Cruz expressed that at the end of the training, the participants were expected to have theoretical and practical understanding of what is an effective risk communication, gained insights on how to develop valuable strategies to overcome barriers including emerging and new food safety or health concerns, and increased ability to communicate outcomes of both risk assessment and risk management to target audiences.

In return, gained knowledge was anticipated to be used as tools to improve their respective government or organizations' competency in the area of risk communication. Mr dela Cruz further encouraged the participants to use the forum to expand their network of regional colleagues whose expertise rest on risk communication. The full training mechanics is shown in **Appendix 4**.

Director Gilberto F. Layese gave the rationale and background of the Training. The PowerPoint presentation is attached as **Appendix 5**. He emphasized that risk communication requires specialized skills and training to which not all food safety officials have access to. Moreover, it requires extensive planning, strategic thinking and dedication of resources to carry out. Director Layese cited that risk communication is the newest of the three components of risk analysis to have been conceptualized as a distinct discipline and is often the least familiar to risk analysis practitioners.

He also mentioned the direct relationship of an effective risk communication mechanism with food safety. An operational strategy includes efficient mechanisms of delivery, substantial and easy to understand messages, timeliness of communication, availability and use of supporting materials and information, purpose and credibility, and meaningfulness of the communication. Risk communication goals should also reflect a two-way exchange of information leading to a common approach to discuss issues and come up with a common influence on risk decisions.

PRESENTATION AND PLENARY

Introduction – Global Food Safety Strategy

One of the consultants, Dr Sonia Y. de Leon gave a global food safety situationer to level off the expectations of the participants of the training. She also presented the challenges in ensuring safe food supply and enumerated some of the existing international efforts and programs on food safety.

Dr de Leon further mentioned the negative consequences of food related disease outbreaks. These include effects on consumer health, finances, economic and emotions. She strengthened her point by citing reports of food borne disease outbreaks happening worldwide.

She then elaborated on the measures taken by countries to improve food safety management practices achieved through education, training, legislation and surveillance. Dr de Leon stressed that efforts of government can be

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affected if the private sector were not enabled to engage in consistent food regulation practices that meet international standards.

Dr de Leon presented briefly the risk analysis framework including its three components. She also enumerated several means of managing food safety risks, highlighting that communication is one of the most effective way of controlling it. Fostering dialogue among the different stakeholders namely government, academe, industry, and NGO (GAIN) will help in achieving an interdisciplinary approach in assessing risks and its effects.

The full PowerPoint presentation is found in **Appendix 6**.

Review of Risk Analysis

The participants were reviewed on risk analysis framework, its components, principles and importance by Ms Christel Leemhuis, Strategic Science Team Leader from FSANZ. The presentation can be found in **Appendix 7**.

To start with, she gave a brief introduction of the food regulatory system in Australia. The system is comprised of three sectors. These are: (1) good policy guidance, which is set by a ministerial council consisting of health and agriculture ministers from Australian States and Territories and New Zealand, (2) standards setting undertaken by FSANZ and (3) effective enforcement of standards at the state/territory and New Zealand. The diagram below reflects how these functions come together. Note that it also mirrors the risk analysis framework.

Standards setting
FSANZ

Policy
Ministerial Council
(States/Territories)
(health/agriculture portfolios)
FSANZ Act

Enforcement
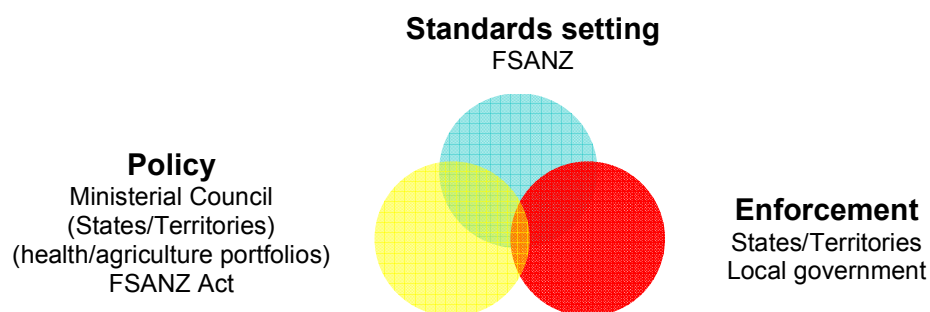States/Territories
Local government

Figure 1. Food regulatory system in Australia

The development of risk analysis is crucial since there is a community expectation that food will be safe. In general, for most people, most of the time, this expectation is met. However, ensuring food safety is dependent on many factors, not all of which can be controlled through government legislation and regulations.

Ms Leemhuis underlined that risk analysis basically addresses two questions, and these are: what is the nature and magnitude of the health risks and how should the risk be managed and communicated to those affected.

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Furthermore, she explained that food safety risk analysis is anchored on the principles that best available data are used, uncertainty are recognized, interested and affected groups are involved, level of protection is applied proportional to the implicated risks, communication is done in an open and transparent manner, and constant review of regulatory response is performed.

