



Food and Agriculture  
Organization of the  
United Nations

# Report Regional Training on Enhancing Risk Communication in Food Safety

13-15 May 2015

Bangkok, Thailand





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Regional Office for Asia and the Pacific  
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## FOREWORD

In today's context of globalization and greater food trade, the challenges and risks to health and safety due to food consumption are high. To deal with such challenges of food safety, it is important to follow the risk analysis principles and framework, an important part of which is risk communication. Risk communication has been defined as the exchange of information and opinions concerning risk and risk-related factors among risk assessors, risk managers, consumers and other interested parties. The main goal of food safety risk communication is to increase understanding among various food safety stakeholders regarding the rationale behind the decisions taken to assess hazards and manage food safety risks, and to help people to make more informed judgments about the food safety hazards and risks they face in their lives. Food safety risk communication also frequently informs and enhances risk assessment and risk management decisions.

The responsibilities of national food safety authorities with regard to risk management have increased considerably in recent years. The responsibility of governments to communicate information about food safety risks to all interested parties at the appropriate level of understanding for each audience has increased accordingly. As part of the FAO's endeavour in strengthening capacity to develop and implement food control activities in member countries, a regional training programme on "Enhancing Risk Communication in Food Safety" was held in Bangkok, Thailand from 13 to 15 June 2015.

This report summarises the proceedings of the training programme based on the good practices and elements of communication learnt in the technical lecture sessions – including the technical lectures, the hands-on exercises, the discussions on case studies to apply best practices of risk communication in real life food safety situations, and the role play which was organised to demonstrate how to deal with the press when a food safety incident occurs. The training exposed participants to the rapid risk communication assessment tool to enable them to assess their food safety risk communication capability and capacity at the organizational, country, regional and global levels, including practical approaches to address such needs. Some areas for support identified for capacity building at country and regional levels on risk communication are also covered.

I take this opportunity to convey FAO's appreciation to all resource persons and participants for their contribution to this important training programme. I hope that the report, which highlights the discussions held during the training and the experiences shared by the participating countries of the region, will be useful to governments in strengthening risk communication in their countries.



Hiroyuki Konuma  
Assistant Director-General and  
Regional Representative for Asia and the Pacific  
Food and Agriculture Organization of the United Nations



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## EXECUTIVE SUMMARY

The three-day regional training on Enhancing Risk Communication in Food Safety was organized by FAO Regional Office for Asia and the Pacific on 13 – 15 May 2015. This was organised in view of requests received from countries as well as the fact of risk communication being an area not well addressed in countries yet a very important part of risk analysis paradigm. The training brought together 40 representatives from 13 Asian countries representing senior level government functionaries from the ministries of agriculture, animal husbandry, food, health and commerce engaged or to be engaged in food safety risk management and communication in their respective countries. The faculty for the training were drawn from academics and professionals with long standing experience in the field, FAO Headquarters and RAP.

The opening session commenced with the Welcome address delivered by Mr Adnan Quereshi, Senior Administrative Officer on behalf of Mr Hiroyuki Konuma, Assistant Director General and Regional Representative, FAO Regional Office for Asia and the Pacific and Opening Address given by Dr Tipvon Pariyasiri on behalf of Secretary General, FDA, Ministry of Public Health.

This was followed by technical interactive sessions consisting of key conceptual and factual lectures followed by hands-on individual or group exercises enabling the participants to acquire new or advanced knowledge, and practical skills on good risk communication principles and practices in emerging and non-emerging settings applicable to food safety. The main topics of case-studies, drafted by each country prior to the workshop, were introduced early in the workshop, and discussed at the end of the workshop, allowing the participants to reflect on the knowledge accumulated throughout the workshop, apply new skills and report/exchange key lessons-learned. The former were captured as key recommendations on how to strengthen risk communication capacity at the country and regional levels, and are reported below. A role play exercise was organised using hypothetical potential emerging food safety signal, which becomes over time major public health event. The focus of exercise was on demonstrating complexity of challenges when communicating food safety problems in presence of uncertainty, new information, and under serious media pressures.

