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Innovative Education on Complex Humanitarian Emergencies

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Innovative Education on Complex Humanitarian Emergencies

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Abstract

Innovative Education on Complex Humanitarian Emergencies
By Crystal Stafford

The frequency of disasters is on the rise and this, combined with the vulnerability of many countries, makes for an urgent need to build the capacity of these vulnerable countries to prepare for and respond to disasters. The CDC's Emergency Response and Recovery Branch (ERRB) is tasked with building this capacity by providing technical training on response for complex humanitarian emergencies (CHEs), but the branch lacks the time and resources to respond to every request for training. In order to expand the reach and accessibility of its trainings, the goal of this special studies project was to begin the conversion of ERRB's curriculum to an online format.

This conversion began by adapting ERRB's introductory lectures on disasters and CHEs into five short video tutorials: Video 1 – Introduction to Disasters; Video 2 – Types of Disasters; Video 3 – Phases of a Disaster; Video 4 – CHEs: Causes and Characteristics; and Video 5 – CHEs: Underlying Factors. The first video introduces the topic of disasters, illuminating the rising frequency of disasters and the importance of an effective response. The next video discusses the major categories of disasters in more detail, providing examples of the types of impacts these disasters have on the affected population. The third video guides the learner through the four different phases of a disaster and discusses the main attributes of each phase, the impact each phase has on the surrounding population, and actions that can be taken to minimize impact. The fourth video discusses the causes and characteristics of CHEs, providing a brief background on armed conflict and discussing in more detail the impacts of CHEs. Finally, video five discusses the underlying political, economic, social, and cultural factors that contribute to CHEs. The crux of this video is that by understanding these underlying factors, practitioners can forecast the nature of the impact on the population as well as dictate an appropriate humanitarian response.

These videos are the first step in developing a curriculum that can serve to educate humanitarian workers on effective response in CHEs and build the capacity of the international community to prepare for and respond to disasters.

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ACRONYMS

ATHA	Advanced Training Program on Humanitarian Action
BSHE	Behavioral Sciences and Health Education
CDC	Centers for Disease Control and Prevention
CHE	Complex Humanitarian Emergency
CPHTCHE	Center for Public Health Training in Complex Humanitarian Emergencies
DRM	Disaster Risk Management
ELRHA	Enhancing Learning for Humanitarian Assistance
ERRB	Emergency Response and Recovery Branch
FCP	Final Cut Pro
FEMA	Emergency Management Institute
H.E.L.P.	Health Emergencies in Large Populations
HCRI	Humanitarian and Conflict Response Institute
HPM	Health Policy and Management
HREA	Human Rights Education Associates
IAWG	Inter-Agency Working Group on Reproductive Health in Crises
ICRC	International Committee of the Red Cross
IDP	Internally Displaced Persons
IERHB	International Emergency and Refugee Health Branch
IFE	Infant and Young Child Feeding in Emergencies
IFRC	International Federation of Red Cross and Red Crescent Societies
IYCF	Infant and Young Child Feeding
MOOC	Massive Open Online Course
NGO	Non-governmental Organization
PATH	A Principled Approach to Humanitarian Action
PHAP	Professionals in Humanitarian Assistance and Protection
RSPH	Rollins School of Public Health
SAM	Severe Acute Malnutrition
SSP	Special Studies Project
TISS	Tata Institute for Social Sciences
UNHCR	United Nations High Commissioner for Refugees
WHO	World Health Organization

INNOVATIVE EDUCATION ON COMPLEX HUMANITARIAN EMERGENCIES

CHAPTER I

INTRODUCTION

The Centers For Disease Control and Prevention's (CDC) Emergency Response and Recovery Branch (ERRB) currently spends a large proportion of its time and resources providing trainings on humanitarian response in complex humanitarian emergencies (CHEs) worldwide. These trainings are offered domestically and internationally to university students (e.g. Emory and Tulane), foreign and domestic governmental health departments and non-governmental organizations (NGOs). ERRB has training and educational materials but would like to develop supplemental educational materials (videos) in order to achieve three objectives:

1. Decrease time commitment of ERRB technical experts in teaching CHE curriculum at Emory University;
2. Reduce the travel time and resources currently devoted to trainings internationally; and
3. Extend the reach of its trainings to humanitarian workers who lack the time and/or resources to obtain the education they need to be more effective in emergency response.

There are numerous programs offered that provide comprehensive trainings in humanitarian response: master's programs in global health, International Committee of the Red Cross' (ICRC) Health Emergencies in Large Populations (H.E.L.P.) course, certificate programs in disaster

response, but all of these programs are offered at high costs and require residential study, both of which are barriers to many humanitarian workers.

This paper will begin by discussing the need for increased effectiveness in humanitarian response. It will then provide background information on ERRB and its current curriculum. Chapter 2, *Inventory of Current Offerings*, will discuss in detail the relevant CHE training materials currently available online, which fall into three categories:

1. eLearning Courses;
2. Web Portals; and
3. Distance Learning Certificates.

This chapter will also reveal gaps in current offerings that ERRB aims to fill. Chapter 3, *Methods*, will examine the steps taken to produce the videos. Chapter 4, *Deliverables*, will provide a description of the videos produced for this special study project (SSP) and instruction on how to access the videos. Finally, Chapter 5, *Discussion and Recommendations*, will discuss the final product, the next phase of the project, and recommendations for future development of the curriculum.

Disasters on the Rise

The frequency of disasters has steadily increased over the past few decades. Figure 1 illustrates this trend. There were three times as many natural disasters in the years from 2000 to 2009 as there were from 1980 to 1989. In the past decade alone, humanity has endured 7,300 disasters, including 1,818 floods, 1,026 storms, 437 epidemics, 298 earthquakes, and 169 droughts (CRED 2013). Unfortunately, our collective ability to manage disasters has not followed the same trend. Along with the steady increase of disasters has come an increase in economic damage (Fig 1)

and lives lost. The disasters of the past decade resulted in 1,125,687 deaths, an increase of 146% from the previous decade (CRED 2013). (Figure 1)

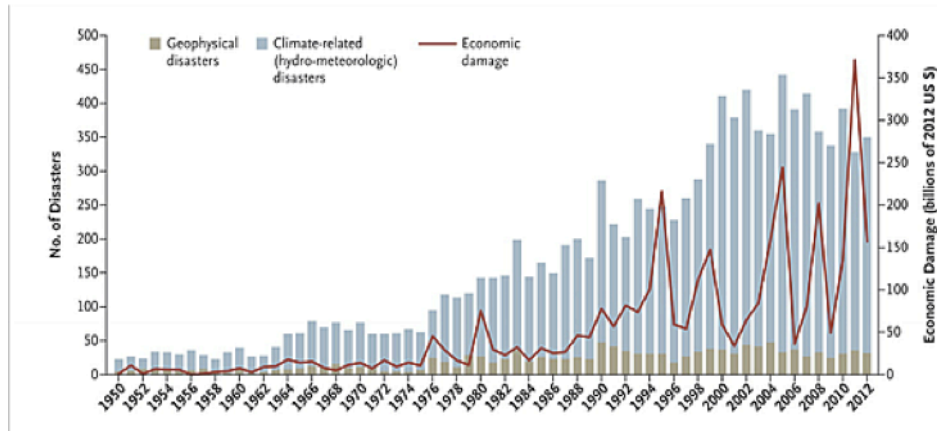


FIGURE 1: NUMBER OF DISASTERS AND ECONOMIC DAMAGE SINCE 1950 (CRED 2013)

Programs to strengthen the capacity for disaster preparedness and response within the countries that are most affected by them are urgently needed. Of the top thirteen countries for lives lost during disasters since 2000, eight are considered low to lower-middle income economies by The World Bank (2013) (Fig 2). These high rates of death and destruction often stem from the lack of capacity (e.g. a stable government, disaster preparedness and early warning systems, medical services and social and material security) within these countries to cope with and respond to disasters (UNU-EHS 2011).

Unfortunately, many of the most disaster-prone countries and the people living in them do not have the resources for the type of in-depth training that is required to prepare them for these

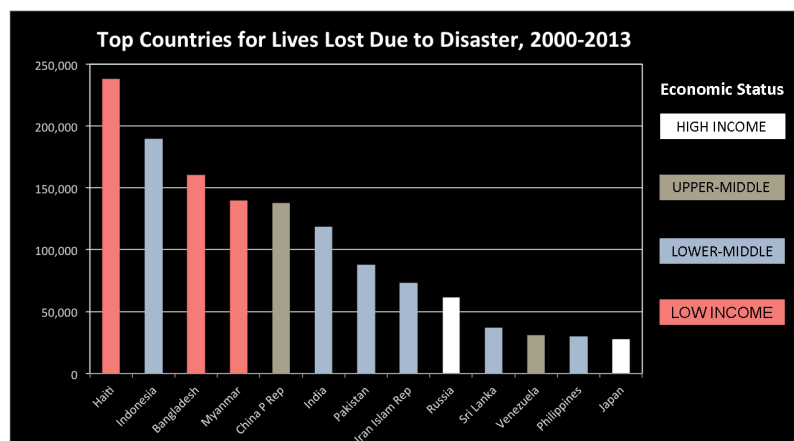


FIGURE 2: DATA COURTESY OF CRED (2013) AND THE WORLD BANK (2013)

occurrences. ERRB seeks to provide trainings that educate local responders working in low-

resource settings and thus improve local capacity for disaster preparedness and response. Once the video resources are completed, ERRB will provide these materials free of charge thus making them accessible to humanitarian workers who do not have access to formal educational opportunities, e.g. governmental bodies, NGOs, community health workers, and epidemiologists working in low-resource settings.

Emergency Response and Recovery Branch, CDC

CDC's mission is to increase the health security of America by saving lives and protecting people from health threats, both domestic and international. They do this by conducting critical science, informing the public on health information and threats, and responding to threats when they arise (CDC 2013). The ERRB contributes to this mission by bringing “public health and epidemiologic principles to the aid of populations affected by CHEs and are responsible for implementing and coordinating the CDC’s response to CHEs as requested by U.S. government and United Nations agencies and non-governmental organizations.”¹

ERRB, formerly known as the International Emergency and Refugee Health Branch (IERHB), has played an integral role in strengthening the capacity of many countries to respond to emergencies within their own borders and the surrounding regions. It provides technical assistance on rapid health and nutrition assessments, surveillance programs, epidemic investigations, and emergency preparedness. It also works with international partners to develop more effective public health interventions in emergency settings (CDC 2011). Since 2010, ERRB, in partnership with Rollins School of Public Health at Emory University, has facilitated the Graduate Certificate in Global Complex Humanitarian Emergencies. ERRB contributes to the

¹ CDC (2011). "International Emergency and Refugee Health Branch." Global Health. Retrieved January 15, 2014, from <http://www.cdc.gov/globalhealth/gdder/ierh/>.

certificate program by teaching students technical skills for working in complex emergencies (e.g. epidemiology, needs assessments, and survey methods). In addition to facilitating Emory's CHE certificate courses, ERRB is often called upon to deliver technical training for the CDC and other US government agencies, NGOs and other governments. Trainings cover a wide variety of topics including water and sanitation, health and nutrition, and epidemiology in CHEs. Requests for trainings have steadily increased over the years, as have the number of natural disasters and armed conflicts. The branch is a small collective of forty individuals. It does not have the time and resources to respond to every emergency and/or training that is requested. Its human resources are spread thin, as the staff is often commissioned to travel far and wide to provide trainings. The need for an alternative training program has become increasingly apparent.

Innovative Education

ERRB seeks to create a comprehensive online curriculum that achieves the following criteria:

- Accessible to humanitarian workers who lack the time and resources to obtain training in humanitarian response;
- Educates the user on the foundational building blocks of the humanitarian sector (more on this below);
- Imparts technical skills for increased effectiveness in an emergency setting;
- Evaluates learners throughout the course; and
- Provides all of the necessary resources or links to resources in one place, whether materials developed by ERRB or links to additional resources.

Currently there are numerous courses offered online to strengthen the capacity of humanitarian workers, although none reach the technical depth and comprehensiveness of ERRB's curriculum.

In order to acquire comprehensive instruction on humanitarian response, the user would have to search for and complete multiple programs which is a barrier for those with limited Internet access and time constraints. This project aims to begin the conversion of ERRB's curriculum, which is taught in multiple settings from U.S. universities (Emory University and Tulane) to various NGOs worldwide, the United Nations High Commissioner for Refugees [UNHCR] and the World Health Organization [WHO]), into an engaging and interactive multimedia-training program that is accessible to any humanitarian worker in need of no-cost educational materials that are adaptable to the amount of time humanitarian workers have to complete the program and the resources, e.g. Internet connectivity, available to them. Although Internet access has become increasingly ubiquitous, there is still a substantial fraction of the target audience that does not have constant access to Internet. ERRB is committed to developing alternative methods of distribution for the curriculum to address this gap in accessibility. The beginning phase, the focus of this SSP, involves the conversion of ERRB's introductory lectures from its *Health in Complex Humanitarian Emergencies* course at Rollins School of Public Health, Emory University, into five short (approximately five minutes per video), engaging video tutorials, inspired by Salmon Khan's innovative online educational forum, the *Khan Academy*.

The Kahn Academy is a non-profit organization that provides free education for anyone anywhere via online video tutorials. These videos are condensed, 5-15 minute tutorials on anything from math to humanities. The video display is a virtual black board where the instructor writes and lectures on the topic. The video modules build on each other and increase in depth and complexity as the learner advances. There are also interactive challenges and evaluation tools to supplement and advance the learners (Kahn 2013).

Through its involvement with the CHE certificate program at Emory University, ERRB has developed a comprehensive curriculum that provides learners with a solid foundation of principles and standards and the hard skills that are necessary to be effective in an emergency setting. The program also provides in depth background knowledge of the Sphere standards, the cluster system and other inner workings of humanitarian response. Over the years the curriculum has been continuously evaluated through the use of course evaluations and fine-tuned to meet the educational needs of the students. The majority of the training materials used have the capacity to be converted to alternative forms of instruction such as that provided by numerous online outlets. New technologies have increased the interactivity of online education, creating an engaging learning experience that rivals the presentational richness of the classroom (Larreamendy-Joerns and Leinhardt 2006). An online platform is appealing for multiple reasons:

- Permits access to a geographically wide audience;
- Can be delivered inexpensively (after initial investment);
- Enables use of instructional materials that convey information in multiple ways (text, images, videos, animated graphics);
- Encourages increased interactivity for the student; and
- Online trainings would drastically reduce the amount of travel required of ERRB employees.

In a meta-analysis performed by the U.S. Department of Education's Office of Planning, Evaluation, and Policy Development, the overall finding was that "classes with online learning (whether taught completely online or blended) on average produce stronger student learning

outcomes than do classes with solely face-to-face instruction.” (2010)² Online learning is especially beneficial for adults, which, according to Adult Learning Theory, are highly self-motivated and goal oriented (QOTFC 2007).

The first five videos will serve as a prototype for the first module of the online curriculum:

Video 1. Introduction to Disasters

Video 2. Types of Disasters

Video 3. Phases of Disasters

Video 4. Complex Humanitarian Emergencies: Causes and Characteristics

Video 5. Complex Humanitarian Emergencies: Underlying Factors

The CDC has not yet allocated a budget for this project, so these first videos will serve as a means to solicit funding for the further development of the course. The next steps, which are beyond the scope of this project, will be to obtain funding for the project, facilitate field-testing of the videos and continue the conversion of the curriculum into video modules.

² U.S. Department of Education, O. o. P., Evaluation, and Policy Development (2010). Evaluation of Evidence-Based Practices in Online Learning: A Meta-Analysis and Review of Online Learning Studies. Washington D.C. 18.

CHAPTER II

INVENTORY OF CURRENT OFFERINGS

As mentioned above, there are numerous programs offered that provide comprehensive trainings, but none of these programs possess the accessibility that ERRB seeks to provide. They are offered at high cost and require residential study. To compare the ERRB training approach and materials with existing programs, only programs and courses provided online were included in the inventory that follows. In *A Blueprint for Professionalizing Humanitarian Assistance* (Walker, Hein et al. 2010), Enhancing Learning and Research for Humanitarian Assistance (ELRHA) commissioned the authors to facilitate online surveys, focus groups and individual interviews of humanitarian workers worldwide. One of the outcomes of the study was an identification of core knowledge areas for humanitarian workers:

- **Core Knowledge Areas**
 - Humanitarian and refugee law;
 - Safety and security issues; and
 - Mandates and principles of key humanitarian organizations.

Building on the core knowledge areas identified by *Walker et al*, ERRB recommends the addition of two core knowledge areas:

- **Additional Core Knowledge Areas**
 - Health; and
 - Humanitarian Response.

Figure 3 illustrates a conceptual framework for a comprehensive curriculum for humanitarian workers. This conceptual framework was adapted from the classification of learning objectives known as Bloom's Taxonomy (B.S. 1956). Bloom's taxonomy describes the steps necessary for learning, which build on each

other: knowledge,

comprehension, application,

analysis, synthesis and

evaluation. The framework

identifies five foundational

building blocks for a

comprehensive curriculum for

humanitarian workers:

1. Humanitarian Law;
2. Organizational Structure;
3. Safety and Security;
4. Health in Emergencies; and
5. Humanitarian Response.