She also explained the components of risk analysis, its framework and their inter-relations. Ms Leemhuis expressed that risk analysis can be used across a broad range of circumstances in many different scientific fields. Through this process, one can identify effective risk management strategies and encourage wide range of communication with all stakeholders including consumers, industry and government.
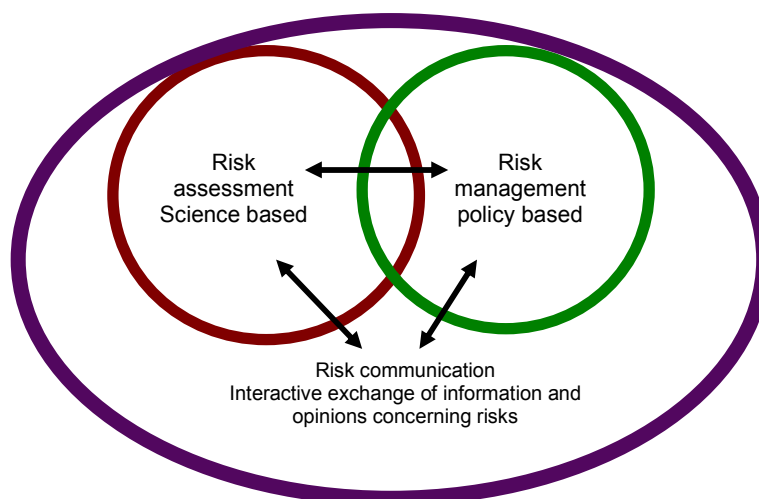

Figure 2. Codex Schematic Framework for Risk Analysis[1]

Focusing on risk communication, Ms Leemhuis stated that risk communication is embedded in the risk analysis process and should start at the beginning.

In order to accentuate what is not a property of risk communication, Ms Leemhuis pointed out that it is not just about communicating risk or simply telling the public of the decisions made. It is also neither a crisis-related process nor the sole responsibility of communication specialists. Risk communication instead is a two-way process that aims to facilitate understanding of people's perception of risks. Moreover, it is a process that presents a good opportunity to involve the public in the decision making process to get the message across the target audiences accurately and on time.

Ultimately, Ms Leemhuis stressed that food safety assessments need to be based on sound scientific evidence so that consumers can make informed choices, considering that everyone have a different perception of risk, and remain confident about the safety of food supply. The challenge still remains for the food regulators, she said, to maintain a food regulatory system that

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[1] FAO/WHO. 2006. **Food Safety Risk Analysis. A Guide for National Food Safety Authorities** - FAO Food and Nutrition Paper 87.

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delivers food for the population and also maintains public confidence on the regulations.

Elements and Guiding Principles

Dr Deborah Cai, an Associate Professor from UM commenced her presentation by affirming that member economies need to find means on how to make risk communication models work for their respective countries considering differences in culture.

She further explained the following concepts of risk communication: goals, definitions, roles and responsibilities, elements, principles and components. Dr Cai discussing the definition of risk communication, said that strategies have to be both for long and short-term issues.

Citing some of the risk communication goals, Dr Cai pointed out the importance of tailor fitting communication approaches so that it takes into account the emotional response of the target audience to a specific event. In most cases culture serves as the determining factor in making informed decisions. Due to this it is then very important to consider how the target audiences will react to a pre-determined choice. Dr Cai further articulated that during emergencies, risk communicators should be able to generate pro-active and reactive approaches.

Dr Cai enumerated the expected outcomes of an effective risk communication. The noteworthy are getting people behind to support the proposed or developed plan, efficient utilization of resources and providing the target audiences information to enable them in making informed choices. During the discussion of elements of risk communication, she also stressed that listening is the biggest factor in making an approach successful. However, she said that strategists and decision makers are more prone to talking than listening.

There are also thoughts that need to be considered during communicating certain messages: "what information is important?", "what messages should be delivered before, during and after", "what are the obstacle?", "what are the opportunities?", "what questions can we anticipate?", "what are the news media's responsibilities?"

She also elaborated on the outrage factors that can affect risk communication strategies since reaction of consumers changes as risk increases. During food borne disease outbreak situations, it is very crucial to eliminate the fear, if possible, from the consumers and persistently build trust which is slow to acquire, readily extinguished and difficult to re-establish, during crisis situation if not properly managed and is difficult to establish. People's reaction changes as risk increases, for example, when perceived received is low, our initial reaction would most likely acceptance of the situation. As the risk increases, we develop fear, denial and eventually we tend to get flustered or panic when the risk is too high. But more often than not, humans adapt well to risks even if our initial reaction to a new and potentially serious risk is usually

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over-reaction. Dr Cai to reinforce her point showed a diagram of human adaptation to perceived risks.

Acceptance **Fear** Denial Panic
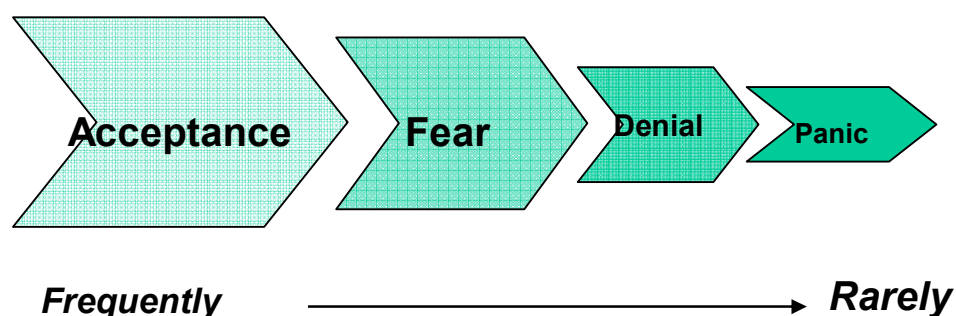
Frequently ──────────────▶ *Rarely*

Figure 3. Human adaptation mechanism relative to perceived risk (Sandman, 2005)

Fear as a natural reaction in a crisis situation can be managed if guidance or help is offered as soon as possible. If not, heightened fear leads to denial. Dr Cai expressed that denial, when it happens, is more dangerous than fear because then the target audience is lost.