The participants reviewed an example of rapid risk communication assessment tool, which could be applied at the organizational or country level, primarily under emergency setting, and discussed opportunities to potentially pre-test and adapt such tool, or share similar tools among countries. The use or adoption of similar tool could allow an organisation or country to assess their food safety risk communication capability and identify strengths and capacity building needs (based on weaknesses). The tool could be potentially tailored in future for regional level, for other purposes (e.g. used as part of broader food safety capacity assessment) or simply used for rapid self-assessment to identify specific capacity building needs, develop plan for strengthening capacity and demonstrate improvements. Some areas for potential risk communication initiatives at country and/or regional level as identified during discussions are as below:

### ***Country level***

1. Creating pragmatic opportunities for dialogue with stakeholders at appropriate times throughout risk analysis process

2. Using multi-stakeholder networks to collaborate in risk communication is particularly beneficial when resources are limited
3. Identifying one or more spokespersons who would have the responsibility in carrying out the risk communication activity on food safety issues, when such situation arose may be useful. Such persons may need to be professionally trained in addressing public at large, media persons. Countries generally felt that training support for spokespersons is needed.
4. Effective risk message crafting and pre-testing of messages with targeted audiences is essential

### ***Regional level support***

Based on the priority areas identified, the participants recommended FAO led support in both introductory and advanced training in risk communication applicable to food safety but specifically in the following areas which in their view would be very beneficial to countries:

- Training of personnel for dealing/briefing of Media on risk communication
- More opportunities to connect with other countries through networking and better utilization of INFOSAN Asia network
- Support countries in carrying out an assessment of risk communication in their countries

## 1. INTRODUCTION

Food safety risk has been defined by the Codex Alimentarius Commission as a function of the probability of an adverse health effect and the severity of that effect, consequential to a hazard in the food. Whereas food safety risk communication is the exchange of information and opinions between the interested parties, namely risk assessors, risk managers, consumer and other stakeholders including media personnel, specifically about risk and risk-related factors associated with food safety hazards and risks.

Risk communication is an essential part of the risk analysis paradigm. The main goal of food safety risk communication is to increase understanding among various food safety stakeholders regarding the rationale behind the decisions taken to assess hazards and manage food safety risks, and to help people to make more informed judgments about the food safety hazards and risks they face in their lives. Risk communication is needed in helping risk assessors and managers to understand the likely impact of their different decisions and thereby assessing the effectiveness of their decisions. Food safety risk communication is often an on-going mechanism for reducing the risks of food safety hazards and should always include relevant stakeholder groups, namely regulators, consumer, food business operators, industry, others.

The risk management responsibilities of national food safety authorities have increased considerably over the years. Traditionally, risk analysis capacity building efforts applied to food safety have been focused around risk assessment and risk management, and/or other related functions, such as surveillance, and policy decision making. It is important to note in this context that governments have a fundamental responsibility for risk communication when managing food safety. With the responsibility for managing risks comes the responsibility to communicate information about risks to all interested parties at the appropriate level of understanding for each audience. Decision-makers within the government have the obligation to ensure effective communication to interested parties including public when appropriate in the risk analysis process. Risk managers also have the obligation to understand and respond to the factors driving public concerns about health risks, as well as technical risk assessments.

The post-event analysis of recent global, regional and national food safety and public health events demonstrated their adverse impact on consumer's confidence in safety of agri-food production, supply and trade. Therefore, a need is increasingly being felt for more effective use of the risk communication principles and practices by shift from the current generic approach to more proactive perspective and issue specific risk communication practices targeting stakeholders within their competencies and vulnerable groups.

Risk communication is an area not well addressed in countries but a most important part of risk analysis and countries have been requesting support. In view of the requests as well as the importance of this subject, the regional training on enhancing risk communication capacity in food safety was organized.

The main objectives of the regional training workshop were to provide participants with:

- enhanced understanding of what is food safety risk communication, why is it so important and its contextual use by national food safety authorities within the context of risk analysis, and in the management of food safety and public health events, and emergencies;
- the tools for developing/enhancing risk communication capability and capacity in food safety, including their practical application;
- be able to assess food safety risk communication capability and capacity building needs at the organizational, country, regional and global levels, and practical approaches for addressing such needs.

- opportunity to share knowledge and experience on good risk communication principles and practices, and key factors and considerations for contextual adaptation.