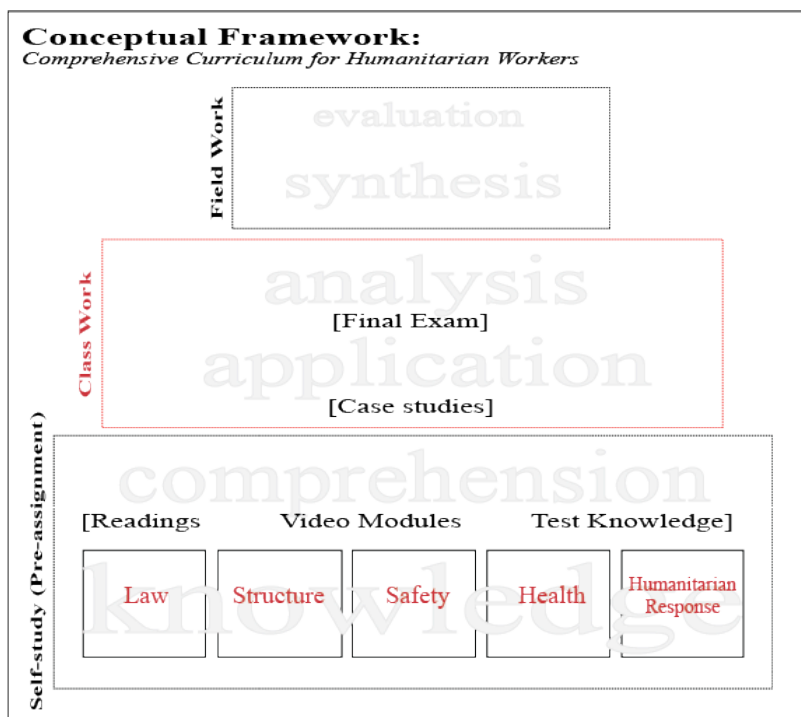


FIGURE 3 ADAPTED FROM BENJAMIN BLOOM'S CLASSIFICATION OF LEARNING OBJECTIVES, *BLOOM'S TAXONOMY*.

All current offerings were evaluated for inclusion of relevant content related to the above mentioned foundational building blocks, depth of content, the use of multiple types of media, cost, and accessibility (see *Appendix I* for a list of all courses evaluated and the criteria used). If an offering claimed to be introductory, the depth of the content was automatically labeled introductory and vice versa for offerings that claimed to be in depth. For offerings that did not

claim to be introductory or in depth, the duration of the course, course format, and number of topics covered were all used to determine the depth of the content. Offerings labeled *minimal* interactivity are those that only required the user to watch the materials being presented and navigate the course using web links. Offerings labeled *medium* interactivity are those that required the user to watch the materials being presented but also consisted of class forums and/or the opportunity to question live professors. Finally, offerings labeled *high* interactivity are those that not only presented the materials but were also interspersed with quizzes, case studies and other interactive qualities that increase engagement of the learner. The target audience for each offering was also documented. If the organization providing the learning materials did not identify their target audience, the target audience was marked as “not disclosed.”

Through extensive research, three platforms for online education were identified:

1. eLearning Courses – These are single courses provided free of charge by organizations that operate in the humanitarian context. Often they provide only an introductory look at the subject matter.
2. Web Portals – Ranging from websites that offer a few courses that focus on a particular subject to websites that offer hundreds of courses on varying subjects (e.g. *Coursera*), these portals provide a broad spectrum of training materials. Although the breadth of training is wide, the depth on any one subject is often poor. Most courses are provided free of charge.
3. Distance Learning Certificate Programs – highly in-depth curriculum comprised of multiple courses that must be taken within a specified amount of time. These programs require payment of tuition.

While there is a plethora of training courses on disaster-response and humanitarian aid available online, none cover CHEs in particular, nor do they fully meet the needs of the target audience that ERRB seeks to support: any humanitarian worker who lacks the time and/or resources to obtain training in emergency response. ERRB aims to provide skills-based trainings via a rich, engaging multimedia educational platform. In order to reach the target audience ERRB must address issues of:

- Financial accessibility;
- Physical accessibility;
- Flexibility for completion; and
- Ease of use.

Many of the materials currently available are missing one or all of these components. Many require a substantial time commitment, which is not feasible for those who do not have stable access to Internet, and few provide the learner with hard skills that can be used in an emergency setting. There are numerous courses offered for free (e.g. *Coursera*, *Disasterready.org*), but most of these are introductory at best. The most comprehensive programs, those that provide a solid foundation of principles and standards as well as hard skills, are inaccessible to humanitarian workers that lack either the financial resources to pay the high costs of tuition and/or the time commitment required to complete a synchronous course of study.

1. ELEARNING COURSES

There are many eLearning courses provided by organizations that occupy a niche within the humanitarian sector. While all of the topics covered are important to include in any curriculum

aimed at improving the effectiveness of humanitarian workers, they are in no way a comprehensive one-stop shop for continuing education. All of these courses share a single flaw in filling this gap: they are only a fragment of the knowledge and skills needed to be effective in humanitarian response. Accessibility and ease of use is achieved by providing all of the information and resources in one place. None of these programs are successful at providing this level of ease and accessibility. Therefore this flaw will not be discussed individually.

1.1 Inter-agency Working Group on Reproductive Health in Crises (IAWG)

1.1.1 Adolescent Sexual and Reproductive Health in Humanitarian Settings

<http://www.iawg.net/resources/arhtoolkit.html>

Primary target audience: Not disclosed							
Cost	Duration	Time Completion	Depth of Content	Application of Skills	Interactivity	Evaluation	Certification
Free	One hour	Asynchronous	Introductory	Yes	High	No	None

This is a one-hour interactive eLearning course that provides an introduction to adolescents' reproductive and sexual health needs in the emergency setting. The course accomplishes this by guiding the user through an emergency scenario (an earthquake in the fictional country of Loucra) and asks the user to describe which interventions should be put in place. The course also instructs the user on use of tools provided in the *Adolescent Sexual and Reproductive Health Toolkit for Humanitarian Settings*, a 92 page PDF document provided in conjunction with the course and written by the United Nations Population Fund (UNFPA) and Save the Children USA.

The course succeeds in providing interactivity and the opportunity to apply skills through emergency scenarios. The accompanying readings give the user multiple forms of instruction, which increases comprehension of complex ideas (Larreamendy-Joerns and Leinhardt 2006).

1.2 Professionals In Humanitarian Assistance and Protection (PHAP)

1.2.1 Essentials of International Humanitarian Law

<http://phap.org/activities/online-services/online-training-center>

Primary target audience: Not disclosed							
Cost	Duration	Time Completion	Depth of Content	Application of Skills	Interactivity	Evaluation	Certification
Annual Membership \$109	Unavailable	Asynchronous	Introductory	Unavailable	Minimal	Quiz at the end of each module	Certificate of Completion

This course is an introduction to international humanitarian law based on the legal and policy research in International Humanitarian Law (IHL) at the Program on Humanitarian Policy and Conflict Research (HPCR) at Harvard University. It consists of fifteen sessions that cover the following topics:

- Introduction to Public International Law
- Introduction to International Humanitarian Law
- Core principles of International Humanitarian Law
- Protection of Civilians
- Qualification of Armed Conflict
- Humanitarian Access
- Human Rights and Armed Conflict
- Civilian Direct Participation
- Repression of Violations
- Enforcement Mechanisms
- Engagement with Armed Groups
- Occupation Law

- Principles of Conduct of Hostilities
- Monitoring and Reporting
- Status of Individuals

The course provides comprehensive instruction in the subject matter. The fifteen sessions are presented in video format and provide an engaging learning experience, including a lecturer who describes the content next to animated texts, charts and graphics. The rich multimedia material is accompanied by additional resources, which are provided throughout the video. When the user is done watching the video session a quiz assesses the user's knowledge. When all fifteen sessions and quizzes are completed a certificate of completion is awarded.

The course successfully meets many of the criteria for a rich, engaging learning experience.

However the payment of membership fees in order to access the course could be prohibitive for some humanitarian workers.

1.3 The Sphere Project

1.3.1 Sphere Handbook in Action

<http://www.sphereproject.org/learning/e-learning-course/>

Primary target audience: Humanitarian workers striving to improve the quality and accountability of their work							
Cost	Duration	Time Completion	Depth of Content	Application of Skills	Interactivity	Evaluation	Certification
Free	6 hours	Asynchronous	In-depth	Yes	High	Quiz at the end of each module	Certificate of Completion

This course is a six-hour, self-paced training program on the Sphere principles and standards.

The course is targeted for anyone working in humanitarian response, whether new to the field or experienced practitioners. The training covers key aspects of humanitarian work including accountability to affected populations, needs assessments, response coordination, impartiality

and non-discrimination, keeping populations safe from harm, “building back safer” and looking after oneself as a humanitarian worker.

The course begins with three modules: Introduction, A Different Way of Thinking, and The Sphere Essentials. All modules are interactive, including animated graphics and include interviews of expert practitioners. Completion of the modules unlocks five realistic emergency scenarios. The user must complete three highly interactive modules within each scenario, each providing the user with an opportunity to apply the lessons learned in the first section of the course. Upon completion of the three modules, the user is evaluated on that specific scenario. Once all scenarios are completed the user is awarded a certificate of completion.

This program is one of the most comprehensive in its choice of subjects and skills-based training. The self-paced structure of the course allows for ease of use, especially for those who are in and out of Internet zones. Interviews with workers in the field provide increased engagement for the learner. The highly interactive and accessible educational platform could be used as a model for ERRB’s online curriculum. However, the program lacks the content on CHEs that ERRB provides and does not include training on important skills such as epidemiology, needs assessments and many other hard skills important for humanitarian response.

1.4 The World Bank

1.4.1 Introduction to Disaster Risk Management

<http://einstitute.worldbank.org/ei/course/introduction-disaster-risk-management>

Primary target audience: General development practitioners							
Cost	Duration	Time Completion	Depth of Content	Application of Skills	Interactivity	Evaluation	Certification
Free	18-24 hours	Asynchronous	Introductory	Yes	High	Final assignment to be completed within three days	Unknown

This self-paced course is an introductory course for the World Bank's *Disaster Risk Management (DRM)* program; an initiative aimed at encouraging development practitioners to incorporate DRM in development planning. The course introduces development practitioners to concepts and methods for disaster management. The course consists of three modules:

Module 1. Introduction to DRM: Basic Concepts, Players and Terminology

Module 2. Prevention, Relief and Reconstruction: From Vulnerability and Risk Assessment to Damage and Reconstruction Needs Assessment

Module 3. Introduction to Safer Cities, Community-Based DRM and Best Available Tools to Enhance Resilience

Each module contains text, two to three automated key message presentations ranging from 20-30 minutes in length, a downloadable PDF of the script of the key message presentations, required readings (also PDF downloads), case studies, additional resources in the form of links to YouTube videos and other related websites, and a quiz to be completed at the end of the module. The Key Message presentations contain the majority of the content for the course. The content is presented using images, animated graphics and text all narrated by an unidentified lecturer. Each module takes approximately six to eight hours to complete. Once all modules are completed a final assignment is to be completed within three days.

This course succeeds in providing an engaging learning environment. The information is presented in multiple formats, which can increase comprehension. It also gives the learner the opportunity to apply skills via case studies. The program uses a Course Management System (CMS), also known as a Learning Management System (LMS) or a Virtual Learning Environment (VLE), called *Moodle* to organize the course content. *Moodle* is a free web

application that allows educators to develop online learning sites. Once the CDC's curriculum is completed, a *Moodle* site could be incorporated into the CDC's main website and would serve as a good platform for the online curriculum.

2. WEB PORTALS

Web course portals offer a continuum of from a few modules consisting of a few courses on one subject, to hundreds of courses on varying subjects. The information provided is more in depth than that provided by the eCourses. There is also more opportunity for obtaining technical skills and instruction for health related topics relevant to humanitarian emergencies. Most courses are provided free of charge.

2.1 Coursera

<https://www.coursera.org/>

Primary target audience: Anyone							
Cost	Duration	Time Completion	Depth of Content	Application of Skills	Interactivity	Evaluation	Certification
Free	5-12 weeks	Asynchronous (Must be completed within course duration)	In-depth	Yes	Medium	Final evaluation	None

Coursera is an education company that provides free, online courses in partnership with 100 of the top American and international universities and institutions, including Emory, Yale, Princeton, Columbia and the World Bank. Courses are offered on a variety of subjects covering the humanities, medicine, biology, social sciences, mathematics, and many other topics. There are numerous courses available specific to the needs of humanitarian workers, although they are not advertised as such. These courses include:

- Epidemiology
- Biostatistics
- Critical Thinking in Global Challenges
- Data Analysis
- Vaccines
- Epidemics – the Dynamics of Infectious Disease
- Human Nutrition.

Classes range from five to twelve weeks and allow users to study at their own pace within that time period. Courses include lectures by world-class professors, weekly readings, interactive exercises and knowledge evaluations. This company provides a promising platform for educating humanitarian workers in the field and may be a good partner for distributing the CDC's curriculum.

2.2 Elevate

<http://www.elevatehealth.eu/courses>

Primary target audience: Not disclosed							
Cost	Duration	Time Completion	Depth of Content	Application of Skills	Interactivity	Evaluation	Certification
\$0-\$3500	1-10 weeks	Unknown	In-depth	Yes	Medium	Final evaluation	College credit

Elevate partners with twelve institutions and universities in the Netherlands including Utrecht University and the Royal Tropical Institute, to provide an online collection of health related eLearning courses for credit towards a diploma at one of the partner institutions. The program offers a broad range of courses in the following health related themes:

- Communicable diseases
- Non-communicable diseases
- Epidemiology and Biostatistics
- Health Issues and Determinants of Health
- Reproductive and Children's Health

Classes range from two to twelve weeks and prices vary, anywhere from \$90 to upwards of \$3000. The courses consist of online lectures and collaborative assignments. There is an examination at the end and upon successful completion of the course credit is given.

Many of these classes would be beneficial for a humanitarian worker in the field. Examples include: War, Violence, Peace and Health; Disease Control; Introduction to Epidemiology; Introduction to Statistics; and Medical Peace Work³.

The Medical Peace Work course is the only freely accessible course since there is no charge for participating. This course consists of three chapters displayed as a web page that the user can navigate at his/her own pace. The user begins each chapter by reading the provided *Textbook Chapter* and then taking a test at the end of the chapter. The user can then move on to the next chapter, although successful completion of the previous chapter is not required. At the end of the third and last chapter, two *E-cases* are provided. The *E-cases* are much more interactive than the *Textbook Chapters*, which consist mostly of text and a few images and figures. The *E-cases* include audio, images and text. A narrator guides the user through the scenario, encouraging the user to apply skills learned in previous chapters. Once the case is explained the user is then asked to work through the case using interactive media to develop the tools that were discussed in the

³ This module is an introduction in violence prevention and peace building for humanitarian workers. It consists of seven courses and is the only offering that is provided free of charge.

Textbook Chapters. Once all three chapters are completed a final evaluation is performed and a certificate is provided for successful completion of the course.

Elevate is one of the few programs that include courses on epidemiology and disease control and the self-paced structure provides increased accessibility. While the subject matter is relevant to humanitarian work, the pricing is a barrier to those who work in poor settings and cannot afford the high cost of these courses.

2.3 UNICEF

2.3.1 A Principled Approach to Humanitarian Action (PATH)

<http://www.unicef.org/path/>

Primary target audience: Humanitarian workers in complex emergency setting							
Cost	Duration	Time Completion	Depth of Content	Application of Skills	Interactivity	Evaluation	Certification
Free	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown

This is a new program that will be launched in 2014. The program educates humanitarian workers on the ethical dilemmas that arise in complex emergencies and how to resolve them. The course informs the user of international and ethical standards in an attempt to define the path through complex emergencies. The course begins with an introduction to humanitarian action and then offers six modules:

Module 1. Sexual Exploitation and Abuse – Teaches users methods for preventing sexual exploitation and abuse of children in emergencies

Module 2. Armed Groups – Teaches users to negotiate with arm groups to better protect children

Module 3. Displacement – protect refugees and IDPs affected by conflict

Module 4. International Legal and Ethical Standards

Module 5. Child Soldiers – Teaches user how to prevent and respond to recruitment of child soldiers

Module 6. Landmines – Teaches user methods for reducing impact of landmines on children

Since the program will not be launched until later this year, there was no information about the course content.

2.3.2 Programming for Nutrition Outcomes

https://www.lshtm.ac.uk/eph/dph/research/nutrition/programming_nutrition_outcomes_module.html

Primary target audience: Not disclosed							
Cost	Duration	Time Completion	Depth of Content	Application of Skills	Interactivity	Evaluation	Certification
Free	3 hours per module	Asynchronous	In-depth	None	Minimal	Final Evaluation	Unknown

This program, offered in partnership with the London School of Hygiene & Tropical Medicine, is a free, open-access, Master's-level module designed to underline the multi-sectoral causes of undernutrition and identify programmatic solutions. The program consists of seventeen modules: four core sessions (the scale of global nutrition concerns, the causes and consequences of undernutrition, methods for nutritional assessment and the international landscape for nutrition programming) and fourteen optional sessions, which include basic epidemiology, nutrition and health in emergencies and nutrition and infection.

The modules are interactive web pages that the user navigates at his/her own pace. Each module takes approximately three hours to complete and an assessment is performed at the end via the website. Where the modules are lacking in media richness, they make up for it in their comprehensive coverage of the subject, providing in depth instruction for skills relevant to nutrition work in emergencies.

2.3.3 IFE Interactive lessons

<http://lessons.enonline.net/>

Primary target audience: Emergency relief staff, program managers, and technical staff involved in planning and responding to emergencies, at national and international level							
Cost	Duration	Time Completion	Depth of Content	Application of Skills	Interactivity	Evaluation	Certification
Free	40 minutes per module	Asynchronous	In-depth	None	Minimal	None	None

This program is part of a package to help orient emergency relief staff, program managers and technical staff on infant and young child feeding in emergencies (IFE). The program consists of seven 40-minute lessons that cover the following topics:

- Key global initiatives on IFE
- Common concerns about breastfeeding
- Basic and technical interventions
- The importance of complementary feeding
- Infant feeding in the context of HIV and many more topics
- Policy, coordination, training and communication
- Preventing and handling donations in emergencies
- Handling milk and milk products in emergencies.

Each lesson contains anywhere from eight to thirty pages that resemble PowerPoint slides. While a few are interactive, most simply present information to the user. No evaluation of knowledge is provided. Comprehensiveness of the subject is achieved, but presentation of the material lacks engagement.

