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Web-based Distance Learning Techniques to Train Farm and Food Industry Personnel to Protect and Secure the Global Food Supply Chain

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First off, I'd like to thank Ed for asking me to be a member of this wonderful panel. I'm honored to be a member of this group and I look forward to many more years of interaction and work. A lot of the questions that were raised recently and throughout today's panel, I'm going to address. I don't know that I have answers to any of the questions but I'll try to address those. The Early Responders Distance Learning Center (ERDLC) at St. Joseph's Univ. has been in existence since 1999.

I'm going to talk a little bit about it as we go through my agenda for the presentation. I'm going to talk about the ERDLC at St. Joseph's; you need another acronym of course, so you have one. I'm going to talk about how we at St. Joseph's became involved in food safety and food protection through our food marketing programs. I'm also going to talk about some of the web based programs that we have developed or are in development that will be available as part of our consortium.

There's a certificate program in food protection and defense that we have ready now. It was put together primarily under the guidance of another government agency known as the Technical Support Working Group. The Technical Support Working Group, they like to be called TSWG, is an interagency that is overseen by the Dept. of State, primarily through the Dept. of Defense with a lot of input from the Dept. of Homeland Security, Energy, and Labor. In many respects, it's like a smaller version of DARPA, the Defense Advances Research Project Agency in that they have a task of developing deliverables for the combating terrorism community; they do it on a very short order. So we are always tasked with coming up with a deliverable – in our case it is a course, in a very short period of time with the primary function of combating terrorism. Obviously, that overlaps very nicely with what we are talking about now in our collaboration with the National Centers.

In addition to the certificate program in food protection and defense, we are presently working with TSWG and the USDA AFIS on some web-based courses on the Emergency Management of Agricultural Bioterrorism. These courses are being developed primarily toward USDA internal program; it would be offered through their add-learning management system. We are in negotiations with TSWG and the USDA so that we'll be able to use these courses as part of our collaboration as well. I'm going to talk about the courses that we've developed in each of these programs a little later in my presentation but mostly I'm going to focus on the last point there, the challenges of creating web-based distance learning courses for teaching in food protection and defense. As I said, ERDLC was founded in 1999 primarily in response to the No Lugar Act.

As Ed mentioned, I'm a psychologist and Ed I know less about food than you do, although I'm very familiar with the term, "monja." I'll translate that for you later. As a psychologist we became interested in developing training in the psychological consequences of terrorism. My background in psychology is primarily in the psychology of fear, how fear is learned in specific situations, how it can be characterized to more contextual situations as well. Clearly, that is something that is relevant to the realm of terrorism or the study of terrorism. Our first program then was in the certificate program on the psychological consequences of terrorism. We've moved into other areas as well but primarily our focus at the Univ. is an independent center, we are part of the Univ. but we're not affiliated with any one department; we're cross cultures, cross disciplines, within our university.

We developed a series of training programs that are either computer-based training, web-based training, we specialized in what is called ADL-SCORM compliant training. Donna, you mentioned about metatagging and how courses need to be metatagged. That's a procedure that I'll talk later on as well; that's a government stipulated procedure that we should all be following now in terms of preparing our distance based courses so that we can use them across our institutions. We also do a series of field exercises and table-top exercises. In all of our field exercises and table-top exercises focus on the interface between the private sector, the public sector and the government. So that's where we sort of play in this field. As you know, St. Joseph's Univ. is not an agricultural school. However, we do have programs through our School of Business which I'll talk about that deal primarily with the food sector, the private sector. So that's our area of specialization.

Our current projects at the ERDLC are the following; we've completed a psychological aspect of Homeland Security Project, it's available on our website, you are free to take a look at those courses. The government owns the intellectual property of those courses. You could use them in your curriculum; you just need to let us know so that we could report that back to the government. We have the certificate program in food protection in Homeland Security, a completed project as well on our website and available and I'm going to talk about that in a little more detail today. Once again, it is available to you for your use. If you would like a certificate in this from St. Joseph's Univ. we could offer that to you as well. If you would like to use some of the modules in your courses or if you would like to use all of the modules, that is available as well. Again, the government owns the intellectual property and we're very happy to share that with all members. Just talk to me about that and we'll talk about mechanisms of doing that.

We also completed a training program on shelter in place; how to appropriately shelter homes, small businesses, with the focus on the those in the food industry if there would ever be some sort of chemical incident, not so much to protect the food but primarily to protect the employees if there is ever an incident of that nature. It goes a little bit beyond the old duct tape and cover incidents that we've had a few years ago. The emergency management of agriculture bioterrorism training is a program that we are presently working on; should have that wrapped up sometime in 2006. We're shooting for February; again, we probably will have some of those courses available for this consortium as well. I would say mid to 2006.