The full presentation of her presentation is attached as **Appendix 8**.

After her paper presentation, Dr Cai entertained several questions from the participants. Issues that arose were: management of information that goes out to the media, appropriate moment to communicate about a crisis situation, and best time to send out necessary information.

Dr Cai in response to the first query stated that it is very important to consider news media as one of the target audience. Thus, extra attention should be spent with them to thoroughly explain the situation. However, when the media is owned by the government, dealing with the circumstances will differ. For the second query, Dr Cai stressed that crisis situations should be treated as an opportunity to sustain people's attention on what is going on and to get more information out in the field. Therefore, communication should be done before, during and after a crisis situation.

Communication strategies before the occurrence of an outbreak can be perceived as a proactive approach, while strategies during a crisis are geared towards controlling the rise of panic response from the consumers. After a crisis, communication should continue in terms of tailored responses to reach other audiences.

In addition, fear can be minimized during a food borne disease outbreak by conveying information as soon as food regulators have generated even little information about it. There is merit in letting the stakeholders know what information the government has and what they have not acquired yet. It is

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important to build trust between the consumers and government during these situations in order to prevent people from becoming suspicious.

Barriers to Effective Risk Communication

The Director for Communications of New South Wales Food Authority in Australia, Ms Samara Kitchener elucidated the common barriers to effective risk communication. Her presentation composed of three parts namely: barriers to communication within the risk analysis framework, barriers within the Codex context and general barriers to communication.

Ms Kitchener reviewed the risk analysis framework based on the Codex guidelines. With respect to the barriers of communication that occurs within the risk analysis framework, nine general difficulties that risk communicators face were identified: engagement of stakeholders, uncertainty and science, separation of risk assessment and risk management, stakeholder acceptance and ability to implement risk management options, communicating how the risk management options will alleviate the risk and public support for chosen management options.

According to Ms Kitchener, to overcome the barrier presented by uncertainty and science, it is important that the communicators assist the stakeholders in understanding the dynamism vis-à-vis the limitations that science presents. Likewise, she stressed the significance of facilitating the implementation of risk management options to the stakeholders.

In discussing the barriers to communication within the Codex content, Ms Kitchener presented an overview of Codex, its objectives and the committees involved in the development of food standards and guidelines. One of the main barriers within the Codex process identified was the difficulty in facilitating and implementing risk communication at the international level. To overcome this impediment, wider participation in the national level was recommended.

Another barrier identified was the lack of knowledge and experience, expertise and knowledge to participate effectively in the Codex process. Building the capacity of member countries in the various Codex issues and concerns shall enable them to provide more concrete recommendations to Codex works.

Ms Kitchener also stated that another major barrier to communication present within the Codex framework was the non-inclusion of consumer perception and cost benefit analysis in the development of policy guidance developed in Codex. She mentioned that incorporating consumer factors in a logical fashion shall facilitate the communication of risks.

Lastly, a discussion on the general barriers to communication was given focus by Ms Kitchener. She presented the challenge faced by risk communicators in dealing with the public. Scientists are trained to look into hard sciences. As such, they usually face the difficulty to unravel the information to stakeholders.

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Given this condition, Ms Kitchener explained that what may be acceptable for the scientists may not be the case for the stakeholders.

The organizational requirements for risk communication were also introduced in the presentation. Understanding the cornerstones of an organization involved in communicating the risks to the public shall aid to prevail over the barriers to communication. Ms Kitchener identified the three organizational requirements to be: expertise, trust and commitment.
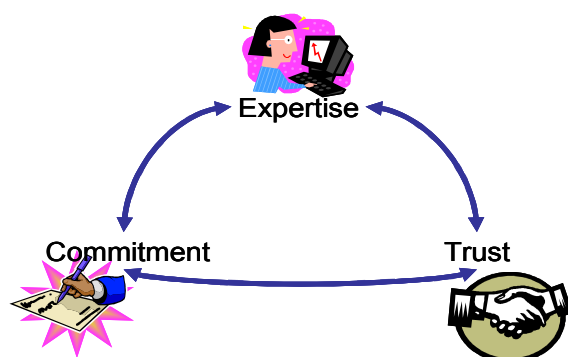

Figure 4. Organizational requirements for risk communication (NSW Food Authority)

Ms Kitchener pointed out that in expressing the commitment of the organization towards providing effective risk communication, it is important to do it early and often. She added that conveying commitment entails that the organization put the science in a policy context and give the message that the responsible agencies are looking into the various ways to manage the risk.

The second organizational requirement presented was on building expertise. According to the presentation by Ms Kitchener, the community generally looks to their respective governments to provide knowledge and experience. She stressed that scientific information on the risk is important and in communicating the information, the responsible agencies need to be open, honest and simple. Ms Kitchener further recommended that it is also advantageous to ask other people from other organizations and the universities for assistance and support in communicating risks.