2.3.4 Foundations of Nutrition in Emergencies

<http://www.unicef.org/nutrition/training/>

Primary target audience: Individuals working in or aspiring to work in emergency nutrition							
Cost	Duration	Time Completion	Depth of Content	Application of Skills	Interactivity	Evaluation	Certification
Free	Unknown	Asynchronous	In-depth	None	Minimal	Quizzes	Unknown

This course is one of the few available that aims to strengthen technical knowledge of humanitarian workers. It begins with a basic introduction of the humanitarian system and then moves on to cover more in-depth training on undernutrition and response in emergencies, individual assessment and micronutrients. The course is comprised of five sections:

1. International Humanitarian System and Reform
2. Basic Concepts in Nutrition in Emergencies
3. Measuring Undernutrition in Individuals
4. Micronutrients
5. Infant Feeding in Emergencies

The content is displayed as slides that the user can move through at their own pace. The only interactive qualities are the quizzes that are sprinkled throughout the course. The slides are simple text and photographs; there are no animations or video. Links to additional resources are provided.

This course is different than most because it educates the user on skills that can be used in the field such as anthropometry, assessing micronutrient deficiencies, calculating nutrient content of rations, and technical interventions for infant feeding in emergencies. The program is also highly accessible. However, the content is not very interactive, nor does it offer the opportunity to apply skills learned.

2.3.5 Caring for infants and children with acute malnutrition

<https://www.som.soton.ac.uk/learn/test/nutrition/courses/>

Primary target audience: Health professionals who have any responsibility for child care, especially pediatricians, nurses, medical students and nursing students							
Cost	Duration	Time Completion	Depth of Content	Application of Skills	Interactivity	Evaluation	Certification
Free	Unknown	Asynchronous	In-depth	Unknown	Unknown	Unknown	Unknown

This self-paced course is provided in partnership with the University of Southampton. It aims to provide the learner with core knowledge and competencies for managing Severe Acute Malnutrition (SAM). The course is comprised of three modules that cover the following topics:

Module 1. Definition and classification of malnutrition, the visible and invisible changes caused by malnutrition, and why malnourished children need different care than other children

Module 2. Assessing and screening children for malnutrition

Module 3. How to manage children with malnutrition, integration of community- and facility-based approaches, and effects of malnutrition on gastroenteritis, pneumonia and malaria.

The course was not available for viewing at the time of writing due to a glitch in the website.

2.3.6 Programming for Infant and Young Child Feeding

<http://www.nutritionworks.cornell.edu/UNICEF/about/>

Primary target audience: UNICEF staff and counterparts who are involved in Infant and Young Child Feeding (IYCF) programs in developing countries							
Cost	Duration	Time Completion	Depth of Content	Application of Skills	Interactivity	Evaluation	Certification
Free	Unknown	Asynchronous	In-depth	Unknown	Medium	<ul style="list-style-type: none"> •Evaluation at the end of each module •Final evaluation 	<ul style="list-style-type: none"> • Certificate of Completion • 12 continuing education credits

This program is provided in partnership with Cornell University. It aims to build programming capacity for those involved in Infant and Young Child Feeding (IYCF) in low resource settings.

The training consists of twelve units:

Essentials of IYCF

- Unit 1. Undernutrition Basics
- Unit 2. Role of IYCF in Child Survival, Growth And Development
- Unit 3. Essentials of Breastfeeding
- Unit 4. Essentials of Complementary Feeding

Programming

- Unit 5. Comprehensive IYCF Programming
- Unit 6. Selected Interventions for Improving Breastfeeding
- Unit 7. Selected Interventions for Improving Complementary Feeding

Special Topics

- Unit 8. IYCF in Emergencies
- Unit 9. IYCF in the Context of HIV/AIDS

Case Studies

- Unit 1. Case Study - Country 1
- Unit 2. Case Study - Country 2
- Unit 3. Case Study - Country 3

Each unit is displayed on its own web page and consists of a list of resources, a unit test, a discussion forum and the course content. The course content is presented in a Panopto-style presentation, with video of a lecturer to the left of the screen and a PowerPoint presentation to the right. Upon successful completion of a final exam, a certificate of completion worth twelve continuing education units is awarded.

The course provides comprehensive coverage of the subject matter. The case studies provide an opportunity for the user to apply knowledge and skills. However, the content lacks interactivity and engagement.

2.4 Harvard University

2.4.1 Advanced Training Program on Humanitarian Action (ATHA)

<http://www.atha.se/online-module>

Primary target audience: Humanitarian professionals							
Cost	Duration	Time Completion	Depth of Content	Application of Skills	Interactivity	Evaluation	Certification
Free	Unknown	Asynchronous	Introductory	None	High	Quiz at the end of each module	Unknown

This self-paced program was created in partnership with ten of the leading organizations in the humanitarian sector, including multiple divisions of the UN. The program was designed to enhance the capacity of international actors at all levels working within a humanitarian context, with a long-term goal of strengthening professionalization in the sector.

The program consists of eleven multi-media modules covering the following topics:

- The Role of International Humanitarian Law
- Humanitarian Principles
- Humanitarian Coordination
- International Assistance and Interventions
- Organizational Mandates
- Human Rights in Humanitarian Action
- Peace Building and Linkages with Security and Stabilization
- Health in Humanitarian Crisis

- Early Recovery and the Transition of Relief Development
- Humanitarian Preparedness, Disaster Mitigation, and Risk Reduction
- Humanitarian Funding Mechanisms.

The information in this course is presented in an engaging and interactive format. Each module consists of approximately twenty slides containing animated info graphics and diagrams narrated by an audio track. Each module also includes a video interview of an expert practitioner in the field. At the end of each module a final quiz is presented.

The program claims to be an advanced training on humanitarian action, but teaches very few skills that would be useful in the field. Instead the course is more of an introduction that could serve as a foundation for further development. For example, the Health in Humanitarian Crisis module briefly introduces the user to rising occurrence of conflict since the 1950s and Rapid Needs Assessments. It makes no attempt at imparting skills useful for improving health in an emergency.

2.5 Emergency Management Institute, FEMA

2.5.1 Independent Study Program

<http://training.fema.gov/is/>

Primary target audience: people who have emergency management responsibilities and the general public							
Cost	Duration	Time Completion	Depth of Content	Application of Skills	Interactivity	Evaluation	Certification
Free	Varied	Asynchronous	Varied	Unknown	Varied	Final evaluation	Certificate of Completion

The Emergency Management Institute (EMI) is an open-access web portal offering 184 self-paced courses free-of-charge. The courses cover topics related to the nine mission areas identified by the United States National Preparedness Goal:

- Incident Management
- Operational Planning
- Disaster Logistics
- Emergency Communications
- Service to Disaster Victims
- Continuity Programs
- Public Disaster Communications
- Integrated Preparedness
- Hazard Mitigation

All courses are interactive web based courses that consists of video, text and images as well as knowledge reviews. Once all lessons in a particular course are completed a final examination can be complete online. The program provides a wide range of skills and knowledge useful for humanitarian work. The self-paced structure provides increased accessibility, as well as the lack of cost. The content is largely focused on preparedness, planning and logistics in emergencies and does not include any health related content.

2.6 Water, Engineering and Development Center, Loughborough University

2.6.1 Development, Disasters and Sanitation

<http://learn.lboro.ac.uk/enrol/index.php?id=6373>

Primary target audience: those new to working in development or disaster relief							
Cost	Duration	Time Completion	Depth of Content	Application of Skills	Interactivity	Evaluation	Certification
\$16	2 hours	Asynchronous	Introductory	None	Minimal	Quiz at the end of each module	Certificate of Completion

This professional development course is a two-unit introduction to disasters and sanitation. The target audience is those new to working in the field of development and disaster relief. The first

unit delivers background information on development, disaster relief and poverty in an effort to provide a foundation for more in depth understanding of water and sanitation in developing or disaster affected countries. The second unit explores the principles of excreta disposal and its significance for improving health in rural and urban communities.

The information is presented in multiple formats, which makes for an engaging learning environment. The course is a multimedia web-based platform that includes slide presentations, video, animations, photography and graphics. The user is given associated readings to complement the units. Each unit takes approximately one hour to complete. An assessment is given at the end of each unit and a certificate of completion is awarded upon the successful completion of both assessments.

Though the cost is relatively low, the necessity for online payments decreases accessibility for workers in lower income countries where the majority of the population does not have access to credit.

2.7 Human Rights Education Associates (HREA)

<http://www.hrea.org/>

HREA's distance learning program provides training on human rights via self-directed eLearning courses for humanitarian workers, defenders, educators, NGOs, and law enforcement officials. Below are courses that specifically relate to complex humanitarian emergencies. All are provided at a relatively high cost, which can be prohibitive for some humanitarian workers. The content of the courses could not be validated because a fee was required to view them.

2.7.1 Rapid eCourse

2.7.1.1 RIGHTS OF REFUGEES AND INTERNALLY DISPLACED PERSONS (IDPs)

http://www.hrea.org/index.php?doc_id=1327

Primary target audience: not disclosed							
Cost	Duration	Time Completion	Depth of Content	Application of Skills	Interactivity	Evaluation	Certification
\$75	3-5 hours	Asynchronous	In-depth	Unknown	Unknown	Unknown	Unknown

This is one of the few online courses available that gives an in depth overview of working with refugees and IDPs. The course gives a short overview of the institutions and mechanisms that serve to protect refugees and internally displaced persons (IDPs). It discusses the role of UNHCR, explains the 1951 Refugee Convention and its protocol, examines the regional protection of refugees (Africa, Europe and the Americas), and reviews the UN guiding principles on IDPs.

The course is an interactive presentation that contains videos, podcasts and links to supplementary readings. The course is self-paced and can be completed in approximately three to five hours. Once the course is completed an assessment is performed. Upon successful completion of the test a certificate of completion is awarded.

2.7.2 Certificate Courses

The following courses provide participants with more in depth training on the subject matter than the *Rapid eCourse*. Each course takes approximately thirty hours to complete and is offered over a six-week period. The cost for each course is \$575. The courses are led by an instructor and students are required to participate in online working groups and webinars, interact with other students and the instructor, and complete readings, quizzes and a writing assignment. A Certificate of Participation is awarded upon successful completion of each course.

2.7.2.1 FORCED MIGRATION

http://www.hrea.org/index.php?base_id=1449&language_id=1

Primary target audience: Professionals who want to gain knowledge in the field of forced migration; government officials (local and national level) dealing with forced migration and refugee-related issues; staff of inter-governmental organizations such; NGO staff members and service providers; and students of law, international relations, politics and social science							
Cost	Duration	Time Completion	Depth of Content	Application of Skills	Interactivity	Evaluation	Certification
\$575	6 weeks	Synchronous	In-depth	Unknown	Highly	<ul style="list-style-type: none"> • Quizzes • Writing assignment 	Certificate of Participation

This course provides the user with in depth knowledge of the many facets of refugee protection: international and regional systems and standards; mounting challenges to protection; linkages between human rights law, humanitarian law and refugee law; understanding differing needs of refugee populations; humanitarian aid delivery; and durable solutions for refugees (repatriation, integration, resettlement). It gives special emphasis to the challenges presented by complex emergencies.

2.7.2.2 INTERNATIONAL HUMANITARIAN LAW

http://www.hrea.org/index.php?base_id=1340&language_id=1

Primary target audience: University students of international law, international relations, politics and other areas, NGO staff members, humanitarian actors, educators and professionals who want to gain basic knowledge in the field of international humanitarian law							
Cost	Duration	Time Completion	Depth of Content	Application of Skills	Interactivity	Evaluation	Certification
\$575	6 weeks	Synchronous	Introductory	Unknown	Highly	<ul style="list-style-type: none"> • Quizzes • Writing assignment 	Certificate of Participation

This course provides an introduction to international humanitarian law, examining how this law affects interactions and restricts the use of force between hostile factions, protects civilians in armed conflict, and lessons the overall impact of warfare. The course serves as a foundation course for more advanced courses in the subject area. It provides the user with a basic knowledge on development, scope and purpose of international humanitarian law.

2.7.2.3 ARMED CONFLICT, HUMAN RIGHTS AND HUMANITARIAN LAW

http://www.hrea.org/index.php?base_id=337

Primary target audience: Practitioners and professionals who want to gain knowledge in the field of the law of armed conflict, university students of international law, international relations, politics and other areas and NGO staff members							
Cost	Duration	Time Completion	Depth of Content	Application of Skills	Interactivity	Evaluation	Certification
\$575	6 weeks	Synchronous	In-depth	Unknown	Highly	<ul style="list-style-type: none"> • Quizzes • Writing assignment 	Certificate of Participation

The International Law course is a prerequisite for this course. This course provides more in-depth knowledge of humanitarian law and human rights law in armed conflicts. It begins by refreshing the participant's knowledge of international humanitarian law. It then critically examines the following topics:

- The changing nature of warfare and how it challenges the law;
- The role of law in contemporary situations of armed conflict;
- The role of human rights in armed conflict and their interplay with international humanitarian law;
- Current challenges and trends in the protection of civilians;
- The international criminal jurisdiction for war crimes and crimes against humanity;
- The place of human rights and humanitarian law in multi-national peace and stability operations; and
- The role of human rights and humanitarian law for humanitarian actors working in

conflict zones.

2.7.2.4 PSYCHOSOCIAL CONSEQUENCES OF MIGRATION AND ASYLUM

http://www.hrea.org/index.php?base_id=1426&language_id=1

Primary target audience: Professionals who want to gain knowledge in the field of (im)migration and asylum; government officials (local and national level) dealing with migration and migration-related issues; staff of inter-governmental organizations; NGO staff members and service providers; and students of law, international relations, politics and social science							
Cost	Duration	Time Completion	Depth of Content	Application of Skills	Interactivity	Evaluation	Certification
\$575	6 weeks	Synchronous	In-depth	Unknown	Highly	<ul style="list-style-type: none"> • Quizzes • Writing assignment 	Certificate of Participation

This course explores mental health issues for refugees and workers in the humanitarian setting. It also examines issues related to the provision of culturally sensitive interventions. It is the only online course found that addresses mental health in emergencies.

2.8 Cornerstone on Demand Foundation

2.8.1 DisasterReady.org

<http://www.disasterready.org>

Primary target audience: Aid workers							
Cost	Duration	Time Completion	Depth of Content	Application of Skills	Interactivity	Evaluation	Certification
Free	Varied	Asynchronous	Introductory	None	Highly	Quizzes	Unknown

This is an online training portal that provides free eLearning courses and other training tools to help prepare aid workers for disaster response. Courses are created in partnership with some of the leading humanitarian response organizations including UNHCR, OXFAM, CARE, MercyCorps, Save the Children, World Vision and International Rescue Committee.

Courses are divided among seven major themes:

- Humanitarian Standards

- Protection
- Program/Operations
- Management & Leadership
- Staff Safety and Security
- Staff Welfare
- Soft-skills

The courses are presented via an interactive web-based platform. There is a main menu for each course with links to the modules in that course. Each module is an interactive presentation of the content. The presentation is narrated and includes photos, videos, animated graphics and charts, quizzes and links to additional resources.

This platform is ideal for the target audience ERRB seeks to support. It's free, has a wide breadth of instructional material all in one place, it is self-paced, and the information is presented in a rich, engaging and interactive format. The problem is that the content focuses mostly on programming and security and does not provide in-depth technical training that would be useful in the field.

2.9 International Federation of Red Cross and Red Crescent Societies (IFRC)

2.9.1 Learning Platform

<http://www.ifrc.org/en/get-involved/learning-education-training/learning-platform1/>

Primary target audience: Volunteers, staff, members and partners of National Societies; staff of the IFRC, ICRC; and the general public							
Cost	Duration	Time Completion	Depth of Content	Application of Skills	Interactivity	Evaluation	Certification
Free	30-45 minutes per course	Asynchronous	Introductory	Yes	High	<ul style="list-style-type: none"> • Quizzes • Final evaluation 	Certificate of Completion

The IFRC's *Learning Platform* is an online learning community that provides short, self-paced courses aimed at developing professionalism in humanitarian response. Courses are introductory and cover a wide range of topics including:

- Security Management
- Cultural Awareness
- Humanitarian Pandemic Preparedness
- Operational Alliances
- Professionalizing the Humanitarian Sector
- International Response Laws, Rules and Principles
- Cash Transfer Programming
- Project/Program Planning
- Community-Based Health and First Aid
- Humanitarian Diplomacy

Each course takes approximately thirty to forty-five minutes to complete. Although this is one of the most comprehensive and accessible programs available online, the program still lacks the technical depth that ERRB courses provide. The content covers useful skills such as first aid and preparedness. The courses consist of a rich and engaging learning environment. They are narrated, interactive web-based modules with animated graphics, video, photos and quizzes. In most courses, the user is guided through disaster scenarios in order to give the user the opportunity to apply the knowledge they are learning. At the end of each course a final test is given and a certification of completion is awarded.

3. DISTANCE LEARNING CERTIFICATES

These programs provide the most in depth training available online. They consist of numerous courses on humanitarian response and are highly skills oriented. What these courses gain in depth and application, they lose in accessibility due to high cost and a large time commitment. All of the courses cost upwards of \$1000, require at least a year to complete, and are highly structured. Due to the cost associated with the programs, none of the content could be evaluated.

3.1 Friedman School of Nutrition Science and Policy, Tufts University

3.1.1 Evidence-based Humanitarian Assistance Certificate

<http://www.nutrition.tufts.edu/academics/certificate-programs/evidence-based-humanitarian-assistance-certificate>

Primary target audience: Individuals who are engaged in critical jobs in countries around the globe							
Cost	Duration	Time Completion	Depth of Content	Application of Skills	Interactivity	Evaluation	Certification
\$7,260	<ul style="list-style-type: none"> • One year • 1 semester (16 weeks) per course • 8-12 hours per week 	Synchronous	In-depth	Unknown	Unknown	<ul style="list-style-type: none"> • Midterm • Final evaluation 	Certificate of Completion

This graduate certificate program aims to instruct users on how to use data-driven methodologies to carry out needs assessments in the field of food security and nutrition and implement field research programs to measure effectiveness and assess the impact of programming.