Our last 2 projects that we are currently working on now – one is port security and much of the work that we are doing on port security now, you look at food, imports and exports as a security issue. This is being sponsored partly by the Dept. of Homeland Security as well as the Coast Guard and we are using the Delaware Bay core as a model, coming up a series of training courses and procedures, then that can be applied throughout the nation. Lastly, combating terrorism, distributive training; the psychology of suicide bombers is something that we are working on. Now you might not see where that is relevant to the food industry but it is. If you look closely at the history of suicide bombers and where they set off their devices, it's overwhelmingly in public places and a large majority of those public places are places where food is delivered, either in malls, restaurants; in fact in some retail places. So food is heavily involved in the minds of a suicide bomber. If you think about it, there is a good reason but we'll talk about that a little later on as well. Again, I'm a psychologist and food is something that I love and appreciate but it's not one of my core areas of specialization.

However at the Univ. we have the Erivan K. Haub School of Business and with the School of Business we have a Dept. of Food Marketing and a Dept. or a Center for Food Marketing. It was the first center for food marketing that was developed in the nation many, many years ago and it's one of only 2 or 3 departments that offer master's degrees and MBAs in the area of food marketing. I know there are others, but the market is kind of small at this point. Many of the faculty in that program have previously worked with agencies like the FDA and the USDA and have a great deal of expertise in the area of food safety as well as food protection. So it was through our partnership with the food marketing department that we went after some of these other projects and we were successful. As an aside, Erivan K. Haub, the benefactor for our departments in the School of Business, is the owner of the Tengelmann (ph) Group which is a large food retailing group in Europe and is the owner of the old A&P and Super Fresh Markets here in the United States and his people have been very influential in helping us with some of the issues that they face as a good retailer.

Now the project that I think that is most germane in terms of our contribution to the present effort is the Certificate Program in Food Protection and Defense. This is a program that was made primarily for individuals in the private sector. The scope and goal was to address those individuals in the private sector who will interface with the government or interface with emergency responders if and when there is a terrorist or food defense event. In that respect, these courses are not traditional academic courses. We do not offer academic credit for these courses in the Certificate Program. We offer a certificate for each individual course or we offer a completion certificate for all eight courses. However the courses were built in such a way that they are scalable, a term that is used in the profession, meaning that they could be made larger, made applicable to an undergraduate curriculum, made applicable to a graduate curriculum by adding additional exercises, by adding additional assignments and on the other hand they can be made scalable below the level that they are presented at. For instance, these are in fact web-based courses using fairly sophisticated delivery techniques and technologies but they were built in such a way that a

chart could be made of each of these courses. So in terms of your question, sir, we could take the context from this material and create an emergency responders chart for those of you who have seen what police and fire carry with them many times today.

The bulk of the information that they have as a reminder when they are in an incident is the various charts that they carry with them. Sometimes the chart will actually fit in their pockets; these courses were built so that they could be reproduced in that way as well. The courses were also built so that it addresses the issue of Section 508 compliance so that those people with disabilities could also collect the material from the course and whatever sensory capacity that they are best able. We'll talk a little bit about that later on as well.

Again, the training here covers the entire farm to fork continuum; we try to use the latest distance learning technologies through what we call a Virtual Univ. Architecture and as I said previously, it can be delivered and given to you in other formats than advanced distance learning technology.

This is the introductory course; we call it Food Security and Terrorism 101, essentially; it's the course now that gives you an overview of the issues that you will learn throughout the other courses. It deals with the reality of food terrorism all the way through the responses to food terrorism. What you see there is an actual screen shot of the course.

You will note that it's not a power point based course, it's a course that is fairly attractive, it's very interactive, the student cannot just read the power point slide or listen to the power point slide in order to get the information, they have to be awake, they have to interact. They have to press buttons and on the basis of the way that they answer some of the questions, we'll give them either a harder follow-up question or if they're not doing so well, we'll give them a little – you know, one of those easy questions that everyone gets. We don't want them to become too discouraged. So in terms of rigor, that's one way that you can approach rigor; you can design the course so that it answers questions to the level of the student. Now that's not simply done, but we can talk about how that can be incorporated in other courses and other techniques.

The key is its interactive; it's not power point that somebody speaks over. Now sometimes voice-over power point is very effective in situations – in other situations, it's not. We found that in these courses, which are asynchronous, meaning that the faculty member is not there holding the students hand throughout the course, you only interact with the faculty member maybe three or four times a week if that frequently.

In some of the asynchronous courses you may never interact with the faculty member; the interaction is all done through the course presentation. It's got to be interactive; it's got to be at a level that is attractive, stylistic, but as we know from the great old philosopher, Khan (ph), you can't substitute style over substance. Substance is the most important thing; there is substance in here but on the other hand you cannot pay attention to style as well. We try to come up with a match of that. Again, I encourage you go ahead and take a look at the courses on our web-site; you can do that without charge. You take the exam and want to get a certificate, we might ask you for a charge there but you are able to see the content free of charge; that's the introductory course.