Finally, Ms Kitchener elucidated the value of trust as the last of the organizational requirements for risk communication. She shared the experience of her organization in building trust during the onset of their activities in risk communication. Based on their experiences, she recommended the importance of creating a relationship with the consumers. This activity takes time to achieve but it can be done by taking positive action in smaller issues until capacity has been achieved and before a major crisis hits. She further emphasized that responsible agencies must do what they promise to undertake for the resolution of conflicts and crises in order to build the profile and credibility of the organization.

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A video clip was presented showcasing the activities done by Australia in managing the issue on meat substitution in the supermarkets. In this scenario, Ms Kitchener narrated that the local butchers were substituting the cheaper cuts of meat for the top of the line cuts. According to her, this resulted to public outrage due to the fact that the consumers are being deceived through such substitution. In order to pacify the consumers, the responsible agencies provided the public information on the situation. Likewise, the agencies declared that they shall take legal action to the establishments committing fraudulent acts.

Another video presentation illustrated the campaign of the Australian government in addressing the issue on the increased salmonella incidence during holiday season. The main activity undertaken by the government in this scenario was to provide public advice to consumers in the proper handling of foods, particularly in thawing and cooking turkey to avoid salmonella poisoning. Ms Kitchener imparted that small activities such as the one presented in the video clip facilitated in building the profile of their organization.

The last part of the presentation focused on the communication channels that agencies may tap in order to convey the key messages to the stakeholders. Among the different vehicles for communication include: public health partners, at the point of sale, through the internet, media and during community events. Ms Kitchener highlighted the need to take advantage of the new and emerging forms of media such as websites, RSS feeds[2], podcasts[3], blogs[4], mobile phone video and photo editing, and short messaging system. New media enables government to communicate risk directly and promptly. However, this form of communication may also bring about drawbacks such as credibility assurance and lack of control in the information being disseminated to the public.

In conclusion, Ms Kitchener summarized six action points to overcome the barriers in communication to be: active participation in networks before crisis occurs, build relationships and trust, employ the technology, response mechanism, plan and prepare, and maintain messages.

A copy of her presentation is shown in **Appendix 9**.

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[2] RSS is used to refer to the following formats: Really Simple Syndication (RSS 2.0), RDF Site Summary (RSS 1.0 and RSS 0.90) and Rich Site Summary (RSS 0.91). RSS is a family of Web feed formats used to publish frequently updated content such as blog entries, news headlines, and podcasts in a standardized format. An RSS document (which is called a "feed", "web feed", or "channel") contains either a summary of content from an associated web site or the full text. (http://en.wikipedia.org/wiki/RSS_(file_format), accessed 27 June 2008)

[3] A podcast is a series of digital-media files which are distributed over the Internet using syndication feeds for playback on portable media players and computers. The term *podcast*, like *broadcast*, can refer either to the series of content itself or to the method by which it is syndicated; the latter is also called podcasting (http://en.wikipedia.org/wiki/Podcasts , accessed 27 June 2008)

[4] A blog (an abridgment of the term web log) is a website, usually maintained by an individual, with regular entries of commentary, descriptions of events, or other material such as graphics or video. Entries are commonly displayed in reverse chronological order. "Blog" can also be used as a verb, meaning *to maintain or add content to a blog.* (http://en.wikipedia.org/wiki/Blog , accessed 27 June 2008)

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Ms Kitchener answered a few questions after her presentation. During the discussion, it was asked whether there is a need to require a certification for risk communicators similar to certificates issued to HACCP auditors and inspectors. As a response, Ms Kitchener replied that communicators should have and continue to develop expertise and certain skill in order to effectively communicate and impart the message to their target audience.

Another inquiry posted during the discussion focused on the credibility of the content of blogs and other internet based applications when used as a tool to communicate the risk. In reply, Ms Kitchener stated that there the stakeholders cannot be 100% guaranteed about the content of certain websites and blogs. However, their agency website follows the guidelines of Google™ in order to maintain a high credibility ranking which is through maintaining updated information posted in the website.

With regard to the question on the composition or structure of organizations involved in risk communication, Ms Kitchener elucidated that the section dealing with risk communication in their agency is composed of six to seven persons. She added that the team may start with a webmaster, a consumer communicator expert, an industry communicator expert and a call center manager for their hotlines.   Other experts and personnel may be added over time.

Finally, further elaboration on the implementation of risk communication throughout the risk analysis framework was discussed. Ms Kitchener clarified that crossovers among the organization and other organizations may be necessitated in order to effectively communicate the risks among the risk assessors, risk managers and stakeholders.

Strategies for effective risk communication

Ms Christel Leemhuis from FSANZ elaborated the strategies for effective risk communication. Her presentation involved five areas: general consideration for effective risk communication, points to consider regarding public concerns, strategies for risk communication in non-crisis situations, strategies for risk communication during a crisis and strategies for communicating risk management decisions. The copy of her presentation is in **Appendix 10**.

An introduction on the general considerations for effective risk communication involved a basic review and understanding of the risk analysis model, the definitions and types of risk, and the basic definition of risk communication. Ms Leemhuis also presented the underlying bases for governments to undertake risk communication to the public. She stressed that it is the fundamental responsibility of governments to provide the right information to ensure and protect public health and safety.