The program requires completion of three online courses:

- Field Research Methods in Humanitarian Settings;
- Food Security and Nutrition in Emergencies; and
- Assessing and Measuring the Impact of Humanitarian Aid.

This is the only program identified in this review of options that covers field research methods and monitoring and evaluation, both of which are key skills in humanitarian response.

Each course runs a full semester, 16 weeks, and requires eight to twelve hours of study per week.

The student must successfully complete a midterm and final exam. Since only one class is offered per semester, completion of the program takes one year.

3.2 International Federation of Red Cross and Red Crescent Societies

3.2.1 Online certificate programme in disaster management

<https://www.ifrc.org/en/get-involved/learning-education-training/certified-professional-development-courses/online-certificate-programme-in-disaster-management/>

Primary target audience: Current and future practitioners in disaster response							
Cost	Duration	Time Completion	Depth of Content	Application of Skills	Interactivity	Evaluation	Certification
\$1,980	• One year	Synchronous	In-depth	Unknown	Medium	Unknown	Certificate of Completion

This certificate program is a one-year, comprehensive, skills-based course provided in partnership with the Tata Institute for Social Sciences (TISS). The program provides in depth instruction on disaster risk reduction, disaster response and post-disaster recovery with emphasis on justice, equity and social inclusion. The twenty-credit course consists of the following seven modules:

Module 1 – Humanitarian principles and values

Module 2 – Introduction to development

Module 3 – Introduction to hazards, vulnerabilities and disasters

Module 4 – Disaster risk reduction and development planning

Module 5 – Disaster response and post-disaster recovery

Module 6 – Term paper: Research and analysis

Module 7 – Internship: Applied knowledge or practicum

All modules are completed online via a virtual classroom. Students are encouraged to engage with their peers through discussion boards, group work, online chat, and question and answer sessions with a tutor.

3.2.2 Postgraduate Certificate in Global Health

<http://www.ifrc.org/en/get-involved/learning/opportunities/online-post-graduate-certificate-programme-in-global-health/>

Primary target audience: Current and future practitioners in global health							
Cost	Duration	Time Completion	Depth of Content	Application of Skills	Interactivity	Evaluation	Certification
\$3,450	• One year	Unknown	In-depth	Unknown	Unknown	Unknown	Postgraduate Certificate

This certificate program is offered in partnership with the University of Manchester's Humanitarian and Conflict Response Institute (HCRI). The program seeks to bring together the study of emergency medicine, disaster management, community health, anthropology, and the sociology of health and illness.

The program takes one year to complete. The curriculum is comprised of four, fifteen-credit modules:

Module 1 – Risk, vulnerability and resilience

Module 2 – Health systems and markets

Module 3 – Community approaches to health

Module 4 – Ethics, human rights and health

This course is one of only a few that contains in depth coverage of health in emergencies. The program claims to be highly skills-based, but without the ability to view the content the depth and range of skills taught cannot be known.

Conclusion

There are numerous educational materials available online that covers an array of topics related to emergency response. Many of these materials could be used as additional resources (e.g. *The Sphere Handbook in Action*) for the curriculum that ERRB seeks to provide, but there is still a large gap in the content covered. The following gaps exist in the current resources available online:

- None of the available resources provide in-depth training on CHEs and humanitarian response;
- Although there are bits and pieces of related content available through many different organizations and institutions, none of the resources are available all in one place, which makes accessibility more difficult; and
- The most comprehensive programs (the *Distance Learning Certificates*) also have the highest tuition expenses (from \$2,000 to \$7,000), which decreases accessibility.

CHAPTER III

METHODS

Video Production

The most important aspect of each video is the information being conveyed. Therefore, production of the videos began with script writing. All lectures from the CHE courses are recorded in Panopto and are available online. The introductory lecture on disasters, presented by Mark Anderson, Acting Branch Chief of ERRB, on the first day of the *Health in Complex Humanitarian Emergencies* course at Emory University, was reviewed and evaluated for information that was critical to the learner. Information was deemed critical if it effectively explained and supported the topic in a concise manner appropriate for short video tutorials. All information deemed critical was sub-divided into themes for videos. From these subdivided themes, scripts were developed scene by scene.

The next step was to develop a storyboard (*Appendix II*). The scenes developed in the scriptwriting phase were divided into a five columned table with the frame number, visual script, narration, type of content and source of the content. The appropriate content was determined for each scene, contingent on the complexity of the information being provided. Substantial cognitive and educational research has shown that complex concepts are more easily understood when presented in multiple forms (Larreamendy-Joerns and Leinhardt 2006), while multimedia presentations can obstruct learning of less complex information (Otondo, Van Scotter et al. 2008). Types of content included text, video, photographs, animation, voice over, music, charts, graphs and/or diagrams.

Once appropriate forms of content were established for each scene, the collection or creation of content was performed. This was done in a multitude of ways depending on the type of content. This project has not received funding so only original content from ERRB and materials provided cost and royalty free could be included in the videos. Fortunately, there is a vast amount of free material available online (discussed in further detail below).

Once all of the content was generated a software program called *Final Cut Pro (FCP)* was used to produce the videos. This program allows users to import all types of content including video footage, animations, photographs and graphics. Once the content has been imported, the user can easily arrange the content as “clips” on a timeline. It can then be edited in numerous ways including duration of each clip, application of effects (i.e. blurring), and addition of text, narration and music. Once the content is arranged and edited to the user’s preference, the footage can be exported as a *QuickTime* movie (file type: .mov), which can either be uploaded to any video broadcasting site (e.g. *YouTube* or *Vimeo*), played with any computer media player (e.g. *QuickTime* or *VLC* [this is not an acronym]) or can be burned to a DVD.

Generation of Content

TEXT

Regular text was created directly within *FCP*. Animated, freehand text was also used occasionally and this was captured in *Motion 5*, another video editing software, using a *Bamboo* tablet.

VIDEO FOOTAGE

Video footage was collected in two forms: previously recorded stock footage and original footage filmed by the author. There are numerous

websites that supply stock footage free of charge. License agreements for the footage vary (see *Appendix III*). Some allow use of the footage for all purposes while others allow use for educational purposes only. Since this project seeks to provide educational material free of charge, either licensing agreement is sufficient. One common licensing agreement used is *Creative Commons*. *Creative Commons* is a non-profit that provides licensing agreements to content creators free of charge. These agreements allow creators to provide their footage to other users free of charge. Depending on the type of agreement the original creator has chosen, the end user can build upon, manipulate and present the material as part of their original work. A search engine is provided by *Creative Commons* that searches popular sites such as YouTube and Google images for videos and photographs that are under *Creative Commons* licensing. This site was used extensively for retrieval of video footage and photographs.

Creative Commons search engine: <http://search.creativecommons.org>

Stock footage was only captured from sites that allow licensing for all or at least educational purposes. The following sites were found to have the appropriate licensing agreements:

Internet Archive	www.archive.org
Video Blocks	www.videoblocks.com
Stock Footage for Free	http://www.stockfootageforfree.com/
Vimeo Group <i>Free HD</i>	http://vimeo.com/groups/freehd
Open Footage	www.openfootage.net
X Stock Footage	http://www.xstockvideo.com/

MAPS

Only original maps, created by the author specifically for this project, were used. The maps in Video 2 were created using the software program *ArcGIS*. The GIS coordinate data used to develop the maps in Video 2 were acquired from Columbia University's Center for Hazard and Risk Research (2013). The animated map in video 4 was created using the free online mapmaking site, *CartoDB* (www.cartodb.com). This site allows the user to upload GIS data and easily design animated maps using a "wizard." Once the animation was developed, *QuickTime* video software was used to "capture" the screen and record the animation. The GIS coordinate data used to develop the map in Video 4 was acquired from Uppsala University and Peace Research Institute of Oslo (1946-2014).

PHOTOGRAPHS

All photographs used for this project were either original works of the author, were acquired from a website that provides royalty-free stock photography, or were retrieved through the *Creative Commons* search engine (see above). The following sites provide royalty-free stock photography:

BIGSTOCK <http://www.bigstockphoto.com/>

iSTOCK <http://www.istockphoto.com/>

ANIMATIONS

Only original animations, created by the author specifically for this project, were used. Animations were created in a variety of ways using both Adobe software programs (*Photoshop*, *Illustrator* and *Flash*) and *Motion 5*.

CHARTS, GRAPHS & DIAGRAMS

Only original graphics were used. The data used for these graphics came from ERRB, The International Disaster Database (EM-DAT), or other reputable sources (see references).

VOICEOVER

All audio needed to be aligned to the visual content. Therefore narration was recorded directly into *FCP* once all visual content was in place.

MUSIC

Music used for the videos was either the original work of the author or obtained from free stock music sites. Many of the stock video sites mentioned above also have stock music available. As with the narration, music was placed once visual content was compiled in *FCP*.

Upon completion of all visual content, they were exported as *QuickTime* movies and uploaded to *Vimeo*. Links were sent to Dr. Anderson (ERRB Acting Branch Chief), Richard Garfield RN, DrPH (ERRB Team Lead for Assessment, Information, and Surveillance) and Cyrus Shahpar, MD, MBA, MPH (ERRB Medical Epidemiologist). Dr. Garfield and Dr. Shahpar were both supervisors of the project. All three supervisors provided feedback on the content and all

necessary changes were made accordingly. Once final approval of visual content was granted the audio components (narration and music) were added. The completed video will be distributed to ERRB supervisors for final feedback and approval.

After videos have undergone final approval by ERRB, they will be sent up the chain of command at CDC and used to solicit funding for completion of the online curriculum. Approval for dissemination will also be sought at this time. The CDC has strict procedures for acquiring approval of dissemination of content. Determining the method of distribution for these videos will go beyond the scope of the project due to the time required to obtain this approval.

CHAPTER 4

DELIVERABLES

ERRB staff currently spends a large proportion of their time and resources providing trainings on humanitarian response in CHEs, both domestically and internationally, to all levels of practitioner from students to governmental health departments and NGOs. ERRB would like to develop educational materials that can both reduce the current workload devoted to training and extend the reach of these trainings to humanitarian workers who lack the time and/or resources to obtain educational opportunities.

There are numerous educational materials available online that cover an array of topics related to emergency response, but there is still a large gap in the content covered. The following gaps exist in the current resources available online:

- None of the available resources provide comprehensive, in-depth training on CHEs and humanitarian response;
- Although there are bits and pieces of related content available through many different organizations and institutions, none of the resources are available all in one place, which makes accessibility more difficult; and
- The most comprehensive programs (the *Distance Learning Certificates*) also have the highest tuition expenses (from \$2,000 to \$7,000), which also decreases accessibility.

The materials that ERRB seeks to develop will fill all of these gaps by providing in-depth training on CHEs and humanitarian response that is easily accessible (all in one place online) and free-of-charge. Developing materials of this nature will not only allow ERRB to continue to

provide these trainings to their current audience (university students, NGOs, governments) but will also allow ERRB to extend their services to a new target audience: humanitarian workers who lack the time and/or resources to obtain trainings in CHEs and humanitarian response.

The first five videos developed will serve as a prototype and will be used to solicit funding for the further development of the online curriculum. Prerequisites for the use of these materials are as follows:

- The user must be literate;
- The user must be able to speak and read English; and
- The user must have access to a computer and the Internet.

Once the online curriculum is fully established additional methods of distribution will be developed to increase accessibility, e.g. mailing course packets that include DVDs and reading materials.

These first five videos were adapted from the introductory lecture of ERRB's CHE curriculum. Mark Anderson, Acting Branch Chief of ERRB, typically presents the introductory lecture for Emory University's *Health in Complex Humanitarian Emergencies* course. The content of the videos was taken from his lecture and lecture notes (provided as additional materials for the course). To view scripts and more detailed information on content, see *Appendix III*. The videos can be accessed via the author's *Vimeo* site, for which links are provided below. Since these videos are not yet available to the general public, they are password protected. All videos can be accessed with the case-sensitive password, CDCdisasters.

Video 1: Introduction to Disasters

Vimeo link: <https://vimeo.com/92368718>

Dr. Anderson's introductory presentation, *Introduction to Disasters*, is a visually stimulating presentation consisting of mostly photographs of disasters and humanitarian response efforts interspersed with statistics. Keeping in the same vein of Dr. Anderson's lecture, the information presented in this video is delivered over video footage of real disasters and humanitarian response efforts worldwide. The content consists of introductory information and statistics on disasters in the form of text and animated charts and graphs. In order to prevent distraction from the information being provided, video footage is blurred behind content. Once the viewer is given the opportunity to take in the information, video footage then comes into focus. This first video is set to music and is not narrated. Instead, excerpts from Dr. Anderson's lecture notes are presented as text. Below are screenshots of scenes from the video. For a more detailed description of content, see the screen captures provided below and *Appendix III*.

Video 1 - Introduction to Disasters.mov

Resolution: 1920x1080

Filesize: 492.5 MB

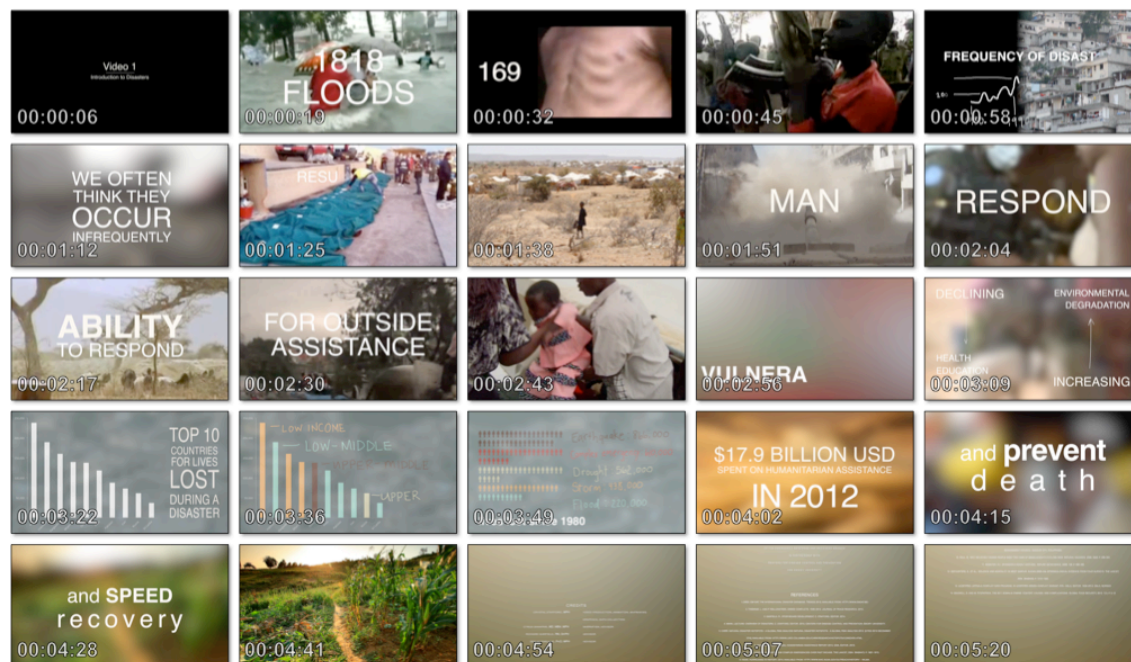


FIGURE 4: SCREENSHOTS OF VIDEO 1 - INTRODUCTION TO DISASTERS

Video 2: Types of DisastersVimeo link: <https://vimeo.com/87504286>

The 2nd video in this series focuses on types of disasters. The content is presented in a slower, simpler format than the first video and is narrated by Dr. Shahpar, supervisor to the project. The video begins with maps that show the frequency of different types of disasters around the world. It then transitions to video footage exhibiting the five categories of disasters: sudden-onset, slow-onset, industrial/technological, epidemic diseases and CHEs. The video then goes on to define each category of disaster in a more detailed manner, describing the type of disasters that occur within each category and the impact they have on the surrounding population. Next the video displays an animated chart (adapted from one of Dr. Anderson's charts from his lecture notes) that analyzes the impact different types of disasters (earthquakes and floods) have on people's lives compared with CHEs. This is the first time in the series that CHEs begin to be discerned

from other types of disasters. The video concludes by examining the difference an effective response can make on the impact disasters have on people's lives. For more detailed information on content, see the screen captures provided below and *Appendix III*.

Video 2 - Types of Disasters.mov

Resolution: 1920x1080

Filesize: 639.3 MB

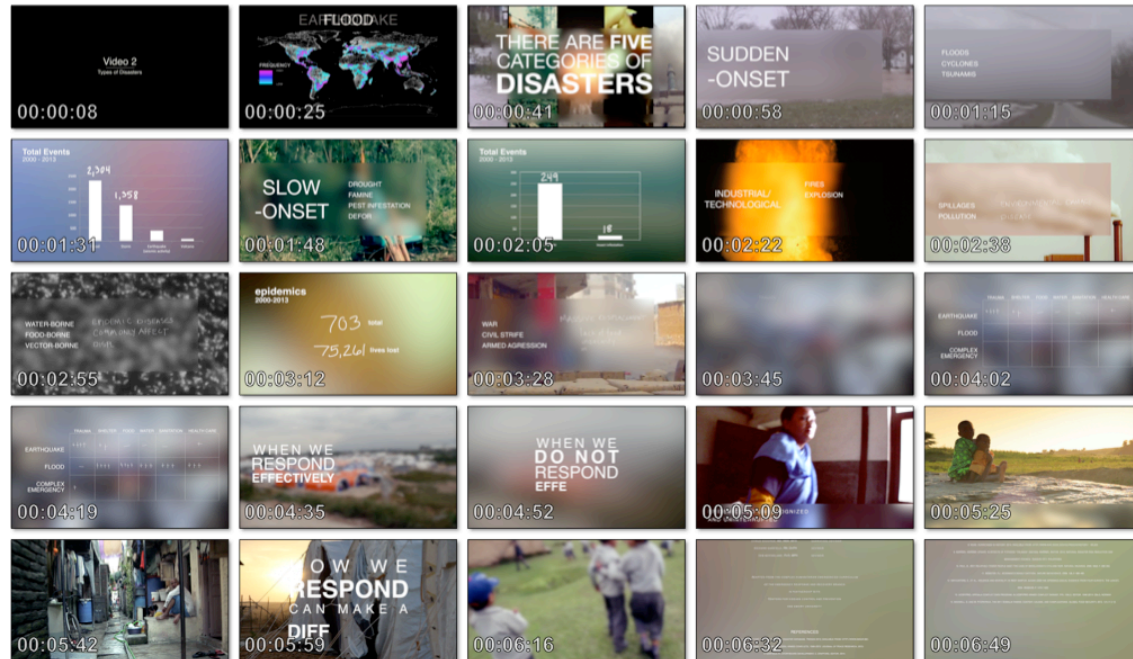


FIGURE 5: SCREENSHOTS OF VIDEO 2 - TYPES OF DISASTERS

Video 3: Phases of Disasters

Vimeo link: <https://vimeo.com/88539784>

This video is narrated by Dr. Shahpar and begins by exhibiting the four phases of disasters:

1. Pre-emergency;
2. Acute emergency;
3. Post emergency; and
4. Rehabilitation.

An animated scene representing scenarios that would take place during that phase illustrates each phase. The video then goes on to describe the metric that is used to determine the phases of a disaster, the crude mortality rate (CMR), and provides examples of CMRs during some of the worst humanitarian emergencies (e.g. Rwanda 1994) using an animated graph. Next the video describes each phase in more detail, including the main attributes of each phase, the impact each phase has on the surrounding population and actions that can be taken to minimize impact. Throughout the video, different types of media are used to illustrate the information being conveyed including animations, photographs, and video footage of real scenarios. For more detailed information on content, see the screen captures provided below and *Appendix III*.