Second course in the curriculum is a course on Food Security Risk Assessment. This course follows the ORA ORM model, using that as the way that we look at food security risk assessment. When we completed the course and we talked with some of our colleagues at FDA and some of our colleagues actually at IFT, we heard about CARVER. CARVER I guess, as you know, wasn't made available to outside of the secure community until about a year or so ago. We're now working to make sure that CARVER is part of this course as well. It's not presently part of it but it will be made part of it. The courses are built in modules, scalable so that if you have to come back and add something or delete something and change it, it can be done relatively easily.

Of course, also then on Food Supply Chain Traceability, tracing the entire food supply from start to finish with a lot of interactive demonstrations, you can see that we actually have the food supply oriented there. It's a moving, active food supply, you could click on any part of the food supply and a pop-up window will come with a videotape of somebody at that part of the food supply talking about their challenges and issues. We have a very good course on Food Security Risk Communication, once again, built primarily within the operational risk analysis framework. If you come to our presentation tomorrow, Risk Communication, we'll talk about some of the things that we are discussing in this course.

Of course on Food Security Risk Management is involved there; this course has been received fairly well in the insurance community most recently, such that – I think as you know, the insurance that food manufacturers and food retailers now have through the federal government expires at the end of December. So the insurance industry now is going to be asked to help make up for that loss of federal help. The insurance agencies now are looking at way of how they could price that out and they are also looking at ways at which they are now going to be able to certify various organizations so that they can be insured. Lloyds of London has approached us to take these courses, to use this course for those individuals who are ultimately going to be insured by them as their way of indicating that they are certified in food security risk assessment and the like. So we are very excited about that recent development as well.

Food Security Law; I can't say that this is my favorite course but it's an important course. It does go over (inaudible) the one statute where you need to inform when food is coming in – Prior Notice Act, yes, the Prior Notice Act. We review that in good detail in here. We also have downloads directly from FDA sites and USDA sites that are relevant as to what you have to do according to those laws.

This changes a lot; we've tried to make modifications as the laws change as well. We find that the people in the food – private food sector love this course because it's something that they have to comply with and it's something that they are always try to keep up with, possibly ahead of it. Of course, that looks at the global food supply, expands upon the food chain, looking at the globalization issues of food coming into our country as well as food going out of our country and looking at some of the security, the unique security issues and defense issues that are there. Part of the reason for this course is we have concern about securing our facilities overseas, not so much on Army Bases but clearly at State Dept. sites and so on and so forth. There is a true security issue that the government is concerned about and this course tries to address some of those issues. We don't solve them but we try to outline some of those issues and what can be done and what should be thought of.

Lastly, a course that's sort of a follow onto our Risk Communication course, it's a course on Crisis Leadership in the Food Industry; the Missing Competency. Leadership during a time of crisis is very important, important not only at the level of risk communication but important in terms of leadership within the corporation and within the government.

This course attempts to look at competencies that have been identified through social science research that allow you to be an effective leader, a risk communicator, a risk manager. It's one of my favorite courses, of course, I'm a psychologist and it's based a lot on psychological notions. So don't let that stop you from looking at it. So those are the eight courses in this Food Protection Certificate Program.

We're getting a lot of interest in it and as I said before, if you would like to look at any of these modules, if you would like to use them, please feel free to do so. The government owns the copyright and the intellectual property and would be very proud to see that you are using these modules in some of your courses. Now a little bit about each of the courses. Each course is divided into either three to four modules;

the seat time which is the term that they use in the web industry for going through each module from start to finish is about 1 h. No one does it in 1 h but if you were going through it and responding and reading the information, it would take about an hour to get through each module.

The modules are broken up into small learning objects so that you don't have to go through each module contiguously in that one hour period, you could stop, when you come back to the course, you just go back to where you were. The seat time for each of the courses then is approximately 4 h. When we've done some testing, we've actually measured how long it takes the students to go through these courses. We're looking at more like 8 to 12 h even though the calculation is 4 h. We think the longer you take to go through it, the better. It seems to me that you are thinking and you are responding and you are learning. Clearly, that's not enough for an undergraduate course; it's not enough for a graduate course.

So what do we do with these modules at the Univ. when we offer these in our undergraduate curriculum or our graduate curriculum? Well essentially, what we'll do is we'll take three or four of the courses, combine them and then add to them a series of readings, a series of assignments, relevant to whether it's an undergraduate course or not and build in a series of interactive exercises above and beyond the asynchronous portion of the course so that it meets the hourly requirement that we have in the State of Pennsylvania for a three-hour course. More important, from a professor's perspective it meets the level of rigor and engagement necessary; again the courses can be used that way. The Certificate is not; the Certificate is for those in the food industry or those in the government who want sort of the primer in this. But it can then be taken further and well beyond that.