Likewise, the steps to effectively undertake risk communication were illustrated. According to Ms Leemhuis, the initial action would be to identify potential food safety risks. Following this, government agencies should

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assess the food safety risk and also the public perceptions of the risk. Upon evaluation, expert advice on the public health significance of the risk should be sought and a review of the approaches to manage the similar issues be undertaken. The next step would necessitate the formulation of management decisions, taking into consideration the audiences whom the risk will impact. Lastly, key messages are formulated and the channels to disseminate the messages must be identified.

The following risk communication wheel summarizes the steps for effective implementation of the communication activities.

Figure 5. The NSW Food Authority Best Practice Process Risk Communication Wheel

In the second part of the presentation, Ms Leemhuis discussed points to consider regarding public concerns. Addressing public concerns about risk requires an insight into the risk communication challenge between balancing advice based on expert knowledge and considering the public assessment of risk. Several fright factors were enumerated in the presentation. Ms Leemhuis stressed the importance of providing the public the necessary information and advising them on what to do. An information vacuum may result to public outrage.
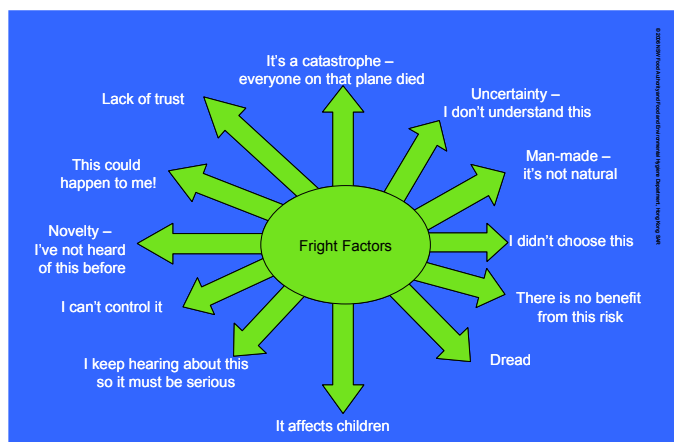

Figure 6. Fright factors (NSW Food Authority)

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The strategies for risk communication in non-crisis situations were elaborated by Ms Leemhuis. She expounded that non-crisis situations are risks that are on-going rather than immediate. Some examples of non-crisis situations are food poisoning, food recalls and food allergies. In dealing with this type of circumstance, it is important to develop awareness about the risk and encourage people to take the perceived risk more seriously.

Activities to raise awareness of the consumers may include publicity stints, direct interaction with stakeholders, point-of-sale interaction, event sponsorship and promotions. In line with the activities presented, Ms Leemhuis also stressed the need to build the public profile for the key communicator or spokesperson.

On the other hand, approaches for risk communication during a food safety crisis involve much more coordination and planning. As defined, a crisis is any unplanned event that triggers a threat to the safety, health or environment of the public or disruption of routine operations such that there are significant consequences and costs. Examples of crises situations include Mad Cow disease outbreaks, bird flu, dioxins, major food tampering and major food poisoning outbreaks.

A crisis usually undergoes four stages prior to its resolution. During the first stage, fact finding activities are usually undertaken. The public relies on the government to tell them what is happening. The next stage is where the drama unfolds and questions are asked by the public. Stage three is the part where the stakeholders point fingers on who is responsible for the crisis. The last stage involves resolution. It is only when questions have been answered and accountability has been put in place will the crisis be resolved.

The different modes of media can be utilized to help resolve crises situations. However, there are media road rules during such scenarios. First is to acknowledge that media are an opportunity and not an enemy. Second, both government and media should respect each other in doing their respective jobs. Third, responsible agencies need to give the media the correct information and know the need of the other.

Fourth, risk communicators should be able to prepare key messages in advance. Lastly, a polished public face or a key spokesperson may be employed to convey the key messages to the stakeholders. Similarly, Ms Leemhuis added that in developing key messages, the following concerns and questions of the public need to be addressed: "what is happening?", "how does it affect me?", "what should I do?" and "how can I get help?".

Lastly, the strategies on communication of risk management decisions were discussed. In developing communication strategies for the risk management decisions, risk communicators need to work closely with risk managers in identifying the target audiences, key messages and the communication vehicles.

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According to Ms Leemhuis, there are different communication strategies for risk management decisions based on the degree of actual risk and perceived risk of the public. These include: passive, responsive, educative and proactive approaches towards communicating the risk. A passive approach is usually required when there is low actual risk as well as a low perceived risk.

Communication strategies for such approach may include notification and alerting interested or affected parties. In the case of a responsive approach, the actual risk may be low but the public perceives a high level of risk. A good example for this scenario is the issue on Genetically Modified Organisms (GMOs). Taking a responsive approach would include adoption of a labeling regime for consumer information.

Similarly, an educative approach entails education campaigns to attempt to change consumer behavior. This is done when the risk is high but the public perceives the risk to be low as in the case of *Listeria monocytogenes* in ready-to-eat foods. The last communication strategy is the proactive approach implemented when both the actual risk and perceived risk is high. In this case, media and stakeholder interaction is initiated by the regulators.

Ms Leemhuis summarized the steps for developing communication strategies into three. In the first step, she stressed that the different audiences need to be identified. After this, key messages are developed. She added that normally, three key messages are developed and these messages are tailored for each type of audience. Lastly, the appropriate communication tools and vehicles should be selected.