Video 3 - Phases of a Disaster.mov

Resolution: 1920x1080

Filesize: 826.0 MB

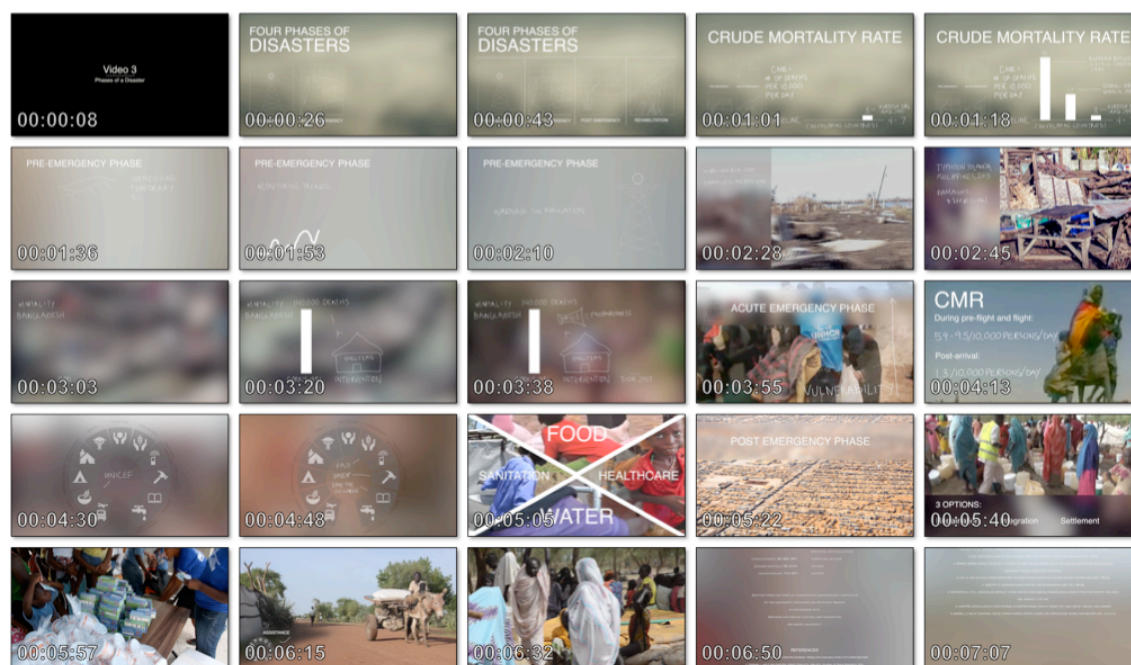


FIGURE 6: SCREENSHOTS OF VIDEO 3 – PHASES OF DISASTERS

Video 4: Complex Humanitarian Emergencies: Causes and Characteristics

Vimeo link: <https://vimeo.com/91347275>

This video is an introductory video on CHEs and is narrated by Dr. Shahpar. It begins by providing a definition of CHEs and an introduction to the causes and impacts. It then goes on to provide a brief background on armed conflict, including characteristics of armed conflict, an animated map of all conflicts since 1946, statistics on battle deaths and civilian casualties over the years, and the nature of civilian deaths (mostly from preventable diseases). The video then provides footage and statistics on civilian deaths in the Democratic Republic of Congo as an example of a country that has experienced high levels of civilian deaths due to indirect causes of war (e.g. infectious diseases). Next the video describes different types of CHE situations (politically driven resource wars, human rights abuses and civil unrest, and genocide) and the impacts associated with CHEs (population displacement, disruption of essential services, poverty and economic collapse, catastrophic environmental and public health events, human suffering and excess mortality). The video concludes by demonstrating how an ineffective humanitarian response can worsen an emergency situation and lead to great human misery. Through out the video the above content is visually represented using video footage and photographs of varying past and present CHEs (e.g. Sudanese refugees in Chad, the Rwandan genocide of 1994, and Ukrainian protests in early 2014) and animated charts and graphs. For more detailed information on content, see the screen captures provided below and *Appendix III*.

Video 4 - CHEs - Causes and Characteristics.mov

Resolution: 1920x1080

Filesize: 548.8 MB

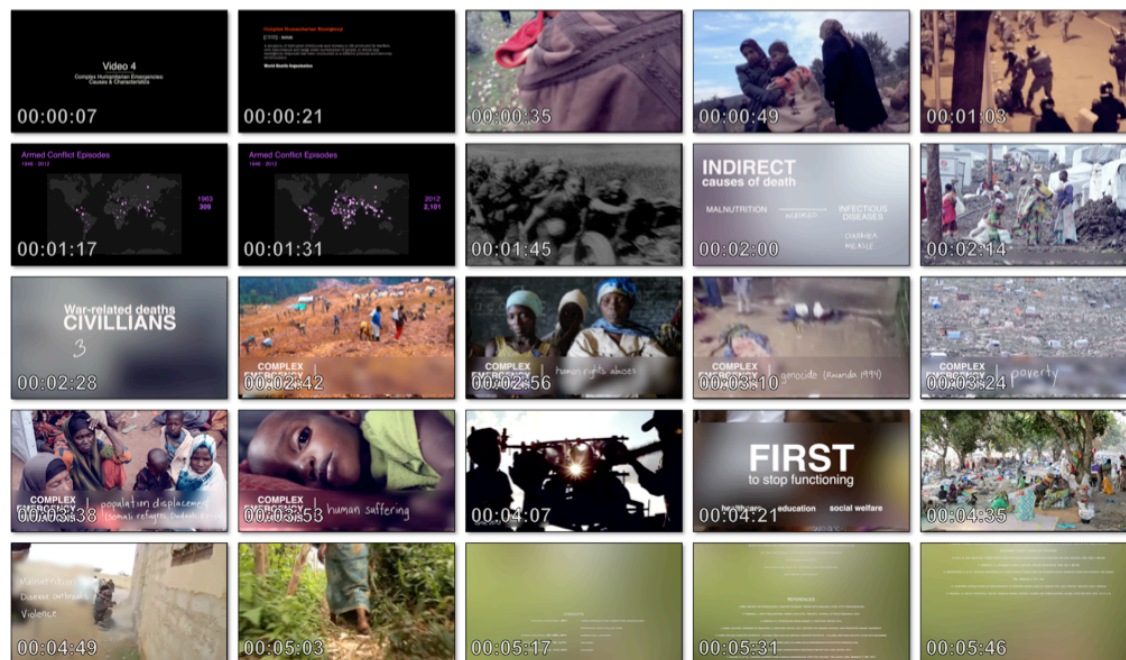


FIGURE 7: SCREENSHOTS OF VIDEO 4 – COMPLEX HUMANITARIAN EMERGENCIES: CAUSES AND CHARACTERISTICS

Video 5: Complex Humanitarian Emergencies: Underlying Factors

Vimeo link: <https://vimeo.com/91652879>

This video dives deeper into the underlying political, economic, social and cultural factors that contribute to CHEs. It begins with an animated version of one of Dr. Anderson’s graphs from his lecture notes, exhibiting these factors. It then breaks each factor down and explains them in more detail. The video begins by explaining the importance of understanding the underlying political factors (corruption, criminalization and suspension of laws) that can predict the potential for an ongoing crisis as well as dictate appropriate political solutions. The video then moves on to economic factors such as overpopulation, environmental degradation, and competition for valuable resources and the contribution these factors have on the prevalence of global conflict. Next the video describes the social factors that complicate the lives of displaced populations. The video provides demographic statistics for refugee populations and explains how these

demographic makeups can complicate the refugee habitat. The video concludes with an explanation of cultural factors such as discrimination and ethnic hostilities. It provides an animated chart of the ethnic makeup of the Nakivale Refugee Settlement in Uganda, which houses refugees from nine different countries, including countries that are still at war with one another, and describes how these ethnic hostilities remain within the boundaries of the camp. For more detailed information on content, see the screen captures provided below and *Appendix III*.

Video 5 - CHEs - Underlying Factors.mov

Resolution: 1920x1080

Filesize: 485.8 MB

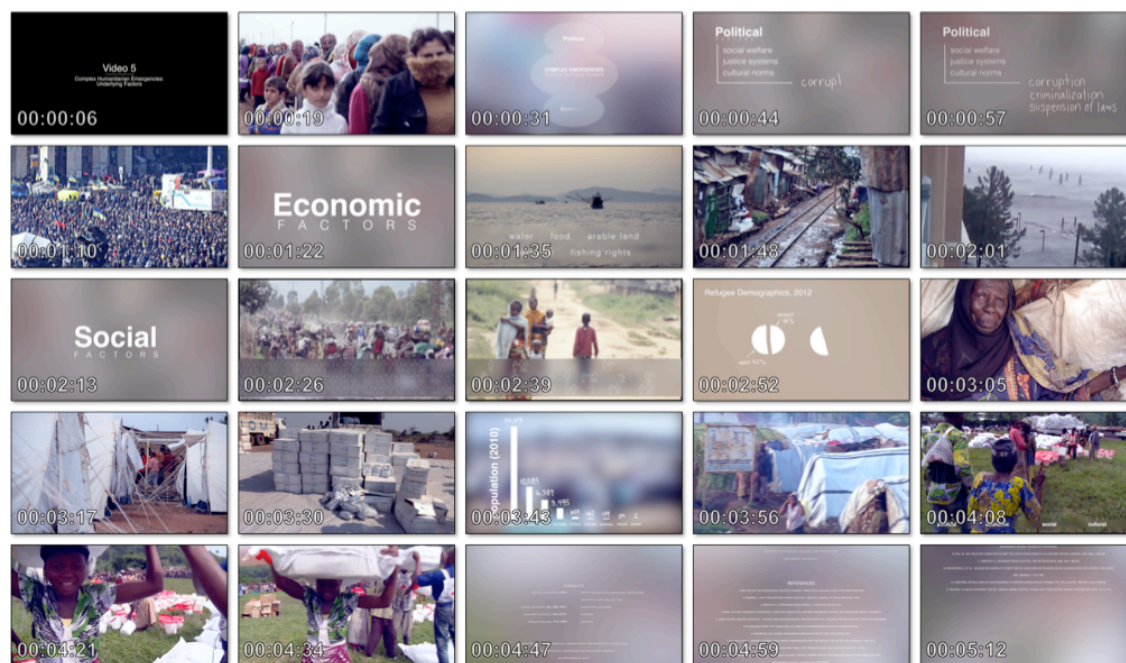


FIGURE 8: SCREENSHOTS OF VIDEO 5 – COMPLEX HUMANITARIAN EMERGENCIES: UNDERLYING FACTORS

CHAPTER 5

DISCUSSION AND RECOMMENDATIONS

The purpose of this project was to convert ERRB's introductory lecture on disasters into short, video tutorials. These videos will be used to solicit funding to continue the development of an online curriculum for CHEs. This online curriculum will serve to meet the three objectives of ERRB:

1. Decrease time commitment of ERRB employees in teaching the CHE curriculum at Emory University;
2. Reduce the travel time and resources currently devoted to trainings internationally; and
3. Extend the reach of its trainings to humanitarian workers who lack the time and/or resources to obtain the education they need to be more effective in emergency response.

Dr. Anderson's introductory lecture on disasters and the corresponding lecture notes were used to develop storyboards for each video, including video script and narration. Visual content was then developed to illustrate the didactic content of each video. Multiple types of content were used including video footage of disasters, text, animated charts and graphs, illustrated graphics, photographs and maps. For this project, five videos were created:

- Video 1. Introduction to Disasters
- Video 2. Types of Disasters
- Video 3. Phases of Disasters
- Video 4. Complex Humanitarian Emergencies: Causes and Characteristics
- Video 5. Complex Humanitarian Emergencies: Underlying Factors

The first video, *Introduction to Disasters*, is a documentary style video that can be used for both educational and promotional purposes. This is the only video that is not narrated. All of the information is presented as either text or animated infographics over real disaster footage and background music. The other four videos are more instructional and, with each video, become increasingly focused on the subject matter of the curriculum (CHEs).

The videos are direct adaptations of the introductory lectures given by Dr. Anderson, which is part of the CHE curriculum offered by the CDC at Emory University. Each course within the curriculum has been evaluated annually since the inception of the program (2010) and has been successful at instructing students and providing them with useful skills for emergency response work. The manner in which the content should be exhibited for the online curriculum still needs to be developed and evaluated (discussed in more detail below).

The next step will be to send the completed videos up the chain of command at CDC to solicit approval for public dissemination and funding for further development of the curriculum. Until then, the videos will continue to be privately housed on the *Vimeo* website.

FINALIZE ERRB EDUCATIONAL PRIORITIES

Appendix I is an evaluation of the current materials available online that cover topics related to health and humanitarian response. ERRB can use this table to identify the following:

- Priority elements for inclusion in the online curriculum (e.g. application of skills, interactivity, asynchronous learning);
- Gaps in the existing available materials that could be filled by ERRB's curriculum; and
- Available materials that could be used as additional resources for ERRB's curriculum (e.g. *The Sphere Handbook in Action*).

This process will illuminate the types of content that need to be created by ERRB for inclusion in the online curriculum and will prevent duplication of instructional materials that are already adequately provided online.

EVALUATION OF CURRENT MATERIALS

Before the online curriculum is developed further an evaluation of the current materials is recommended. Since the materials are being developed for online dissemination, an online evaluation would be the most appropriate method. One way of doing this could be to draw a random sample of students from a list of all students in RSPH departments that would most likely not have a student body with CHE experience (i.e. Behavioral Sciences and Health Education [BSHE] and Health Policy and Management [HPM]). The online materials could be emailed to the selected students with instructions for the evaluation. The student could first be evaluated on their current knowledge of the content, watch the video, and then be evaluated on their knowledge after watching the video. Another way of evaluating the instructional success of the video would be to have the students fill out a worksheet as they are watching the video and ask how many times they had to watch the video in order to acquire all of the knowledge. A student at RSPH could perform this evaluation as a thesis project.

CONDUCT NEEDS ASSESSMENTS

It would be useful to conduct an assessment of educational needs of humanitarian workers in the field in order to ensure the curriculum reaches its target audience and provides content relevant to their needs. The assessment could identify the following:

- Access issues;
- Barriers to obtaining relevant training;
- Topics of interest for training; and

- Additional gaps in available training resources.

Another way of assessing the needs of humanitarian workers would be to facilitate focus group discussions for varying levels of humanitarian worker (students, early-career professionals, mid-career professionals) and from varying global settings. These assessments could be facilitated in partnership with RSPH's Center for Public Health Training in Complex Humanitarian Emergencies (CPHTCHE) as either theses projects for students in CPHTCHE or as class projects. There is currently a course at RSPH, *BSHE 524: Community Needs Assessment*, which could perform the needs assessment as a class project. The focus group discussions could be carried out as a project for the *Qualitative Research Methods for Global Health (GH 522)*.

COMPLETION OF MODULES 1 AND 2

With the development of additional resources and materials, all five videos can be used as an introductory module for the online curriculum. Approval for dissemination can be a lengthy process at the CDC. While this process is underway, I recommend that one more video be produced to complete the introductory module on disasters (see below). Once this module is completed I recommend field-testing the videos for their instructional quality (see above). It may also be useful to do more extensive research on effective online educational materials at this time.

After field-testing has been completed and the instructional quality of the first six videos has been perfected, I recommend producing a second introductory module on humanitarian relief (also covered in Dr. Anderson's introductory lecture), which would consist of eleven videos.

Below is my recommendation for these two introductory modules:

Module 1. Introduction to Disasters

- Video 1. Introduction to Disasters
- Video 2. Types of Disasters
- Video 3. Phases of Disasters
- Video 4. Complex Humanitarian Emergencies: Causes and Characteristics
- Video 5. Complex Humanitarian Emergencies: Underlying Factors
- Video 6. Displacement and Displaced Persons

Module 2. Introduction to Humanitarian Relief

- Video 1. Introduction to Humanitarian Relief
- Video 2. Measles Immunization
- Video 3. Water and Sanitation
- Video 4. Food and Nutrition
- Video 5. Shelter and Site Planning
- Video 6. Healthcare During Emergency Phase
- Video 7. Control of Communicable Diseases and Epidemics
- Video 8. Public Health Surveillance
- Video 9. Human Resources and Training
- Video 10. Coordination

Additional resources should also be developed to accompany these modules such as readings, case scenarios, and assessments. Once these additional resources are developed and dissemination has been approved, a massive open online course (MOOC) website can be developed to disseminate the online modules. MOOC is a popular platform for dissemination of online curriculum, providing open access to online content. Many of the current offerings

mentioned above use this platform (e.g. *Sphere Handbook in Action* and *Coursera*). As mentioned above, *Moodle* (www.moodle.org), currently used by the World Bank, is a free web application that allows educators to develop online learning sites. This would be a great platform for the dissemination of the CHE curriculum.