The other program that we are presently working on is the Emergency Management of the Agricultural Bio-Terrorism Training. It's a USDA-APHIS curriculum; these are the courses that we are working on presently. I'm not going to read those; I'll let you do that. The ones that are almost ready to be shared are the first two, Introduction to Agro-terrorism, Agriculture and Its Industries and then the Principals of the Incident Command System, which I think is a very important course.

We find that in our table-top exercises and field exercises, public sector is left out a lot. Even though there is a seat at the Unified Command Table for the public sector, we're not seeing that they are playing for proprietary reasons and for various other sorts of reasons and we think we need to encourage that sort of play with the private community, with the private sector and we can talk about some means that we're trying to do that with as well.

That was a long intro for this slide but this was the title that Ed gave me initially, and we sort of changed it around. The Challenges of Creating Web-based Distance Learning Courses; what I want to do now is to talk about these sort of as best practices or learned lessons, after-action reports. That's another thing that we need to put in the glossary, what is an after-action report, right?

I'm going to divide it into two primary areas, Instructional Design Issues, meaning the challenges that we face in building the course before we deliver it and then also the technical design issues. How we take the content, the instructional design materials and deliver it in a way that's most effective. Under Instructional Design Issues, we have faced the following problems, the availability of subject matter experts. At a Univ. you have plenty of subject matter experts who are willing to speak with you and discuss these materials, especially if you give them a little seed money to do that. But in the world that we work in, we also have to work with subject matter experts in the private sector and a lot of businesses in the private sector don't want to talk about their procedures in that because it's proprietary.

Those methods and procedures now are things that they believe is their competitive advantage. If you go to many of the larger food distribution organizations like Albertson's or Wegman's or the larger

ones, some will talk with you and others will not; that's an issue. There is also the issue of the availability of subject matter experts from the government. As I said a lot of the work that we've done here has been co-sponsored by organizations like the FDA and the USDA. These are very, very busy people and finding someone who is able to work with you for several hours over 3 or 4 d is a challenge. You might be working with somebody very diligently and having a great experience, the phone rings and off they go to an incident here or there.

So you really need to build in a lot of time to work with the subject matter expert. Again, that's a different challenge that we have in these courses because we're not just doing it within the realm of the Univ., we're doing it in the realm of addressing government sorts of issue. The availability of validated content is something that we've addressed as well. As a Univ. professor, when I would build my courses I'd look things up, using great library resources, using various sorts of books, come up with what I wanted to say and present that. You can't do that for a government sponsored course; the content must be validated. Maybe what I'm saying is appropriate and maybe it is something that the government will sign off on but a large part of it might not be.

The interface now between the Univ. faculty subject matter expert, the expert from the private sector and then the expert from the government can be a true challenge. We are talking about people who have opinions, who want to express their opinions and want to be heard but sometimes there are contradictory messages. Sometimes some of these agencies don't want that contradictory message to get out there.

Now I was a Dept. Chair for 15 y so that's not too hard to deal with, based upon that experience. That was a joke; it is hard to deal with but you have to come up with ways in which you can mediate those sorts of issues. It's a true instructional design issue. The third point speaks to that as well; there's a lack of agreement on key points and issues. Should we use ORM or ORA methodology or should we focus on CARVER+ Shock? One agency might say (inaudible) is the most important thing to agree to another agency might say, no, we don't think so. Then those in the private sector will say we need to know it all. Then of course, the faculty member wants to criticize each one of those because they'll get a paper out of that. So lack of agreement is very important.

An issue that I want to speak to you about an Instructional Design issue is the notion of power point. We use power point a lot in distance learning. A lot of power point is voice-over and pedagogically I don't think that's sound any longer, especially when we look at the community of scholars who we are delivering this material to. Let's think about it in a greater context first. Most of us have taught for many, many years and we would show up in our classes with the syllabus that we had put together at the beginning of the class, the syllabus now was well thought out. Maybe the individual topics were not well thought out when the syllabus was created, right. Many of us would know what we're going to talk about but we're not going to develop those topics a day or two before the lecture. Come on admit that, we've all done that.

In distance learning, you can't do that. In the utilization of power point we can't do that either because you need to have these materials developed well in advance. The point that I want to make here with the use of power point with sound over is in the traditional classroom, what is the most relevant method of instruction; what is the key element to teaching in the classroom, the traditional classroom? What do you think; the student instructor interaction, right? When we speak to the student and we interact with the student there's a lot going on there that conveys our knowledge and engages the student. That doesn't happen when you take your power point slides and read over them like that. You lose that engagement; you lose the key component of the classroom.