As an activity for the Training, Ms Leemhuis asked each member economy to list down the different communication strategies that each economy has undertaken. It was discussed that an educative approach was undertaken for communicating the benefits of good cholesterol versus the bad cholesterol. Likewise, in another scenario, the member economies shared their experience of conducting a proactive approach to communicate the risk posed by Avian Influenza (AI).

To wrap up the discussion, Ms Leemhuis responded to the inquiry regarding the identification of responsible agencies among departments that shall handle communication strategies. According to her, the strategies that shall be adopted should be taken on a case-by-case basis and cooperation among departments and agencies is usually necessitated to effectively undertake risk communication. In the case of Australia, communicating risks from food are undertaken by the food departments and at the same time, health concerns are responded to by the concerned health departments. Ms Leemhuis stressed that the messages imparted should be consistent among all the agencies involved.

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Risk Communication Activities and Programs of the United States of America (the USA)

Dr Marjorie Lynn Davidson an Education Team Leader from the Center for Food Safety and Applied Nutrition (CFSAN) of the US Department of Health and Human Service (HHS) shared with the participants the activities and programs of the USA on risk communication. Although she recognized that the models used in the USA can vary considerably from those conducted in other member economies and may not be applicable, she imparted that these information can also be useful. Dr Davidson said that her presentation is geared towards providing an overview of how the USFDA system operates. Her presentation is shown in **Appendix 11**.

To begin, Dr Davidson said that the USFDA was established during the early 1900s due to crisis on food and drugs which has significantly affected the country. Currently, the USFDA enforces the present day Federal Food, Drug and Cosmetic Act and has moved from the agriculture to the health department. As a public health agency, USFDA regulates all food - except raw meat, poultry and processed eggs, cosmetics, animal drugs and feed, prescription and non-prescription drugs, blood products, vaccines, and tissues for transplantation, medical equipment and devices that emit radiation, including microwave ovens. For specific regulations of food products, Dr Davidson stated these are under the jurisdiction of CFSAN.

Dr Davidson shared with the participants one of the functions of CFSAN which is to provide assistance to local and state authorities in their regulatory functions. In cases of revisions on specific regulations, public consultative meetings are conducted to gather comments from the concerned stakeholders. This is done to ensure that people continue to have trust and confidence on the system and to ensure that stakeholders are involved throughout the whole process.

She also enumerated some of the methods they employ for risk communication. These include: media outreach programs, education conferences, putting up a toll free hotline, instituting a program called EdNet Listserve, issuing advisories, developing regulations on product labeling, establishing a food recall system and conducting training programs

Dr Davidson also cited several cases of food product recalls in the USA due to microbial or chemical contamination. She further explained that as a result of these recalls, the USA came up with a Food Protection Plan enforceable for both domestic food establishments and imported commodities. The plan was aimed at improving an already sound food safety protection capability so as to protect the USA food supply from both unintentional contamination and deliberate attack.

On other topics, she presented the distinctive feature of the USFDA, which is the Risk Communication Advisory Committee. The committee is composed of experts on risk communication, risk perception and other related fields. The committee provides advice on strategies and programs for communicating

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with the public about risks and benefits of regulated products, review and evaluate research relevant to communication to the public, and facilitate sharing risk and benefit information with the public.

Related to this, Dr Davidson explained that risk communication activities in the USA are done in partnership with other government agencies, industry players, academe, health providers and consumer groups. Based on their experience, Dr Davidson believed that this scheme is more successful compared with other methods. She further discussed that their programs were periodically evaluated using a trends analysis of consumer confidence. Except for an outbreak due to microbial contamination of spinach, the American consumer confidence on their food supply has an average of 81.5%. The trends analysis was conducted by CFSAN in collaboration with the retailer or grocery association.

Dr Davidson cited the benefits of enforcing the Safe Food Handling Practices Program implemented in the late 1990s up to early 2000s. Large improvements on food safety practices of food establishments were observed and this had a ripple effect on the adoption of handling practices of the next generation.

During the open forum, Dr Davidson was asked on who bears the costs of food recalls. In reply, she articulated that majority of the costs are shouldered by the industry and CFSAN only updates the information on food recalls in their website.

Risk Communication Activities and Programs of Australia

The risk communication activities and programs implemented in New South Wales (NSW) was presented by Ms Samara Kitchener, Director of Communications of NSWFA. The NSWFA is a state government agency with main responsibility for food safety across the entire food industry, from primary production to point-of-sale. She presented three risk communication case studies, namely – methylmercury in fish, food safety and pregnancy, and allergy aware campaign.

Prior to her discussions of the case studies, Ms Kitchener provided a diagram on the important role of risk communicators.
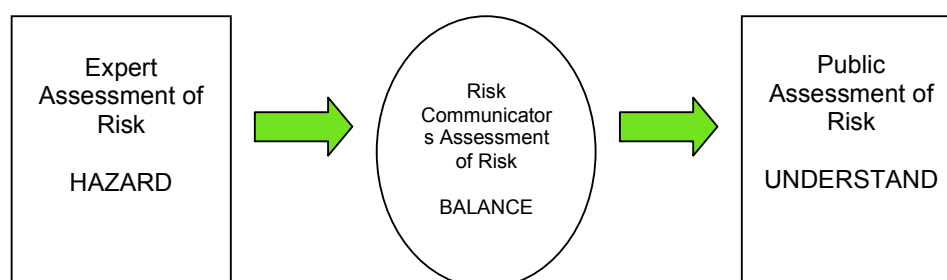

Figure 7. Important role of the risk communicator (NSW Food Authority)

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She reported that risk communicators provide balance between expert assessment of risk and scientific opinion, and the public perception of risk. The communicators provide information that can be easily understood by the public. Absence of such information will create a vacuum and can create a public outrage.