COMPLETION OF THE ONLINE CURRICULUM

The conceptual framework presented in Chapter 2, Figure 3, can serve as a model for the curriculum development. All video modules and the corresponding resources can be used to educate learners on foundational/introductory concepts. These foundational modules can be completed outside of the classroom, which would relieve much of the teaching duties required by ERRB technical experts.

ALTERNATIVE METHODS OF DISTRIBUTION

Although Internet is becoming increasingly accessible, there are still many regions of the world that lack access. For this reason, ERRB should research alternative methods of distribution. One alternative could be to package the curriculum as a DVD set and include additional resources such as readings and case study worksheets.

PARTNERSHIP WITH THE EMORY CENTER FOR PUBLIC HEALTH TRAINING IN COMPLEX

HUMANITARIAN EMERGENCIES

I recommend that ERRB partner with Emory's new Center for Public Health Training in Complex Humanitarian Emergencies (CPHTCHE) in developing and disseminating the CHE curriculum, especially if CDC decides not to fund the further development of the curriculum. CPHTCHE could be a pipeline for knowledgeable faculty who could lend educational expertise in curriculum development, as well as student researchers that could perform the evaluations and

needs assessments mentioned above as either thesis projects or CHE Research Group projects. This partnership will especially be beneficial in determining the use of these materials for the Emory CHE certificate program.

INCORPORATION OF ONLINE CURRICULUM IN EMORY CHE CERTIFICATE PROGRAM

The two completed modules could serve as two of the foundational building blocks of the curriculum. These modules could be completed as a pre-assignment before the *Health in Complex Humanitarian Emergencies* course. Once the online curriculum is developed, it could also be used as a pre-assignment for CHE courses at Emory. Instructors could require the relevant foundational/introductory modules to be completed before a CHE course begins. Class time could then be used for instruction on more complex concepts and case studies (application of knowledge). This would shorten the amount of class time required to complete the course and reduce the burden on ERRB technical experts.

DEVELOP A COMMUNICATION STRATEGY

It may be beneficial for ERRB to develop a cohesive communication strategy to complement the online curriculum. In 2008, the Bill & Melinda Gates Foundation released a document entitled *A New Way to Talk About Global Health*. The document discussed the need for a more positive approach to global health messaging in order to inspire rather than tire donors and practitioners. It suggested the following themes for global health communications:

1. Our global health investments are delivering real results.
2. We're empowering people to lead productive, self-sustaining lives.
3. Our efforts are appreciated.
4. We're just getting started.
5. We can't do this on our own. We need your help.

Considering the weightiness of topics related to CHEs, it might be good to adapt this type of communication strategy to the CHE curriculum. Although much of the curriculum is very technical, these messages could be delivered in case studies and other examples of the concepts being discussed. For example, a case study on the work ERRB did in the Hepatitis E outbreak in Sudan and the consequent control measures introduced could demonstrate that ERRB's work is delivering real results.

Conclusion

The result of this SSP is an introductory module on CHEs that includes five videos. The first video introduces the topic of disasters, starting with the frequency of natural and complex disasters, providing a definition of disasters, and driving home the importance of effective response efforts. The next video discusses the major categories of disasters (sudden-onset, slow-onset, epidemics, industrial/technological and complex emergencies) in more detail, providing examples of the types of impacts these disasters have on the affected population. The third video guides the learner through the four different phases of a disaster: the pre-emergency phase, the acute emergency phase, the post-emergency phase and the rehabilitation/reconstruction phase. Each phase is discussed in detail including the main attributes of each phase, the impact each phase has on the surrounding population and actions that can be taken to minimize impact. The fourth video discusses the causes and characteristics of CHEs, providing a brief background on armed conflict, including statistics and characteristics of armed conflict and civilian versus battle related deaths. It then discusses in more detail the impacts of CHEs. Finally, video five discusses the underlying political, economic, social and cultural factors that contribute to CHEs. The crux of this video is that by understanding these underlying factors, practitioners can forecast the nature of the impact on the population as well as dictate an appropriate humanitarian response.

These videos are the first step to providing a much-needed online training for humanitarian response in complex humanitarian disasters. Chapter 2 discussed the availability of online educational materials on health and humanitarian response and made clear the lack of materials and technical training on humanitarian response in CHEs. Chapter 3 highlighted the methods used for the creation of the videos, the deliverable for this SSP, which provides valuable instruction on the completion of future modules and the online curriculum. Chapter 4 discussed the deliverables in detail and provided screenshots of the final videos. Finally, a list of recommendations was presented in Chapter 5 that can serve as a guide for the development of a comprehensive online curriculum on CHEs.

Combining the vulnerability of many countries with the rising frequency of disasters, we come to understand that there is an urgent need to build the capacity of these vulnerable nations to both prepare themselves for disaster situations and create a robust system of response. The first step to building this capacity is providing a strong foundational knowledge of the many types and causes of disasters, and the ways that each type can influence and exacerbate the other. This is especially true for those working in CHEs. The name says it all: they are complex. They are often composed of weakened political systems and broken social structures combined with natural disasters such as famine or adverse climactic events. An understanding of this web is essential in creating an effective response. There is a fine line between disaster and emergency, and often this line is drawn by the response effort. The response effort can be the difference between providing life-sustaining assistance and causing great human misery. This is why it is so important to have an international corps of well-trained humanitarian practitioners. These videos are the first step in developing a curriculum that can serve to educate this corps and build the capacity of the international community to prepare for and respond to disasters.

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2.7.1.1 Rights of Refugees and Internally Displaced Persons (IDPs) http://www.hrea.org/index.php?base_id=1428&language_id=1	\$575	Unknown	3-5 hours	Asynchronous	<ul style="list-style-type: none"> Refugees IDPs 	In-depth	Unknown	Unknown	<ul style="list-style-type: none"> Interactive presentation Video Podcasts Additional readings 	Unknown	Unknown
2.7.2 Certificate Courses											
2.7.2.1 Forced Migration http://www.hrea.org/index.php?base_id=1448&language_id=1	\$575	Unknown	6 weeks	Synchronous	<ul style="list-style-type: none"> Refugee protection Human rights law Refugee law Humanitarian aid delivery 	In-depth	Unknown	Highly	<ul style="list-style-type: none"> Online lectures Required readings 	<ul style="list-style-type: none"> Quizzes Writing assignment 	Certificate of Participation
2.7.2.2 International Humanitarian Law http://www.hrea.org/index.php?base_id=1340&language_id=1	\$575	Unknown	6 weeks	Synchronous	<ul style="list-style-type: none"> International humanitarian law 	Introductory	Unknown	Highly	<ul style="list-style-type: none"> Online lectures Required readings 	<ul style="list-style-type: none"> Quizzes Writing assignment 	Certificate of Participation
2.7.2.3 Armed Conflict, Human Rights and Humanitarian Law http://www.hrea.org/index.php?base_id=1337	\$575	Unknown	6 weeks	Synchronous	<ul style="list-style-type: none"> The changing nature of warfare and how it challenges the law; The role of law in contemporary situations of armed conflict; The role of human rights in armed conflict and their interplay with international humanitarian law; Current challenges and trends in the protection of civilians; The international criminal jurisdiction for war crimes and crimes against humanity; The place of human rights and humanitarian law in multi-national peace and stability operations; and The role of human rights and humanitarian law for humanitarian actors working in conflict zones. 	In-depth	Unknown	Highly	<ul style="list-style-type: none"> Online lectures Required readings 	<ul style="list-style-type: none"> Quizzes Writing assignment 	Certificate of Participation
2.7.2.4 Psychosocial Consequences of Migration and Asylum http://www.hrea.org/index.php?base_id=1428&language_id=1	\$575	Unknown	6 weeks	Synchronous	<ul style="list-style-type: none"> Mental health issues for refugees and humanitarian workers 	In-depth	Unknown	Highly	<ul style="list-style-type: none"> Online lectures Required readings 	<ul style="list-style-type: none"> Quizzes Writing assignment 	Certificate of Participation
2.8 Cornerstone on Demand Foundation											
2.8.1 DisasterReady.org	Free	Multiple courses	Varied	Asynchronous	<ul style="list-style-type: none"> Humanitarian Standards Protection Program/Operations Management & Leadership Staff Safety and Security Staff Welfare Soft-skills 	Introductory	None	Highly	<ul style="list-style-type: none"> Interactive presentation Narration Photos Videos Animated graphics and charts Links to additional resources 	Quizzes	Unknown
2.9 International Federation of Red Cross and Red Crescent Societies (IFRC)											
2.9.1 Learning Platform http://www.ifrc.org/en/get-involved/learning-education-training/learning-platform/	Free	Multiple courses	30-45 minutes per course	Asynchronous	<ul style="list-style-type: none"> Security Management Cultural Awareness Humanitarian Pandemic Preparedness Operational Alliances Professionalising the Humanitarian Sector International Response Laws, Rules and Principles Cash Transfer Programming Project/Program Planning Community Based Health and First Aid Humanitarian Diplomacy 	Introductory	Yes	High	<ul style="list-style-type: none"> Interactive website Narration Animated graphics Video Photos 	<ul style="list-style-type: none"> Quizzes Final evaluation 	Certificate of Completion
2.10.3 Programming for Infant and Young Child Feeding (IYCF) http://www.nutritionworks.cornell.edu/UNICEF/about/	Free	Single course 12 modules	Unknown	Asynchronous	<ul style="list-style-type: none"> Undernutrition basics Role of IYCF in child survival, growth and development Breastfeeding Complementary feeding programming Comprehensive IYCF programming Interventions for improving breastfeeding Interventions for improving complementary feeding IYCF in emergencies IYCF in the context of HIV/AIDS 	In-depth	Unknown	Medium	<ul style="list-style-type: none"> Panopto-style presentation including video of lecturer Text Additional resources 	<ul style="list-style-type: none"> Evaluation at the end of each module Final evaluation 	<ul style="list-style-type: none"> Certificate of Completion including 12 continuing education credits
3. Distance Learning Certificates											
3.1 Friedman School of Nutrition Science and Policy, Tufts University											
3.1.1 Evidence-based Humanitarian Assistance Certificate http://www.nutrition.tufts.edu/academics/certificate-programs/evidence-based-humanitarian-assistance-certificate	\$7,260	3 courses	<ul style="list-style-type: none"> One year 1 semester (16 weeks) per course 8-12 hours per week 	Synchronous	<ul style="list-style-type: none"> Data-driven needs assessments in food security and nutrition Monitoring and evaluation 	In-depth	Unknown	Unknown	Unknown	<ul style="list-style-type: none"> Midterm Final evaluation 	Certificate of Completion
3.2 International Federation of Red Cross and Red Crescent Societies											
3.2.1 Online certificate programme in disaster management https://www.ifrc.org/en/get-involved/learning-education-training/certified-professional-development-courses/online-certificate-programme-in-disaster-management/	\$1,980	Single course 7 modules	One year	Synchronous	<ul style="list-style-type: none"> Disaster reduction Disaster response Post-disaster recovery 	In-depth	Unknown	Medium	Unknown	Unknown	Certificate of Completion
3.2.2 Postgraduate Certificate in Global Health http://www.ifrc.org/en/get-involved/learning/opportunities/online-post-graduate-certificate-programme-in-global-health/	\$3,450	4 15-credit classes	One year	Unknown	<ul style="list-style-type: none"> Emergency medicine Disaster management Community health Anthropology Sociology of health and illness 	In-depth	Unknown	Unknown	Unknown	Unknown	Postgraduate Certificate

APPENDIX II - VIDEO STORYBOARDS

Video 1: Introduction to Disasters			
FRAME	SCRIPT	VISUAL	SOURCE
1	In the past decade	Disaster footage	Archive.org
Narration:	<i>None</i>		
2	1,818 floods [1]	Flood footage	Archive.org
Narration:	<i>None</i>		
3	298 earthquakes [1]	Earthquake footage	Archive.org
Narration:	<i>None</i>		
4	169 droughts [1]	Drought footage	VideoBlocks, archive.org
Narration:	<i>None</i>		
5	339 armed conflicts [2]	Conflict footage	Archive.org
Narration:	<i>None</i>		
6	With climate change, population growth, urbanization and cutting of the earth's forests, the frequency of disasters is on the rise [1] [3]	Disaster footage being taken over by animated graph	VideoBlocks, original animation
Narration:	<i>None</i>		
7	We often think of disasters as freak events	Disaster footage	Archive.org
Narration:	<i>None</i>		

8	But on a global level They are fairly common and partly predictable.[3]	Disaster footage	Archive.org
Narration:	<i>None</i>		
9	An average of 600 disasters	Disaster footage	Archive.org
Narration:	<i>None</i>		
10	Resulting 120,000 deaths	Disaster footage	Archive.org
Narration:	<i>None</i>		
11	And 164 million lives affected	Refugee camp	VideoBlocks
Narration:	<i>None</i>		
12	Per year [1]		
Narration:	<i>None</i>		
13	Disasters arise	Disaster footage	Archive.org
Narration:	<i>None</i>		
14	By forces of nature	Find better tsunami footage	
Narration:	<i>None</i>		
15	Or man	War footage	Archive.org
Narration:	<i>None</i>		
16	What distinguishes one disaster from another is both the magnitude of the event	Disaster footage	Archive.org
Narration:	<i>None</i>		
17	And how we respond [4]	Footage of response workers	Archive.org
Narration:	<i>None</i>		

18	A disaster overwhelms	Background footage	Archive.org
Narration:	<i>None</i>		
19	Local people's ability to respond [3]		
Narration:	<i>None</i>		
20	Leading to a request		
Narration:	<i>None</i>		
21	For outside	Footage of people asking for help	Archive.org
Narration:	<i>None</i>		
22	Assistance [1]		
Narration:	<i>None</i>		
23	Severity of a disaster depends on the magnitude of the event	Volcano erupting	VideoBlocks
Narration:	<i>None</i>		
24	And vulnerability of the population	African village	Archive.org
Narration:	<i>None</i>		
25	Declining health, infrastructure, education, social services, environmental degradation	Refugees	Archive.org
Narration:	<i>None</i>		
26	All contribute		
Narration:	<i>None</i>		
27	To increased harm and poorer [slower] recovery [4] [3]	Refugees	Archive.org
Narration:	<i>None</i>		
28	Poor countries are often affected the most [1]	Animated graph	Original

Narration:			
29	Top 10 countries for lives lost		
Narration:			
30	Different types of disasters affect different parts of the world	Maps of high frequency disasters zones for: <ul style="list-style-type: none"> • Flood • Cyclone • Drought • Conflict 	Original maps [5]
Narration:			
31	Lives lost since 1980: 3.4 Million <ul style="list-style-type: none"> • Earthquake: 866,000 • CHE: 610,000 • Drought: 562,000 • Storm: 438,000 • Flood: 220,000 [1] 	Animated graphic	Original
Narration:			
32	Cost?	Money footage	VideoBlocks
Narration:	<i>None</i>		
33	17.9 billion usd spent on humanitarian assistance in 2012 [6]		
Narration:			
34	Unmet needs: 3.3 billion [6]		
Narration:			

35	Our goals are to reduce/prevent injury and death, stabilize the affected population and speed recovery [3]	Footage: humanitarian workers	Archive.org, VideoBlocks
Narration:	<i>None</i>		
Video 2: Types of Disasters			
FRAME	SCRIPT	VISUAL	SOURCE
1		Frequency maps of disasters	Original
Narration:	<i>There are many types of disasters, which occur with varying frequency and in varying regions of the world. Some disasters strike rapidly, while other disasters begin with low levels of violence or deteriorating social conditions</i>		
2	There are five major categories of disasters	Disaster footage broken into five types	Archive.org, VideoBlocks
Narration:	<i>Disasters can be classified under five major categories,</i>		
3	All differing in consequences		
Narration:	<i>All differing in consequences: Sudden-onset disasters, slow-onset hazards, industrial/technological events, epidemics and armed conflicts</i>		
4	<p>Sudden-onset</p> <ul style="list-style-type: none"> Floods, tropical storms, tsunamis - Disease outbreak, food shortages, displacement but few deaths and injuries Earthquakes, volcanic eruptions – many deaths, many injuries 	<p>Title: Sudden-onset, etc</p> <p>Flash subtitle: flood, famine, etc with corresponding footage</p> <p>Consequences for each type of disaster flash in and out 1 by 1 (mark's graph)</p>	<p>Archive.org, VideoBlocks</p> <p>Search:</p> <p>Locust swarm</p> <p>Desert locust</p> <p>Dry riverbed</p>

Narration:	<i>Sudden-onset disasters include floods, earthquakes, tsunamis or tidal waves, tropical storms, volcanic eruptions, and landslides. As their name implies, sudden-onset disasters occur swiftly and often without warning. Floods are the most frequent type of natural disaster associated with sudden migration of large populations and food shortages. When these disasters occur, they frequently cause thousands of deaths. Earthquakes cause the greatest number of deaths and overwhelming structural damage</i>		
5	<p>Slow-onset</p> <ul style="list-style-type: none"> • Drought, - overwhelming food shortages, displacement, many deaths, few injuries, possible outbreaks • Famine • Pest infestation • Deforestation 	See above	
Narration:	<i>Slow-onset disasters include droughts, famine, environmental degradation, deforestation (loss of trees and vegetation), pest infestation and desertification (conversion of arable lands to deserts). These disasters are usually the result of adverse weather conditions combined with poor land use. Traditionally, African communities, particularly the poor, have been at increased risk of these types of disasters because of poverty and social inequality, environmental degradation from poor land use and rapid population growth.</i>		
6	<p>Industrial/technological</p> <ul style="list-style-type: none"> • Pollution • Fires • Spillages • Explosions 	See above	
Narration:	<i>Industrial/technological disasters result from a society's industrial and technological activities that lead to pollution, spillage, explosions, and fires. They may occur because of poor planning and construction of manmade facilities (buildings, factories, etc.) or from neglect of safety procedures. Sudden-onset disasters such as earthquakes, floods, and terrorist acts may trigger secondary disasters such as fires or pollution. Industrial events have the potential to cause large-scale loss of life and structural damage, especially in developing countries with unregulated industrialization, and inadequate safety standards and disaster response capacity.</i>		
7	<p>Epidemic diseases</p> <ul style="list-style-type: none"> • Water-borne • Food-borne • Vector-borne 	<p>Water-borne – show footage of a cholera clinic</p> <p>Food-borne – poison symbol</p> <p>Vector-borne – show footage of a mosquito</p>	Archive.org, VideoBlocks