Now there are some wonderful voice-over power point presenta-

tions out there and my friend, Ron LaPorte, at the Univ. of Pittsburgh has done some wonderful things with that in his super course. But you look at what – the goal and challenge of what Ron is doing there and that's to get the information out quickly to primarily subject matter experts. It might not work with the student of today. There's a media writer by the name of Soven and I love his work because he looks at the differences between the student of today and by today he is talking about the student born after 1980, relative to the student born before 1980. As I look around the room, except for Trent, we are all before 1980 in here. Oh, I'm sorry, that was 1971, right? We think about the world in a different way. Because we weren't exposed to digital media from day one as those people who were born in 1980. We've seen it with our kids; they pick this stuff up and it's like nothing to them. Soven says though we need to think of those people as screen-agers meaning they learn through screens and that the digital presentation to them is second nature.

Soven also says that those of us born before 1980, we might be very good at using the stuff, gee, we invented it, we created it. Bill Gates was born well before 1980; Steve Jobs (ph) was born well before 1980 but as Soven says, even though we can use it, it's like a second language to us. We do it with an accent; whereas a screen-ager does it automatically. Screen-agers, when you show them voice-over power point, forget it, they don't want to see it. They want it interactive; they want to be engaged. They want to be involved. Again, it works with us sometimes very well but I don't think it's going to work with the future community of scholars and learners out there. We have to be engaging with them at a level that's more appropriate. Those are the technical issues; one thing I want to say about the technical issues.

ADL/SCORM and compliance; ADL/SCORM is a government – it's a Dept. of Defense requirement in that courses that are web-based now need to be medatagged. They need to be medatagged so that the small components within the course can be saved in repositories – saved in repositories so that we could share. We've been talking about that today. So if I'm at St. Joe's and I have a course and I put it in my repository, Ed might want to pull it out at Michigan State and be able to use it. ADL/SCORM allows us to do that; we can talk about that because all of our courses have to be built in ADL/SCORM and I think if we're going to build this repository we need to make sure that we're meeting that government requirement.

The same thing is true with the Section 508 compliance; another reason why voice-over power point might not be most appropriate. Section 508 compliance tells you that you have to develop all educational materials in a way that it meets everybody out there who has a learning disability or is somehow disabled. Now in the emergency response community the TSWG agency that we deal with says you don't have to worry about that because that is emergency responders cannot be disabled.

So for those courses, you don't need to worry about that. Try to tell that to the USDA or the FDA who are now saying, oh, yes, you do. I think that you have to take that into consideration in all courses that you build. There are very simple techniques essentially having a sort of narrative text for the course; that resolves most of those issues. Higher end access to bandwidth, yes, that's important but there are ways of getting around it. One way of getting around it is to use more modern designs or more modern program languages that don't require as much bandwidth. We program in Flash; I don't know if you saw our friends from Macromedia are here today as well.

Flash allows you to do a lot of high level video and compressing it so that you can stream it pretty effectively. It should stream at a 56K modem level. There are some issues with that. That being said, I'll stop talking now and answer any questions that you may have.

Web-based Distance Learning Techniques to Train Farm and Food Industry Personnel to Protect and Secure the Global Food Supply Chain

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Today's Agenda

- ✓ About ERDLC at SJU
- ✓ About the Food Marketing Programs at SJU
- ✓ Certificate Program in Food Protection and Defense (Sponsored by FDA/TSWG)
- ✓ Emergency Management of Agricultural Bio-terrorism Training Curriculum (USDA-APHIS/TSWG)
- ✓ The Challenges of Creating Web-based Distance Learning Courses for Training in Food Protection and Defense

ERDLC at Saint Joseph's University

- ✓ Founded in Response to the NLD Act (1999)
 - Preparing the Response Community for the Psychological and Food-related Consequences of WMD/Terrorist Incidents.
 - We, at ERDLC & Saint Joseph's University, are passionately committed to use our diverse talents in creating cutting edge distance learning content and delivery to aid and strengthen our nation's Emergency Responder's community.
- ✓ Computer-based Training (CBT), Web-based CBT, ADL/SCORM Compliant Training, Video-based Training, Industry-focused Table-top Exercises, Field Exercise, SJU Certificate Programs, SJU Undergraduate and Graduate Credit Options
- ✓ CEU Training Accreditation: APA, NASW, IACET, ASTD
- ✓ Present Staff Includes 14 FTEs

Current Projects

- ✓ Certificate Program in the Psychological Aspects of Homeland Security (TSWG): Completed
- ✓ Certificate Program in Food Protection and Homeland Security (TSWG/FDA): Completed
- ✓ Shelter-in-Place Training Package (DHS/TSWG): October, 2005
- ✓ Emergency Management of Agricultural Bio-terrorism Training (TSWG/USDA): February, 2006
- ✓ Combating Terrorism Distributed Training--Port Security and Defense (TSWG): December, 2007
- ✓ Combating Terrorism Distributed Training--The Psychology of Suicide Bombers (TSWG): December, 2007

Erivan K. Haub

School of Business

Department of Food Marketing

Center for Food Marketing

- ✓ Recognized leader in food marketing education and research.
- ✓ Provides executive, undergraduate and certificate education for US and international companies, governments and educators in the food industry.