On the case of methylmercury in fish, Ms Kitchener informed the participants that in NSWFA they found this particular issue tricky to handle. It is a fact that fish in general is good for human health, especially for the brain development, due to its Omega-3 content. However, studies conducted showed that some large fish species can contain levels of methylmercury beyond the allowed maximum level (ML) and this can be detrimental to expectant mothers. Ms Kitchener further stressed that the benefits of Omega-3 far outweighs the negative effects of methylmercury. The results of the studies demonstrated that only 25.4% of large fish exceeds the ML of 1mg/kg, while small fish species have low mercury content.

Ms Kitchener also reported that during a pre-campaign research that they have done, results indicated that 64% of respondents were aware that some fish contain high mercury levels and can be bad for health, 44% of these respondents could not name a fish type that should be limited to reduce mercury intake, 39% named incorrect fish, 40% had reduced their fish consumption in the recent past, 45% did so because of health concerns. Many eliminated the wrong fish. The market research confirmed the extent of the problem and confirmed that a strategy to inform women about how to avoid mercury while enjoying the benefits of fish was necessary.

Using the findings as basis, the NSWFA launched a massive information campaign aimed towards educating women planning pregnancy and pregnant women on how to include fish in their diet. Ms Kitchener further discussed that NSWFA used the three-prong approach.
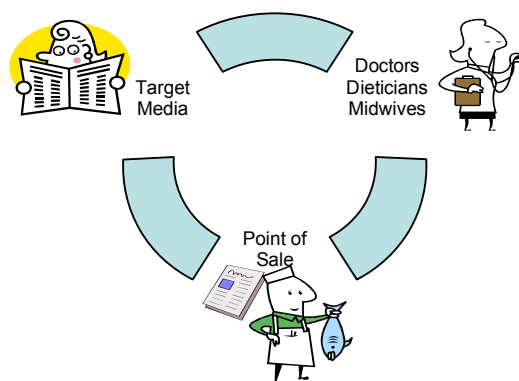

Figure 8. Three-prong approach used in the methylmercury in fish issue
(NSW Food Authority)

She relayed that the decision was made because they believed that any public education campaign needed broad support from a number of different community, medical and industry groups to help with message dissemination

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and give it credibility in the eyes of the public and media. It was also felt that these groups could channel the message via their membership more effectively than a single agency. Campaign strategies for dissemination include showcasing during Easter shows, posters, distribution of brochures, website development and optimization.

As a result of the campaign, Ms Kitchener shared with the participants that it has achieved a successful media repositioning in terms of balanced messages that has reached a potential audience of 1.5 million through television, radio, print and internet channels. Moreover, all media reports mentioned fish benefits and information on fish choices when pregnant or planning.

After the presentation of the first case study, the participants were encouraged to ask questions. The following were the queries: methylmercury content of fish oils and shellfish, employing celebrities as endorsers, and portion of the fish with the highest methylmercury content. Ms Kitchener replied by saying that the regulations of NSWFA only covers fish species and does not transcend to fish by-products. She also suggested that other Member economies with high consumption of fish oil should explore the possibility of conducting risk analysis and developing communication strategies for its target audiences.

On the other hand, Ms Kitchener responded positively by stating that celebrity endorsements will greatly promote a risk communication approach since these celebrities can reach the public in a way that greatly interests them. With regard to the third question, methylmercury is concentrated on the various parts of the fish flesh.

Moving on with her presentation, Ms Kitchener presented a related topic on food safety schemes for pregnant women. The program was developed as a consequence of the findings of a consumer research conducted in February to March 2007 wherein 50% of the respondent felt that there was insufficient information available on diet and food safety for pregnancy. Among the food safety messages promoted during the campaign were: proper food preparation, eating fish wisely and taking in folate. She also articulated that the program is relatively new and that NSWFA is conducting continuous monitoring of the effectiveness of the program.

The last case study presented by Ms Kitchener was the Allergy Aware project. This drive was embarked on because food allergies affected 5% of the children and 1% of the adult population in New South Wales. Even though, Australia has legislations pertaining to food allergies (eg, food labelling), NSWFA deemed it necessary to start a program targeting restaurants because survey showed that 85% of people with food allergies had experienced a reaction in a restaurant.

Allergy Aware is a campaign intended to establish an allergy management partnership between food service businesses, local councils, the NSWFA and consumers to assist food businesses understand and comply with legislation

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around food allergy, and give allergic consumers greater choice when eating out. In order to effectively accomplish this task, the NSWFA collaborated with concerned consumer groups on the logo.

Ms Kitchener was asked several question on the trigger points, conceptualization of the logo, difficulties and success indicators of the project. She replied by stating that it is very important for people with allergies to effectively communicate that they have allergies to the people preparing their food. The logo was also was developed in partnership with graphic designers. The NSWFA supposed that a logo is crucial since it taps the emotional and logical part of the brain.