Narration:	<i>Epidemic diseases are those diseases that normally do not occur in stable communities but have the potential to spread under certain conditions. Examples of epidemic diseases that commonly threaten displaced populations include cholera, measles, dysentery, respiratory infections, malaria, and, increasingly, HIV. After a major disaster, the risk of epidemic diseases increases mainly as a result of overcrowding and unhygienic conditions.</i>		
8	<p>Complex Emergencies [4]</p> <p>Many deaths and severe injuries, outbreaks, food shortages and displacement are common</p> <ul style="list-style-type: none"> • War • Civil strife • Armed aggression 		Archive.org, VideoBlocks
Narration:	<i>Complex emergencies are usually man-made, with multiple contributing factors. They often follow wars between states, internal conflict, and, increasingly, terrorist acts. Massive population displacements may occur due to lack of food, insecurity, and increasing death rates. Poverty and risk of conflict go hand in hand. Civilians that are not part of the conflicts end up bearing the majority of casualties because they are often targets of both sides of the conflict.</i>		
9	The impact on people's lives can be severe [4] [3]	Footage of evacuation shelters and refugee camps	Archive.org
Narration:	<i>The impact on people's lives can be severe</i>		
10		Animated graph similar to Mark's	
Narration:	<i>Affecting the availability of basic needs</i>		
11	<p>When we respond effectively:</p> <ul style="list-style-type: none"> • Excess mortality is avoided or prevented • Epidemics are avoided or cut short • Families remain intact • People and communities rebuild their lives and livelihoods • Emotional and economic resilience is enhanced 	Over blurred screen	
Narration:	<i>Read above</i>		

12	When we do not respond effectively: <ul style="list-style-type: none"> • People lose a sense of purpose and direction • Children don't thrive • Epidemics go unrecognized and uninterrupted • Additional lives are lost • Households are dissolved • Unplanned migration accelerates • Settlements are established in vulnerable areas 	Corresponding photographs/footage for each impact	Bigstock, videoblocks and original content
Narration:	<i>Read above</i>		
13	A new norm of poorer living conditions is established	Video footage of slums	Videoblocks
Narration:	<i>Read above</i>		
1	How we respond	Video footage of well maintained refugee camp	Videoblocks
Narration:	<i>Read above</i>		
2	Can make all the difference		
Narration:	<i>Read above</i>		
Video 3: Phases of Disasters			
FRAME	SCRIPT	VISUAL	SOURCE
1		Time lapse of clouds	
Narration:	<i>Disaster situations are dynamic, always changing and demanding a change in response.</i>		

2	<ul style="list-style-type: none"> • Pre-Emergency • Acute Emergency • Post emergency • Rehabilitation or reconstruction 		
Narration:	<i>There are four generally recognized phases of disasters: Pre-emergency, acute emergency, post emergency, and rehabilitation or reconstruction.</i>		
3			
Narration:	<i>Even though the evolving situation may appear continuous, recognizing the end of a particular phase</i>		
4			
Narration:	<i>May help predict new needs and plan better responses.</i>		
5	Crude Mortality Rate (CMR)	[Phases animation from above continues]	
Narration:	<i>Both the severity of the disaster and the phase can be determined by measuring the Crude Mortality Rate, or CMR.</i>		
6	# deaths /10,000/day	Write equation for CMR below heading over black screen	
Narration:	<i>Which is the number of deaths per 10,000 persons per day.</i>		
7	Developing countries: 0.4-0.7 deaths/10,000/day	Original footage of Rwanda as background	
Narration:	<i>Typical baseline CMR in the developing world is .4 to .7 deaths/10,000/day.</i>		
8			
Narration:	<i>In the early phase of disasters the CMR can be extraordinarily high;</i>		
9	<ul style="list-style-type: none"> • Kurdish IDPs, Iraq, May 1991: 3/10,000/day • Somali IDPs, Somalia, 16.8/10,000/day • Rwandan Refugees 4 Katale Camp, DRC August 1994: 	Blur screen moves up: Animated graph from baseline to Rwanda	Original

	41.3/10,000/day • Angolan IDPs, Angola, February 2002: 3.6/10,000/day [7]	crisis	
Narration:	<i>During the first month after the influx of Rwandan refugees into eastern Zaire, the CMR was 40 to 60 times</i>		
10		CMR for numerous conflicts	
Narration:	<i>The baseline rate for that population.</i>		
11	Pre-emergency Phase	Over footage of people preparing for a disaster: early warning systems, buying food, etc.	
Narration:	<i>The period before the disaster strikes may be used to assess how often a particular community</i>		
12			
Narration:	<i>is exposed to different risks, and how good is their preparedness. Protective actions can be</i>		
13	<ul style="list-style-type: none"> • Identifying temporary shelters • Stocking basic supplies • Planning evacuation routes • Monitoring trends • Warning the population 	Blur screen moves up: Animation pictures of: <ul style="list-style-type: none"> • Cots • Gallons of water • Evacuation map • 	
Narration:	<i>Undertaken based on disaster warnings and the available resources.</i>		

14		Footage of evacuation signs	
Narration:	<i>Preparedness can greatly reduce the number of lives lost during a disaster.</i>		
15		News footage of hurricane Rita, or any hurricane	
Narration:	<i>In 2005 the southern United States was devastated by the class 5 hurricane Rita,</i>		
16		The aftermath	
Narration:	<i>Sustaining damages estimated at \$10 billion dollars. Although this hurricane</i>		
17	Hurricane Rita Damages: \$10 billion Fatalities: 7	Blur screen moves up	
Narration:	<i>Was immensely destructive, only seven deaths were reported.[8]</i>		
18		News footage of Typhoon Yolanda and aftermath	
Narration:	<i>This is in stark contrast to Typhoon Yolanda/Haiyan, another category 5 storm, which hit the Philippines in late 2013</i>		
19	Typhoon Yolanda Damages: \$800 million Fatalities: 6000+	Blur screen moves up	
Narration:	<i>And produced over \$800 million in damages and more than 6,000 deaths.[9]</i>		
20	Bangladesh <ul style="list-style-type: none"> • 1991 Cyclone Gorky mortality: 140,000 	Footage: Bangladeshi cyclone shelter drills	

Narration:	<i>Another example took place in Bangladesh. Cyclone Gorky, a category IV storm, hit Bangladesh in 1991, causing an estimated 140,000 deaths.</i>		
21	Bangladesh <ul style="list-style-type: none"> • Intervention 	Blur screen moves up: Animated graph of before/after mortality	
Narration:	<i>Soon after cyclone Gorky, the Bangladesh government began building cyclone shelters that doubled as schools and facilitated monthly evacuation drills.</i>		
22		Footage: Bangladesh shelters Blur screen moves up, shows decrease in mortality	
Narration:	<i>Preparedness soon became 2nd nature for Bangladeshis. The results were striking.</i>		
23	2007 Cyclone Sidr mortality: 3,046	Footage: Bangladesh shelters Blur screen moves up, shows decrease in mortality	
Narration:	<i>In 2007, Cyclone Sidr, another category IV storm, hit but mortality was substantially lower. This decrease in mortality is largely considered to be a product of their preparedness activities. [10]</i>		
24	Acute Emergency Phase	Blur screen over footage: Darfur refugees during flight being burned, Janjaweed	
Narration:	<i>The acute emergency phase begins immediately after the impact of the disaster</i>		

25	CMR during flight and pre-flight: 5.9 to 9.5 [11]	Blur screen: mortality statistics for flight	
Narration:	<i>This is the moment of highest vulnerability. During the peak of violence in Darfur in 2003 to 2004, CMRs for IDPs were 5.9 to 9.5/10,000/day before arrival at displacement sites. Can also add Somalia information</i>		
26		Footage: Darfur footage continues Animation: Graph showing drop in CMR	
Narration:	<i>Post-arrival CMRs dropped to 1.3/10,000/day. [11]</i>		
27		Footage: UNHCR trucks hauling in supplies Animation: Cluster Logos	
Narration:	<i>This phase is marked by intense, often reactive activities by many humanitarian agencies</i>		
28			
Narration:	<i>Responding to media reports of very high death rates (may be 5-60 times the normal death rate).</i>		
29		Footage: Feeding people, building shelters	
Narration:	<i>The priority is to keep the affected population alive.</i>		
30		Footage: UN peacekeepers	
Narration:	<i>Security may be a major concern in complex emergency situations.</i>		
31		Animation over aerial shot of refugee camp	

		pointing out food distribution tent, latrines, med tent, water pump	
Narration:	<i>Critical services such as providing food, water, sanitation, basic health care and</i>		
32		Draw circle around all and label security, then fade into UN peacekeepers	
Narration:	<i>protection from violence and harassment are quickly organized.</i>		
33		Blur screen moves up: Draw 1/10,000 persons/ day and arrow down	
Narration:	<i>This phase ends when crude death rates fall below 1/10,000 persons/day.</i>		
34	Post Emergency Phase	Footage: refugee camps becoming communities, Palestinian camps, western Sahara. Haitian shelters become permanent. Possibly create time lapse of transition by gathering photos of same area over time.	

Narration:	<i>During the post emergency phase, the population movement usually slows down.</i>		
35		Footage: latrines, water pump, etc.	
Narration:	<i>This enables critical services to be properly established and maintained.</i>		
36		Footage: refugees waiting in camp	
Narration:	<i>The displaced population waits for "something to happen" so that they can</i>		
37	<ul style="list-style-type: none"> • Repatriation • Integration • Settlement 	Blur screen moves up	
Narration:	<i>Return home, integrate with the local community or relocate elsewhere.</i>		
38		Footage: locals holding meeting	
Narration:	<i>As international support declines, the emphasis shifts to building the local capacity And promoting community participation.</i>		
39		Footage: Dr. giving child a vaccination	
Narration:	<i>Vaccination programs, mental health care and other services may be initiated, based on epidemiological information.</i>		
40	Rehabilitation or Reconstruction Phase	Footage: rebuilding homes and clearing streets of debris, time lapse of rebuilding after Katrina or 2004 Asian tsunami	
Narration:	<i>Once a permanent solution is found, the focus shifts from relief to development.</i>		
41		Footage: shop in refugee camp	

Narration:	<i>The aim is to help the affected community become self-reliant.</i>		
42			
Narration:	<i>The responsibility of providing assistance is handed over to the affected community.</i>		
43			
Narration:	<i>The local authorities, development agencies, government and other non-governmental organizations.</i>		
44			
Narration:	<i>Conclusion</i>		
Video 4: Complex Humanitarian Emergencies: Causes and Characteristics			
FRAME	SCRIPT	VISUAL	SOURCE
1	<p>Complex Humanitarian Emergency</p> <p>Definition: A situation of disrupted livelihoods and threats to life produced by warfare, civil disturbance and large-scale movements of people, in which any emergency response has to be conducted in a difficult political and security environment. <i>Environmental health in emergencies and disasters: a practical guide</i>(WHO, 2002)</p>	Over a still screen	
Narration:	<i>none</i>		
2		Footage: refugees fleeing violence, Yugoslavia, Dagestan, Chechnya, Bosnia, Serbia, Syria	
Narration:	<i>The term Complex Humanitarian Emergency, or CHE, is typically</i>		

3			
Narration:	<i>used to describe the human disaster that follows armed conflict,</i>		
4			
Narration:	<i>particularly war and civil strife.</i>		
5		Footage: Rebels	
Narration:	<i>CHEs are often the result of weakening political and governmental processes</i>		
6		Footage: Rwanda genocide museum	Original
Narration:	<i>Leading to collective violence or armed conflict, particularly genocide or civil war.</i>		
7		Footage: Protest	
Narration:	<i>The cause of political instability is usually poor leadership</i>		
8		Footage: Horn of Africa Famine??	
Narration:	<i>Combined with natural disasters such as famine and disease epidemics.</i>		
9		Blur screen moves up	
Narration:	<i>The majority of deaths are non-combatant</i>		
10		Animated world map of conflicts over time since 1946. Counter of years goes up as map populates. War or armed conflict counter counter also ticks.	Original
Narration:	<i>Since 1946 there has been an overall increase in the number of armed conflict events per year.</i>		

11			
Narration:	<i>Civil wars accounted for most of the increase documented.</i>		
12		War map fades to 2012 conflicts, then the interstate conflict fades to grey.	
Narration:	<i>In 2012, 31 of 32 armed conflicts were fought intrastate.[2]</i>		
13	<ul style="list-style-type: none"> • 1980s – 1.9 million • 1990s – 748,000 • 2000s – 461,000 	Black and white war footage	Archive.org
Narration:	<i>Over the past few decades the number of battle deaths have drastically declined</i>		
14	Infectious diseases Malnutrition	Blur screen moves from side: list causes of indirect deaths	
Narration:	<i>However, fatalities due to indirect causes of war continue to rise.</i>		
15		Footage: Congo	
Narration:	<i>For example, of the 5 million war-related deaths in the Democratic Republic of Congo since 1996,</i>		
16	Democratic Republic of Congo War-related deaths: 5 Million Directly battle related - 152,000	Blur screen moves up	
Narration:	<i>[Only 3% are directly related to battle.[12] Millions more have died from diseases that</i>		
17			
Narration:	<i>Are highly preventable but have become lethal due to the lack of infrastructure and</i>		

18			
Narration:	<i>Decrease in healthcare that is a side effect to conflict.] – my addition</i>		
19		Blur side panel Footage: war	
Narration:	<i>There has also been an increase in war-related injury among civilians.</i>		
20	35% 65%		
Narration:	<i>In recent years, war-related deaths among civilians ranged from 35% to 65%, sometimes up to 90%.</i>		
21			
Narration:	<i>The political instability that results [from a disaster or conflict] may lead</i>		
22			
Narration:	<i>To the following complex emergency situations:</i>		
23	Politically driven resource wars	Mining footage	Video Blocks, archive.org
Narration:	<i>Politically driven resource wars</i>		
24	Human rights abuses and civil unrest	Riots and beatings	Video Blocks, archive.org
Narration:	<i>Widespread human rights abuses and civil unrest</i>		
25	Genocide	Rwanda footage	Original
Narration:	<i>Cultural and ethnic minority groups at risk for extinction</i>		
26	Disruption of essential services and supplies	Traffic jam of UN trucks??	Video Blocks, archive.org
Narration:	<i>Disruption of essential services and supplies</i>		

27	Poverty and economic collapse	Crumbled shantytown	Video Blocks, archive.org
Narration:	<i>Poverty and economic collapse</i>		
28	Population displacement	Refugees fleeing	archive.org
Narration:	<i>Forced migration of large populations from their homes</i>		
29	Catastrophic environmental and public health events	Cholera patients	Archive.org
Narration:	<i>Catastrophic environmental and public health events</i>		
30	Excess mortality	Famine??	Archive.org
Narration:	<i>Acute human suffering with significant excess mortality</i>		
31		Footage: Riots	
Narration:	<i>Once political instability sets in, underlying conflict may intensify</i>		
32			
Narration:	<i>As communities struggle to regain historical power and to control resources.</i>		
33	<ul style="list-style-type: none"> • Healthcare • Education • Social welfare programs 	Footage: Lines outside of hospital	
Narration:	<i>Certain services such as healthcare, education, or social welfare programs</i>		
34	Stop functioning	Footage: a shutdown school	
Narration:	<i>May be the first to stop functioning</i>		
35		Footage: Refugees leaving	
Narration:	<i>Increasing insecurity and poor access to food may force large populations</i>		

36	<ul style="list-style-type: none"> • Food • Water • Shelter 	Footage of refugee camp	VideoBlocks
Narration:	<i>To migrate to places without adequate food, water, shelter and other basic necessities</i>		
37			
Narration:	<i>Ineffective political and humanitarian actions may lead to great human misery</i>		
38	<ul style="list-style-type: none"> • Malnutrition • Disease outbreaks [show MSF clinic] • Violence 	Footage of kwashiorkor, measles, beatings	Archive.org
Narration:	<i>In the form of malnutrition, disease outbreaks and violence</i>		
39	<ul style="list-style-type: none"> • Social welfare [kids hangin around in Syria or Zataari doing nothing] • Justice systems [summary execution] • Cultural norms [Iraq/Syria/Afghanistan – women heads of family doing anything, women in black, partially or fully veiled begging out by highway] 		
Narration:	<i>Social welfare, justice systems, and cultural norms collapse</i>		
40			
Narration:	<i>For as long as affected populations are forced to spend most of their</i>		
41		Footage: Lines at water pump and/or food distribution sites. Possibly food riot in Haiti?	Archive.org

		Women with firewood in Darfur, water, etc	
Narration:	<i>Time and energy searching for their basic human needs.</i>		
Video 5: Complex Humanitarian Emergencies: Underlying Factors			
1		Footage: war, CHE	
Narration:	<i>Complex Humanitarian Emergencies are events that involve multiple factors</i>		
2			
Narration:	<i>Which evolve and affect the displaced population. These factors may be</i>		
3	<ul style="list-style-type: none"> • Political • Economic • Social • Cultural 	Blur screen over footage of CHE and add animation of mark's graph.	Original
Narration:	<i>Political, economic, social or cultural</i>		
4	<ul style="list-style-type: none"> • Social welfare • Justice systems • Cultural norms 	View zooms in on parts of graph: Political Factors	Original
Narration:	<i>It is important to understand the past and current political and constitutional</i>		
5	<ul style="list-style-type: none"> • Corruption • Criminalization • Suspension of laws 		
Narration:	<i>Factors: corruption, criminalization, suspension of laws</i>		