The Certificate Program in Food Protection and Defense at Saint Joseph's University

In response to these concerns the Early Responders Distance Learning Center (ERDLC) and Center for Food Marketing (CFM) of Saint Joseph's University have developed a special curriculum:

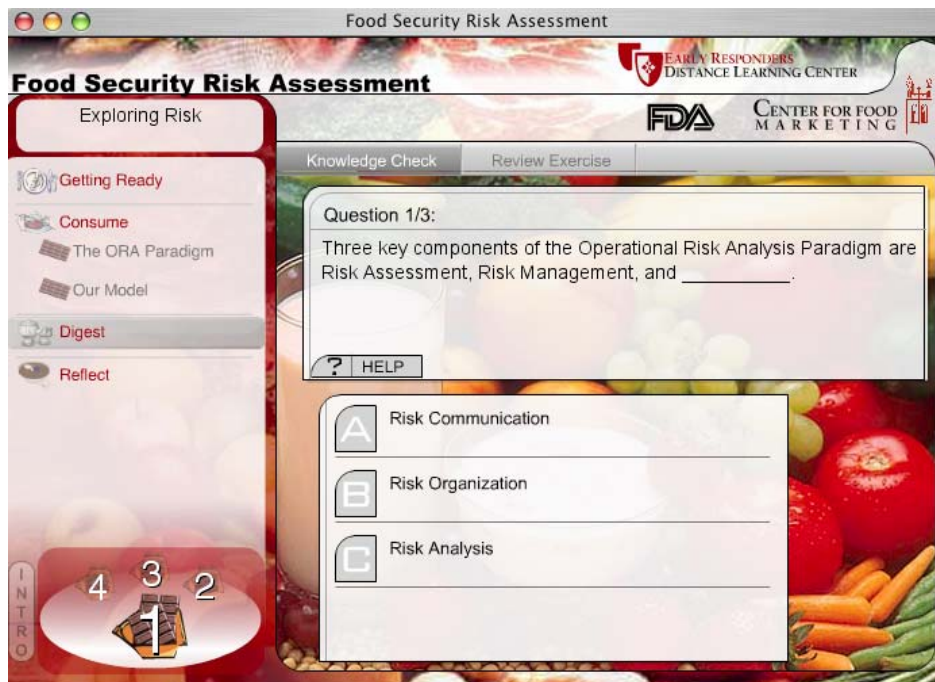
- ADL-SCORM compliant, integrated food security curriculum for critical facilities.
- Training covers the entire “farm to fork” continuum.
- Latest distance learning technology via virtual university architecture.
- Available as web-based training (WBT), CD Computer-based training (CBT) and classroom formats.

Introduction to Food Security and Terrorism

- Reality of food terrorism
- Program's goal and scope
- Concepts of food security
- Case studies
- Vulnerability of food supply chain
- Methods for defending the food supply
- Responses to food terrorism



Food Security Risk Assessment



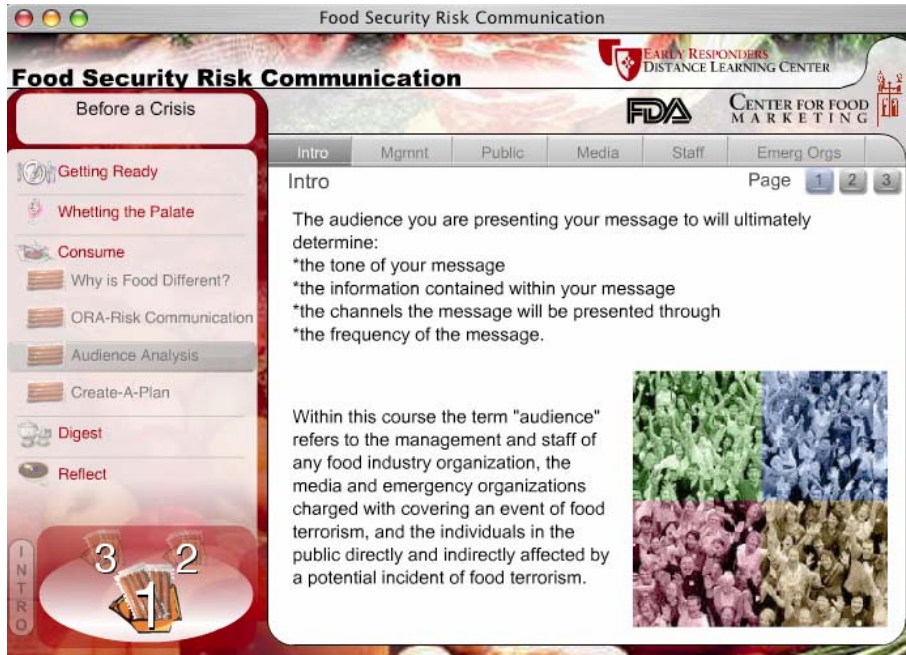
- Food security risk assessment
- Skills and tools for increasing security
- Reducing a successful terrorist attack's impact
- Managing impact on consumers, employees, and businesses.