Moreover, she expressed that during the initial stages of designing the logo, a test-run was conducted with some audiences especially to the affected consumer groups. Trigger points on the achievements of the project is monitored by continuously observing the media and reading-through the latest epidemiological data.

A copy of her presentation is found in **Appendix 12**.

Some Success Stories in Properly Managed Risk Communication: Benefits and Failures

Dr Marjorie Davidson of the USFDA shared with the participants some of the successful initiatives they had relative to communicating food risks to target consumers. These are the Fight BAC!® campaign and a label education program for tweens called Spot the Block. Her presentations are attached as **Appendix 13** and **Appendix 14,** respectively.

The Fight BAC!® campaign was launched due to the outbreak of *E. coli* which has affected many children. This resulted to anxiety from both the government and industry sectors to continue ensuring the safety of food supply. One of the key characteristic of Fight BAC!® is the compelling character or slogan that most consumers can easily identify and remember. BAC!, the campaign's "bacteria mascot," is the invisible enemy who tries his best to spread contamination wherever he goes. The Fight BAC!® campaign was created and maintained by the Partnership for Food Safety Education (PFSE). It is a not-for-profit organization that unites industry associations, professional societies in food science, nutrition and health, consumer groups, and the U.S. government to educate the public about safe food handling.

Dr Davidson also explained that Fight BAC!® focuses on four main steps of keeping food safe from bacteria. These are: clean – washing of hands and surfaces often, separate – do not cross-contaminate, chill – refrigerate properly, and cook – cooking to proper temperature. In addition, she enumerated the promotional campaigns they have conducted throughout the USA. Currently, the USA is developing advertising strategies on the importance of cleaning or washing of fruits and vegetables.

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Figure 9. Fight BAC!® four main steps of keeping food safe

The second program called "Spot the Block." This is an educational campaign launched by FDA and the Time Warner Cartoon Network to encourage "tweens" (youth ages 9 to 13) to look for (spot) and use the Nutrition Facts (the block) to make healthy food choices. In this way, the two organizations hope to prevent overweight and obesity in the early years, which can ultimately help young people stay healthy and prevent health problems in adulthood.was geared towards managing the rise of obesity of children aged 9 to 13, coined as tweens, in the USA. This was done by tapping the expertise of child psychologists, cartoonist and their networks to create a promotional material that will tap the interest of tweens to the information indicated in nutrition labels. Cartoon characters were developed and advertisements plugged in the various children networks.

Figure 10. USFDA and Time Warner Cartoon Network "Spot the Block" logo

Dr Davidson explained that three messages were sent out namely, checking out of serving size, considering the calories and choosing the nutrients wisely. During the evaluation USFDA have conducted, Dr Davidson sent out the good news that there was a significant increase in children thinking nutrition panels are important and that they are more likely to tell their friends about the information they have acquired. Major elements of the Spot the Block campaign respond to one of nine priorities—nutrition—identified by the Department of Health and Human Services for transforming America's health care system. The elements are based on recommendations from both the FDA's Obesity Working Group and the federal government's 2005 Dietary Guidelines for Americans. The dietary guidelines contain science-based advice designed to help Americans choose diets that meet nutritional

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requirements without exceeding caloric needs. In addition, the guidelines promote health, support active lives, and reduce the risk of chronic disease. She further expressed the USFDA is now implementing the second tier of their strategy which targets the parents.

Member Economy Presentations

Each of the 13 member economies presented an overview of risk communication activities in their respective governments. The member economies presented an overall situation in their respective economies including the geographical, economical and cultural aspects. The presentations of the 13 member economies are attached in **Appendix 15** to **Appendix 27**.

For Brunei Darussalam, a description of the organizational structure of the Department of Agriculture and agencies responsible for food safety issues in was presented. Similarly, Ms Lenny Suliany Faizura Binti Ahmad Sah, agricultural chemist from the Brunei Agriculture Research Center described the communication activities undertaken by their department, including assisting local food establishments in developing Good Manufacturing Practices (GMP) and food safety systems to the local premises.

The delegate added that pamphlets, brochures and other forms of media are also being disseminated in support of the food safety program in the local communities.

Mr Liu Quanguo reported the status of the food safety risk communication in the China. He summarized the following activities undertaken by the member economy: collection and analysis system of food safety risk information, trace system of risk information, strengthen construction of a nationwide quick risk warning and responding system, issuing system of risk information, and risk information counseling. Mr Quanguo added that the responsibility of communicating risks is shared among government organizations, private sector, society unions, consumer and consumer associations, academia, media and international organizations.

Also, a rundown of the common problems faced in communicating risks in China was disclosed by Mr Quanguo. He identified that the primary issue is the lack of risk communication resources and information is insufficient. In addition, the fragmentation of the different agencies also creates problems particularly in the allotment of resources for the various risk analysis steps. In order to address the problems identified, Mr Quanguo posted recommendations such as establishing a unified harmonious food safety risk communication management system thus integrating government resources, integrating interdepartmental and intergovernmental exchanges.

The third member economy to present its overview of risk communication activities was Chinese Taipei. Mr Hsu Chao-Kai shared the undertakings of their department in ensuring food safety through public education campaigns. The Department of Health conducts annual scheduled plans for specific

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