6			
Narration:	<i>These factors can predict the potential for an ongoing crisis as well as</i>		
7			
Narration:	<i>Dictate what political solutions are appropriate</i>		
8	<ul style="list-style-type: none"> • Historical • Religious • Political • Ethnic forces 	Footage of collapsed capital building in Haiti. Add tile transition and words to left come into view in tiles.	
Narration:	<i>As weakened states collapse, historical, religious, political, and ethnic forces</i>		
9		<15 year old girl being wed	
Narration:	<i>That are deeply ingrained in populations resurface</i>		
10		Words in tiles expand and lines are drawn to insecurity and civil strife.	
Narration:	<i>This may lead to insecurity and civil strife</i>		
11	Yugoslavia, [year]	Yugoslavia civil conflict footage	Archive.org
Narration:	<i>Driving civilians groups to fight for independence and nationhood.</i>		
12		Views zooms out to main graphic and then to:	Original

		Economic Factors	
Narration:	<i>Overpopulation can increase pressure on land and environmental degradation</i>		
13	<ul style="list-style-type: none"> • Water [S. Sudan, fighting over access to water] • Food • Arable land • Territory • Fishing rights 		Original
Narration:	<i>Competition for valuable resources is a major contributor to the global increase in conflicts and complex emergencies.</i>		
14		Shantytown footage, brazil	VideoBlocks
Narration:	<i>The increasing disparity between the rich and the poor has led to urbanization,</i>		
15		Aerial map of shantytowns surrounding city?? Kabira slums, slums near railroad track in India, slums being flooded out, lower 9 th in Nola	
Narration:	<i>With the isolation of the poor, exposing them to more hazards</i>		
16		Hurricane footage	
Narration:	<i>This can increase ethnic and communal tensions.</i>		
17	Adverse climatic events	Hurricane footage	
Narration:	<i>Economic hardships and serious food deficits may result from adverse climatic events</i>		

18		Famine footage	
Narration:	<i>Or disruption of farming, transport and marketing. Lack of transportation can</i>		
19		Footage: people stranded on roofs in NOLA	
Narration:	<i>Reduce people's access to resources and prevent them from evacuating.</i>		
20		Views zooms out to main graphic and then to: Social Factors	Original
Narration:	<i>Displacement causes people to spend more and more of their time</i>		
21	<ul style="list-style-type: none"> • Food • Water • Shelter • security 	Footage: Boy collecting water from creek or women collecting firewood from forest	
Narration:	<i>looking for Food, water, shelter and security.</i>		
22		Haiti riot footage:	
Narration:	<i>As food shortage becomes severe, families break up and prolonged separations</i>		
23			
Narration:	<i>Prevent them from forming long term relationships that help to hold a group together.</i>		
24		Animated fabric of people holding hands and then disintegrating over	Original

		above footage and then fades into blur.	
Narration:	<i>As a result the social fabric of communities disintegrates.</i>		
25		Pie chart that comes together, showing the proportion of each.	Original
Narration:	<i>Children, adolescents, women and elderly persons represent a significant portion of displaced populations</i>		
26			
Narration:	<i>As society breaks down, these subgroups invariably suffer. As crisis situations worsen</i>		
27			
Narration:	<i>They suffer even more due to increased domestic violence.</i>		
28		Views zooms out to main graphic and then to: Cultural Factors Footage: men in camp	Original
Narration:	<i>Discrimination may result in certain groups of the population being denied access to essential services</i>		
29		Footage: supply trucks	
Narration:	<i>Or certain relief foods may be considered a cultural or religious taboo and will not be eaten.</i>		
30		Aerial map of Dadaab, point out the different ethnicities in the camps	

Narration:	<i>Ethnic hostilities are often a basis for warfare. Settling displaced people from different ethnic</i>		
31			
Narration:	<i>Groups and cultures together in one camp may lead to unrest.</i>		
32	[Conclusion]		
Narration:			

Storyboard References

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APPENDIX III – LICENSING AGREEMENTS

File Name	Description	Type	Source	Terms of Use/Licensing
Video 1 - Introduction to Disasters				
Stateofevents-JapansEarthquakeCrisis735_512kb.mp4	Japan earthquake 288	video footage	Archive.org	Creative Commons Attribution
7062011-115	Grassy meadow	video footage	VideoBlocks.com	Royalty-free
5D08CJ_D07-Field2-DollyP3	Dry ground	video footage	VideoBlocks.com	Royalty-free
witness_insuring20080918_350kb.mp4	Kwashiorkor	video footage	Archive.org	Creative Commons Attribution
child_soldiers_clip_512kb.mp4	Child soldiers	video footage	Archive.org	Creative Commons Attribution
freestormcell	Storm time lapse	video footage	VideoBlocks.com	Royalty-free
Haiti_urban_slum	Haiti slum	video footage	VideoBlocks.com	Royalty-free
refugee.mov	Body bags	video footage	Archive.org	Creative Commons Attribution
podcast_refugee5.m4v	Refugee women getting water	video footage	Archive.org	Creative Commons Attribution
Ethiopia_Refugee_Camps_007	Refugee Camp	video footage	VideoBlocks.com	Royalty-free
tsunami_patong_beach_512kb	Tsunami	video footage	VideoBlocks.com	Royalty-free
Aljazeeraasset-HumanitarianAidFoodDistributionInHaitiLeadsToRioting527	People stealing food aid	video footage	Archive.org	Creative Commons Attribution
haiti2.mp4	Disaster footage	video footage	Archive.org	Creative Commons Attribution
haiti3.mp4	Disaster footage	video footage	Archive.org	Creative Commons Attribution
haiti_o64	Disaster footage	video footage	VideoBlocks.com	Royalty-free
Africa	famine girl	video footage	Archive.org	Creative Commons Attribution
100212-RedoubtSteamingandClouds1	Redoubt volcano	video footage	VideoBlocks.com	Royalty-free
VolcanoeruptiononHeimaeyIceland1973_512kb	Iceland volcano 1973	video footage	Archive.org	Creative Commons Attribution
MVI_8040 copy	Nepali woman and children	video footage	Crystal Stafford	None - Original content
unitednations20100104_350kb	women with jerry cans	video footage	Archive.org	Creative Commons Attribution
030311-t51	Money	video footage	VideoBlocks.com	Royalty-free
Vaccination_Haiti_059	Vaccination clinic	video footage	VideoBlocks.com	Royalty-free
7062011-121	School girls africa	video footage	VideoBlocks.com	Royalty-free
7062011-76	Boys running africa	video footage	VideoBlocks.com	Royalty-free
Video 2 - Types of Disasters				
gov.archives.arc.68933	Volcano erupting	video footage	Archive.org	Creative Commons Public Domain
Syria.TanksAndIfvsInTheBattleAgainstTerrorists	Tanks attack town	video footage	Archive.org	Creative Commons Public Domain
haiti.mp4	Disaster footage	video footage	Archive.org	Creative Commons Attribution
haiti_004	Haitian refugee camp	video footage	VideoBlocks.com	Royalty-free

03-22-08Flooding_512kb	Flooding	video footage	Archive.org	Creative Commons Attribution
GreenAFilmByPatrickRouxel	Deforestation	video footage	Archive.org	Creative Commons Attribution
NuclearExplosionwww.keepvid.com_512kb	Nuclear bomb	video footage	Archive.org	Creative Commons Attribution
MN-3726K Medicine In Action 12 Cholera Can Be Conquered	Cholera patients	video footage	Archive.org	Creative Commons Public Domain
30004-6	Explosion	video footage	VideoBlocks.com	Royalty-free
smoke_stack06-8262013	Smoke stacks	video footage	VideoBlocks.com	Royalty-free
bigstock-African-Women-Desperately-Wait-56103095	Refugees waiting	photograph	Bigstock.com	Royalty-free
bigstock-AMBOSELI-KENYA-30801068	African children	photograph	Bigstock.com	Royalty-free
MVI_7590	Nepali ER	video footage	Crystal Stafford	None - Original content
032213-IwoJima-22	Graves	video footage	VideoBlocks.com	Royalty-free
7062011-284	African child with infant	video footage	VideoBlocks.com	Royalty-free
bigstock-Camp-In-Darfur-4183980	Darfur refugee camp	photograph	Bigstock.com	Royalty-free
bigstock-Darfur-Camp-Site-4167347	Darfur refugee woman	photograph	Bigstock.com	Royalty-free
BMBY0309_01	Indian slum	video footage	VideoBlocks.com	Royalty-free
Ethiopia_Refugee_Camps_005	Refugee tents	video footage	VideoBlocks.com	Royalty-free
MVI_3333	Nepali children	video footage	Crystal Stafford	None - Original content
Video 3 - Phases of a Disaster				
WVHD_FF_UD.TCU.25APR10-M	Time lapse clouds	video footage	VideoBlocks.com	Royalty-free
2011-ShoppingCart-Blur	Shopping cart	video footage	VideoBlocks.com	Royalty-free
bigstock-Hurricane-Evacuation-Route-Sig-40884187	Hurricane evac sign	photograph	VideoBlocks.com	Royalty-free
croppedbigstock-Tsunami-Warning-Evacuation-Sig-2331719	Tsunami evac sign	photograph	VideoBlocks.com	Royalty-free
rita_1280x720	Hurricane Rita	Nasa imagery	Nasa	Nasa
The_Truth-Rita	Hurricane Rita disasters	video footage	Archive.org	Creative Commons Public Domain
bigstock-Wrecked-House-54797831	Typhoon Haiyan	photograph	Bigstock.com	Royalty-free
bigstock-Ruins-Of-A-House-Inside-Barbed-54797834	Typhoon Haiyan 2	photograph	Bigstock.com	Royalty-free
uninaction20090708_350kb	Bangladesh village	video footage	Archive.org	Creative Commons Attribution
Syria, I am here...	Syrian refugees	video footage	YouTube	Creative Commons Attribution
steidle_512kb	Sudanese refugees	video footage	Archive.org	Creative Commons Attribution
South Sudan_ UN rushes aid, boosts peacekeeping presence in wake of ethnic clashes	UN peacekeepers	video footage	YouTube	Creative Commons Attribution
19122013 South Sudan Street Patrol	UN security	video footage	YouTube	Creative Commons Attribution
December 18 2013 UN Assistance to South Sudanese seeking refuge	Gate security	video footage	YouTube	Creative Commons Attribution
An_Aerial_View_of_the_Za'atri_Refugee_Camp	aerial Za'atri refugee camp	photograph	Google Images	Creative Commons Attribution
South Sudan_ IOM Refugee Response	water tap	video footage	YouTube	Creative Commons Attribution
South Sudan_ Sudanese refugees struggle in	rebuilding	video	YouTube	Creative Commons

camps		footage		Attribution
Haiti_vaccine	vaccination	video footage	VideoBlocks.com	Royalty-free
Haiti_053	Clinic	video footage	VideoBlocks.com	Royalty-free
7062011-193	Painting walls	video footage	VideoBlocks.com	Royalty-free
Video 4 - CHEs: Causes and Characteristics				
Syria, I am here...	Syrian refugees	video footage	YouTube	Creative Commons Attribution
Syria Refugees	Syrian refugees walking	video footage	YouTube	Creative Commons Attribution
Ukraine Protest (Police Rushing) 2014	Police brutality	video footage	YouTube	Creative Commons Attribution
Ukraine Crisis- Lenin Statues toppled in protest	Lenin statue falling	video footage	YouTube	Creative Commons Attribution
Lebanon_ Syrian Refugees In Harsh Living Conditions, With Growing Health Needs	Lebanese refugee camp	video footage	YouTube	Creative Commons Attribution
Animated conflict map		map	original	None - Original content
WW2	black and white war footage	video footage	Archive.org	Creative Commons Public Domain
DRC_ Africa's Deadliest Conflict	DRC	video footage	YouTube	Creative Commons Attribution
Crisis in the Congo_ Conflict Minerals and Corporate Responsibility	Conflict minerals	video footage	YouTube	Creative Commons Attribution
ghosts of rwanda	rwandan genocide	video footage	Archive.org	Creative Commons Attribution
Report_ Serious Communications Gaps at Camps for Somali Refugees are Putting Lives at Risk	water tap	video footage	YouTube	Creative Commons Attribution
Haiti_008	slums	video footage	VideoBlocks.com	Royalty-free
Democratic Republic of the Congo_ The survivors	town in congo	video footage	YouTube	Creative Commons Attribution
Report_ Serious Communications Gaps at Camps for Somali Refugees are Putting Lives at Risk	Sudanese refugees	video footage	YouTube	Creative Commons Attribution
Somali refugees in clinic	somali refugee	video footage	YouTube	Creative Commons Attribution
Donate for Syria NOW- Limited time ONLY	body bags	video footage	Archive.org	Creative Commons Attribution
Syria crisis_ Guide to armed and political opposition (Subscribe to my channel)	Syrian fighters	video footage	YouTube	Creative Commons Attribution
Haiti_050_lines_vaccination	Lines at clinic	video footage	YouTube	Creative Commons Attribution
PeppersprayProductions-GoogleDarfur935	Darfur refugee camp	video footage	Archive.org	Creative Commons Attribution
CAR Refugees in Cameroon Our Children Have Become Stateless	CAR refugees	video footage	YouTube	Creative Commons Attribution
An Improved Situation in Yida Camp, South Sudan	malnutrition	video footage	YouTube	Creative Commons Attribution
Vaccination Campaign in Refugee Camp Shows Limits of Access	Clinic	video footage	YouTube	Creative Commons Attribution
Syria Violence	Syrian fighters	video footage	YouTube	Creative Commons Attribution
Video 5 - CHEs: Underlying Factors				
Clothes and food distribution in Qusthapa Refugee Camp	refugees in line	video footage	YouTube	Creative Commons Attribution
Ukraine graphic video Dozens dead, many injured in brutal Kiev clashes	ukraine day after	video footage	YouTube	Creative Commons Attribution
bigstock-Anti-government-Protests-In-Ky-60565271	protest	photograph	Bigstock.com	Royalty-free
bigstock-Kiev-Ukraine--January-----57559073	car	photograph	Bigstock.com	Royalty-free

536_0144_01	overpopulation	video footage	VideoBlocks.com	Royalty-free
30007-2	water	video footage	VideoBlocks.com	Royalty-free
Slavery at Sea	fishing rights	video footage	YouTube	Creative Commons Attribution
Markham-suburbs_aerial-edit2	suburbs	photograph	Google Images	Creative Commons Attribution
1_rocinha_favela_closeup	slum	photograph	Google Images	Creative Commons Attribution
Kibera_Slum_Railway_Tracks_Nairobi_Kenya July 2012	slum	photograph	Google Images	Creative Commons Attribution
Katrina 05_0001.wmv	katrina footage	video footage	Archive.org	Creative Commons Attribution
Out of Sight, Out of Reach in DRC	refugees	video footage	YouTube	Creative Commons Attribution
Ethiopia_Refugee_Camps_004	Refugee Camp	video footage	VideoBlocks.com	Royalty-free
24122013 WFP Food Distribution	Food aid	video footage	YouTube	Creative Commons Attribution
nakivale	refugee camp	photograph	Google Images	Creative Commons Attribution

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- 8. Termination:** This Agreement will commence on the date when you first download any Stock File and will remain in effect as long as you maintain any Stock File or Derivative Work in your possession. The license contained in this Agreement will terminate automatically without notice from Footage Firm if you fail to comply with any provision of the Agreement or the Terms of Use. If you want to terminate this Agreement, you may do so at any time by notifying us and destroying all Stock Files in your possession. Your indemnity and payment obligations and Footage Firm's rights in conjunction with those obligations shall survive any termination or expiration of this Agreement, as well as Footage Firm's limitation on liability. The provisions of this paragraph are in addition to any other remedies and rights Footage Firm

may have as a result of any breach of this Agreement. Neither party will be entitled to damages as a result of termination of this Agreement as provided herein. Upon termination, you must immediately (i) cease using the Stock Files for any purpose; (ii) destroy or delete all copies and archives of the Stock Files or accompanying materials; and (iii) if requested, confirm to Footage Firm in writing that you have complied with these requirements, provided, however, that such requirements in (i), (ii) and (iii) shall not affect or limit your use of any existing Derivative Works containing Stock Files. Upon notice from Footage Firm, or upon your knowledge that any Stock File is subject to a threatened, potential or actual claim of infringement of another's right for which Footage Firm may be liable, you must immediately and at your own expense (i) stop using the Stock File; (ii) delete or remove the Stock File from your premises, computer systems and storage (electronic or physical); and (iii) ensure that your clients, printers or ISPs do likewise. Footage Firm will provide you with replacement Stock Files (which shall be determined by Footage Firm in its reasonable commercial judgment) free of charge, but subject to the other terms and conditions of this Agreement.

- 9. Export Control.** You may not use, export, import, or transfer the Stock Files except as authorized by U.S. law, the laws of the jurisdiction in which you obtained the Stock Files, and any other applicable laws. In particular, but without limitation, the Stock Files may not be exported or re-exported (a) into any United States embargoed countries; or (b) to anyone on the U.S. Treasury Department's list of Specially Designated Nationals or the U.S. Department of Commerce's Denied Person's List or Entity List. By using the Stock Files, you represent and warrant that (i) you are not located in a country that is subject to a U.S. Government embargo, or that has been designated by the U.S. Government as a "terrorist supporting" country and (ii) you are not listed on any U.S. Government list of prohibited or restricted parties. You also will not use the Stock Files for any purpose prohibited by U.S. law, including the development, design, manufacture or production of missiles, nuclear, chemical or biological weapons. You acknowledge and agree that products, services or technology provided by Footage Firm are subject to the export control laws and regulations of the United States. You shall comply with these laws and regulations and shall not, without prior U.S. government authorization, export, re-export, or transfer Footage Firm products, services or technology, either directly or indirectly, to any country in violation of such laws and regulations.