit is an option if the site selected is completely isolated from any surface water or any subsurface source of drinking water. If soakage pits are used, after the rinse water enters, add enough lime or sodium hydroxide to achieve a pH of 12 or above and maintain it at that level for 2 hours without adding more lime.

Each time the pH slips below 12, add more lime and wait a full 2 hours from the time the additional lime was added.^{viii} After the pH has successfully been maintained for 2 hours as described above, cover the area with earth and secure the area so that it is not used for farming, irrigation, digging of wells, and so forth.

- c. Lime is usually available at farm supply stores in the United States as a soil pH adjustment and may be available in less developed areas of the world. The lime addition rate to the pit should be approximately a 50 pound (23 kilograms) bag per 1,000 gallons (3785 liters) of rinse water. The lime will react with water to produce heat. It is best to add the lime as a slurry to the pit by premixing it with other water (NOT the rinse water), rather than pouring powdered lime directly into the rinse water.

Encapsulated treatment. This method requires encapsulating an item, or area to be decontaminated, within a sealed enclosure whereupon all items within the enclosure are subjected to treatment. Treatment may be in the form of heating, vaporized chemical oxidizers (e.g., hydrogen peroxide vapor, chlorine dioxide), or disinfectant bombs/fogs (e.g., formaldehyde/paraformaldehyde fumigation). The amount of time required to effectively decontaminate the area depends on the concentration used, the contact time, environmental controls (maintaining the temperature and/or concentrations), the size of the space (this will be a factor for reaching the desired concentration), and the integrity of the encapsulation (maintained positive pressure, sealed, and so forth). Failure of any one of these may compromise the decontamination process. Additionally, it will be necessary to validate the treatment

process to demonstrate all locations within the enclosed area were adequately subjected to the particular treatment used.

The drawback to encapsulation is the potential for the treatment itself to adversely impact sensitive items contained within the enclosure (i.e., corrosion of electronics, melting of plastics, chemical residues). This form of treatment should only be used in those instances where surface decontamination or disposal of the contaminated item is not feasible due to the total area requiring treatment, when contamination is not limited to the surface, and/or when the cost to replace the item is excessive. Specialized equipment for dispersing reagents, PPE, and controlling the environment will be required.

Management and disposal of surface preparation and decontaminated solid waste.

- a. Waste generated from vehicle decontamination (to include PPE) should be placed in leak-proof bags and disposed as infectious waste.⁶ To minimize contamination of the exterior of the waste bag, place this bag in a rigid waste receptacle designed for this use.
- b. Incineration is the preferred and most effective disposal method for this waste stream; however, incineration options may be limited.

QUARANTINE AND TESTING

1. It is vital that persons held in quarantine are prevented from exposure to the Ebola Virus and to persons infected by the Ebola Virus during the period of their being quarantined.
2. Inspection and testing of those held in quarantine facilities shall be done in keeping with international procedures and standards set out by the World Health Organization.
3. The quarantine period shall not exceed the period within which the virus is known to induce symptoms and the period required in order to ensure that the quarantined person has not been converted into a natural host to and carrier of the Ebola Virus.
4. Every person participating in Rapid Response Teams, Medical Teams, Victim Transportation Teams or any other activity with possible contact with infected or potentially infected persons, must be kept in quarantine during a twenty one (21) day period and released by a medical committee.

THE REHABILITATION OF QUARANTINED AND TREATED PERSONS

1. Persons who have been quarantined and persons who have been isolated for treatment require psychological, social and economic support.
2. Their employment shall be restored.
3. Their habitat shall be restored.

4. They shall be provided with counseling and their interactions and relationships observed and monitored for any signs of discrimination or marginalization.
5. The discrimination and marginalized of persons released from quarantine isolation and treatment shall be criminalized and any person found guilty of the same shall be prosecuted and if found guilty, sentenced to a term of imprisonment in accordance with local regulations.

RESEARCH REQUIREMENTS

OPERATIONAL RESEARCH

The following areas demand immediate intense research:

1. The mode of transmission of the Ebola Virus.
2. The process of removal of personnel protection gear after interacting with persons infected by the Ebola Virus.
3. The minimum Personal Protection Equipment (PPE) required in order to ensure prevention of infection by the Ebola Virus. At this point it is important to differentiate every exposure level, according to the specific mission of:
 - i. Emergency Response Teams operating in scenarios with infected persons and the presence of fluids, projectile vomiting, blood, and other contaminated fluids. (symptomatic).
 - ii. Emergency Response Teams operating with potentially infected persons (asymptomatic).
 - ~~ii.~~iii. Transportation of symptomatic and asymptomatic persons.
 - iv. Victims decontamination teams.
 - v. Facilities decontamination teams.
 - vi. Hospital staff involved with victims.
 - vii. Laboratory staff involved with samples.
 - ~~ii.~~viii. Personnel working in waste management.
 - ix. Persons involved in the disposal of infected cadavers.
4. The examination of whether those engaged in the disposal of bodies infected with the Ebola Virus are infected with the same frequencies as are those who care for living persons infected by the Ebola Virus.