Food Supply Chain Traceability

- Tracing food products in the food production and supply chain
- Farm to fork concept varying by food segment
- Traceability planning and methods for prevention and response
- Containing damage and limiting impact of security breaches in the food supply chain



Food Security Risk Communication



Food Security Risk Communication

Food Security Risk Communication

Before a Crisis

Getting Ready

Whetting the Palate

Consume

Why is Food Different?

ORA-Risk Communication

Audience Analysis

Create-A-Plan

Digest

Reflect

Intro Mgmt Public Media Staff Emerg Orgs

Intro Page 1 2 3

The audience you are presenting your message to will ultimately determine:

- *the tone of your message
- *the information contained within your message
- *the channels the message will be presented through
- *the frequency of the message.

Within this course the term "audience" refers to the management and staff of any food industry organization, the media and emergency organizations charged with covering an event of food terrorism, and the individuals in the public directly and indirectly affected by a potential incident of food terrorism.

- Operational Risk Analysis (ORA) framework
- Risk Communication
- Differing perceptions of risk
- Differing acceptability of risks
- Food risks are uncontrollable, have cultural and emotional ties, and involve fear of the unknown
- Food security risks are more significant to the public

Food Security Risk Management

- ORA Framework
- Risk Management
- Overview of managing risk
- Analyze, Implement and Monitor (AIM) model introduced
- Systematic food security risk management model
- Provides a model for protecting goods from deliberate contamination



The screenshot shows a web browser window titled "Food Security Risk Management". The page header includes the "EARLY RESPONDERS DISTANCE LEARNING CENTER" logo and the "FDC CENTER FOR FOOD MARKETING" logo. The main content area is titled "Risk vs. Benefit" and contains the text: "Risk management is the logical process of weighing the potential costs of risks against the potential benefits of allowing those risks to stand uncontrolled." Below the text is an illustration of a golden balance scale with "Benefit" on the left pan and "Risk" on the right pan. The left pan is lower, indicating it is heavier. A navigation sidebar on the left lists sections: Introduction, Getting Ready, Whetting the Palate, Consume, Overview, Model, Digest, and Reflect. The "Overview" section is currently selected. At the bottom of the sidebar, there are three numbered icons (1, 2, 3) representing different stages or models.

Food Security Law



The screenshot shows a web browser window titled "Food Security Law". The page has a header with the "EARLY RESPONDERS DISTANCE LEARNING CENTER" logo and the "FDC CENTER FOR FOOD MARKETING" logo. Below the header, there are tabs for "Introduction", "Description", "Philosophy", and "Structure". The "Description" tab is selected, showing a "Course Description" section. The description text reads: "This course will provide the Learner with a brief history of the major food security statutes enacted by Congress, as well as the principal federal regulatory organizations responsible for ensuring a secure food supply. In addition, this course will describe the anti-bioterrorism laws, implementing regulations, and guidelines to assist the Food Industry in following the recent legislation." To the left of the text is an illustration of the US Capitol building, a gavel, and a scale of justice. On the left side of the page, there is a vertical menu with the word "INTRO" and three numbered buttons (1, 2, 3). A red arrow points to button 1, and a text box above it says "Click the Module Menu below to exit Introduction."

- History of food security statutes
- Overview of principal Federal regulatory organizations responsible for food security
- Describes food bioterrorism legislation, implementation regulations, and guidelines
- Assists food industry in implementing recent legislation

Securing our Global Food Supply

- Industry overview of global food supply
- Key vulnerabilities
- Methods to secure facilities from attack
- New practices from the government and others to secure the global food supply
- Vulnerability of overseas food businesses
- Multinational actions for preventing terrorism and tampering of food products



Food Security Law

Securing Our Global Food Supply

EARLY RESPONDERS DISTANCE LEARNING CENTER
FDA CENTER FOR FOOD MARKETING

The Chain Double-Edged Sword Food Chain Basics

The Chain

Consider the typical food supply chain:

Input Storage/Transport Processing/Manufacturing

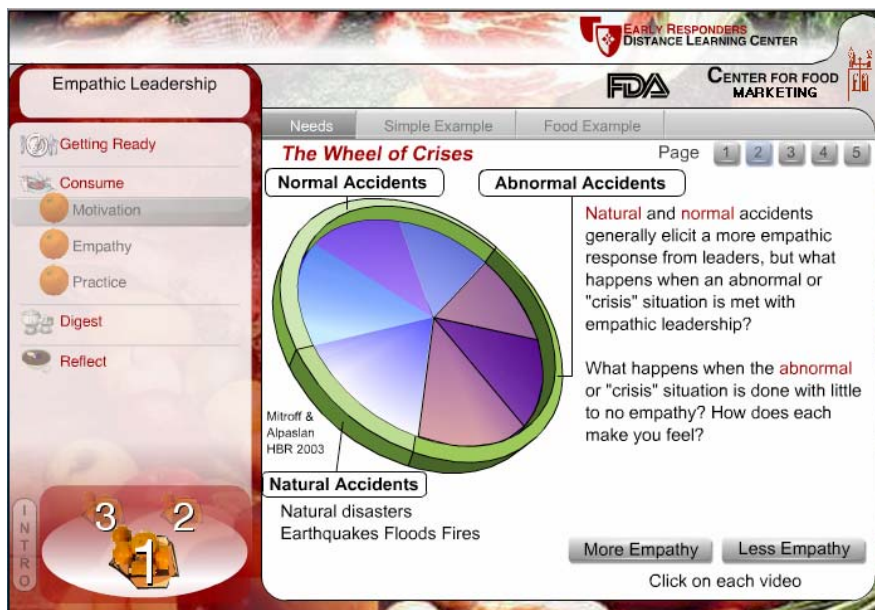
Storage/Transport Wholesale/Retail Consume

Not only does this food chain occur within the US, but it also stretches across the world, where raw products and manufactured goods are transported from one country to the next.

Click on the buttons "USA" and "WORLD" to see how this chain can stretch across the USA and across the World. Click on "Case in point" for an example.

The Chain USA World Case in point

Crisis Leadership in the Food Industry: The Missing Competency



The screenshot shows an interactive learning module titled "The Wheel of Crises" from the Early Responders Distance Learning Center. The interface includes a navigation sidebar on the left with sections for "Empathic Leadership", "Getting Ready", "Consume" (with sub-items: Motivation, Empathy, Practice), "Digest", and "Reflect". The main content area features a "Wheel of Crises" diagram, which is a circle divided into segments. The diagram is divided into "Normal Accidents" (Natural disasters: Earthquakes, Floods, Fires) and "Abnormal Accidents". Text on the right explains that natural and normal accidents generally elicit a more empathic response, but abnormal or "crisis" situations require empathic leadership. A question asks: "What happens when the abnormal or 'crisis' situation is done with little to no empathy? How does each make you feel?". Below the text are buttons for "More Empathy" and "Less Empathy", and a note to "Click on each video". The page number "1" is visible in the bottom left corner of the module.

- Introduce need for leadership during crisis
- Review of crisis leadership literature
- Exercises and case studies
- Development of appropriate and effective crisis leadership skills
- Focus on direct application to food industry situations and personnel

Emergency Management of Agricultural Bio-Terrorism Training

- ✓ A Six Course USDA-APHIS Project and Curriculum.
- ✓ Focuses on the numerous issues associated with the preparation and response to agroterrorist incidents.
- ✓ ADL/SCORM courses to be housed on AgLEARN



USDA United States Department of Agriculture

Module | Scenario | Module Map | Glossary | Help

Lesson | Agroterrorism, Agriculture, and its Industries | Topic

The Threat of Intentional Introduction of Foreign Animal Diseases into the United States

Background

Assumptions

Mission

Select a Topic to begin.

Back Next

Emergency Management of Agricultural Bio-Terrorism Courses

- ✓ Introduction to Agroterrorism, Agriculture and its Industries
- ✓ Principles of the Incident Command System
- ✓ Animal Health Emergency Management
- ✓ Animal Pathogens: Pathways of Introduction, Disease Recognition, Reporting, and Awareness
- ✓ Disease Response Mechanisms and Bio-Security
- ✓ Recovery--Animal Support Response

The Challenges of Creating Web-based Distance Learning Courses for Training in Food Protection and Defense

✓ Instructional Design Issues

- Availability of Subject Matter Experts
- Availability of Validated Content
- Lack of Agreement on Key Points and Issues
- Voice-over Power Point is NOT Pedagogical Sound

✓ Technical Design Issues

- ADL/SCORM Compliance
- Section 508 Compliance
- End-user Access to High-end Bandwidth
- Programming in Modern Web-based Languages and Graphical Design

Thank You

<http://erdlc.sju.edu>