PURE RESEARCH

1. The containment of the current Ebola Initiative may require the increasing of available knowledge bases regarding the evolutionary logic of Viruses in order to better prepare the species Homo sapiens for possible future Viral Initiatives.
2. The examination of the genetic heritage of those who have survived infection by the Ebola Virus and the investigation of their Anthropology and Psychology and Perceptual content.

3. The examination of the splice point at which the Ebola Virus inserts itself into the genetic material of cells.
4. Scientific information related to every possible Virus transmission path.
5. The capacity of the Ebola Virus and other Viruses to penetrate materials.
6. The capacity of the Ebola Virus to survive outside cellular environments and the time for which it may do so.
- ~~7.~~ 7. The role of psychodynamics and perception in the transmission of the Ebola Virus.
- ~~8.~~ 8. Determine the possibility of the Viruses use of vectors for transmission.
- ~~7.~~ ~~9.~~ 9. Determine the possibility of the airborne spread of the virus.

GLOBAL COLLABORATION

The online cloud based collaboration of the following persons in order to continuously examine and improve responses to the current Ebola Initiative aimed at its greater understanding, effective containment, the discovery of curative medical and behavioral responses, and initiatives aimed at intervening within the evolutionary logic of the Ebola Virus and its harnessing and eco integration within dynamics that do not threaten the well being of the species Homo sapiens:

1. National Health Service Specialists
2. Community Health Specialists
3. Epidemiologists
4. Virologists
5. Toxicologists
6. Biologists
7. Micro Biologists
8. Specialists in Emergency Response
9. Specialists in decontamination. (persons, animals and facilities)
10. Physiologists
11. Anthropologists
12. Psychologists
13. Specialists in Human Perception
14. Environmental Specialists
15. Development Practitioners
- ~~16.~~ 16. Disaster Managers
- ~~16.~~ ~~17.~~ 17. Logistics and Transportation Specialists.
- ~~17.~~ ~~18.~~ 18. Materials Engineers
- ~~18.~~ ~~19.~~ 19. Systems Engineers
- ~~19.~~ ~~20.~~ 20. Process Engineers
- ~~20.~~ ~~21.~~ 21. Structural Engineers
- ~~21.~~ ~~22.~~ 22. Construction Engineers

- ~~22~~.~~23~~. _____ Logisticians
- ~~23~~.~~24~~. _____ Military Specialists
- ~~24~~.~~25~~. _____ Statisticians
- ~~25~~.~~26~~. _____ Esri Geographical Information System specialists
- ~~26~~.~~27~~. _____ Remote Sensing Analysts
- ~~27~~.~~28~~. _____ Synthetists
- ~~28~~.~~29~~. _____ Communication Specialists
- ~~29~~.~~30~~. _____ Legal Specialists
- ~~30~~.~~31~~. _____ Religious Specialists
- ~~31~~.~~32~~. _____ Philosophers
- ~~32~~.~~33~~. _____ All individual Homo sapiens who can think deeply and systematically, be they specialists or generalists, scientists or of any other epistemological discipline or tradition, perceive widely in as many dimensions as possible, synthetise their perceptions and articulate them, as well as all those who have academic qualifications and engagement with scientific systems of research are invited to collaborate with these efforts.

This document does not describe the systemic changes required to ensure that the species support and survival systems that Homo sapiens require and the rudiments of which the species has set in place are rendered resilient to Viral Initiatives such as the current one launched by the Ebola Virus.

Neither does this document address the logistics of the geo physical reconfiguration of the population of Homo sapiens that may be required in response to the current Viral Initiatives such as the current Ebola Initiative or the Mass Perceptual Modification that this may entail.

All those interested in the perception and articulation of such responses along with all those other responses required to generate a sustainable and credible civilization with meaningful objectives are welcome to link up and join in this task.

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ⁱⁱⁱ http://apps.who.int/iris/bitstream/10665/133073/1/roadmapsitre3_eng.pdf?ua=1

^{iv} ¹ <http://www.cdc.gov/vhf/ebola/hcp/environmental-infection-control-in-hospitals.html>

^v http://www.epa.gov/oppad001/list_g_norovirus.pdf

^{vi} <http://www.phac-aspc.gc.ca/lab-bio/res/psds-ftss/ebola-eng.php>

^{vii} http://www.nclonline.com/products/view/MICRO_CHEM_PLUS_

^{viii} Title 40 Code of Federal Regulation, Part 503, Rules on lime stabilization of biosolids