The training programme was organized by FAP Regional Office for Asia and Pacific. The course content was put together by the FAO Regional Office for Asia and the Pacific, Bangkok (FAORAP) with support from the resource persons and consisted of lectures followed by exercises by the participants. The training workshop is planned as an intensive, highly-interactive three day activity consisting of theoretical lectures and hands-on exercises on food safety and risk communication at country level and across countries covering risk communication principles and practices including direct communication through spokespersons, public and media interactions. The training programme agenda is given in **Annex 1**.

A total of 40 participants from 13 countries of Asia, namely Bangladesh, Bhutan, Cambodia, China, India, Indonesia, Lao PDR, Malaysia, Maldives, Mongolia, Philippines, Thailand and Vietnam had attended the training. They were senior managerial/ technical staff from Ministries of Agriculture; Health and Family Welfare; Animal Husbandry (Livestock); Food and Drug Administration, Quality and Standardization Organizations with formal mandates in risk analysis functions (risk analysis, risk management and risk communication) - assessing, communicating and managing food safety, zoonoses, public health events/ emergencies. Some of the participants were already serving or anticipated to be appointed in future as official public relationship/ media spoke persons for communicating food safety, zoonoses, public health events or crises.

The Resource Persons were academics and professionals who are internationally recognized risk communication specialists with expertise and experience in applying risk communication principles and practices in food safety area and also officials from FAO Headquarters and regional office. The list of participants, resource persons and support persons is given in **Annex 2**.

The participants had prepared case studies on the basis of a guidance document provided in advance by the FAORAP. The case studies were prepared by each country illustrating real life situations on food safety risk communication and lessons learnt by them. The presentations by each country were followed by lively discussions and exchange of ideas and sharing of experiences by the participants and resource persons. The details are given in **Annex 8**.



## 2. MAIN PROCEEDINGS

### 2.1 Opening Session

Mr. Adnan Quereshi, Senior Administrative Officer, FAO Regional Office for Asia and the Pacific, Bangkok (FAORAP) delivered the Welcome Address on behalf of Mr Hiroyuki Konuma, Assistant Director-General who could not be present for the occasion due to pre-decided programme. He extended a hearty welcome to Dr Tipvon Pariyasiri, Director, Food Control Division, Thai Food and Drug Administration, Ministry of Public Health, Government of Thailand, the participants from thirteen countries of Asia and the resource persons to the training programme, the first of its kind in the region.

Mr Quereshi observed that the subject of discussion was very pertinent in the current context of globalization with increasing demand by consumers for variety in foods leading to a high potential for spread of contamination and thereby risks to consumer health and safety. In this scenario many national and regional food safety authorities around the world had adopted the concept of risk analysis as a risk management framework. He brought out the importance of risk communication which is an essential part of the risk analysis paradigm and the responsibilities of national food safety authorities for the same. He highlighted that this regional training on enhancing risk communication capacity in food safety was being organized, as the subject, though a most important part of risk analysis was not well addressed in countries and FAO had been receiving requests for support on this.

Mr Quereshi also mentioned that FAO has been focussing on food safety at the international level as well as regional level in areas relating to setting international standards as well as responding to the needs of individual countries and supporting them in strengthening capacities to develop and implement food control activities including standards and their implementation.

Mr Quereshi concluded by wishing participants a successful training which would help them to increase their understanding of risk communication principles and their implementation within countries thereby leading to stronger food safety systems. The full text of his speech is given at **Annex 3**.

Ms. Shashi Sareen, Senior Food Safety and Nutrition Officer, FAO Regional Office for Asia and the Pacific, Bangkok introduced the subject with a presentation on “Overview, objectives and expected outcomes of the programme” observing that risk analysis as a science-based risk management framework adopted globally by many national, regional food safety authorities as a systematic disciplined approach for making food safety decisions. However, risk communication was an area not well addressed in countries, and requests had been received during meetings and workshops for such training. The main goal of risk communication was to increase understanding among various stakeholders regarding rationale behind the decisions taken to assess hazards and manage food safety risks. Such understanding would help people in making more informed judgments about food safety hazards and risks they faced in their lives. It would also enhance in informative risk assessment and risk management.

She highlighted the following as main objective of the Regional Training Programme, which was to provide participants with:

- an enhanced understanding of what is food safety risk communication, why is it so important and its contextual use by national food safety authorities within the context of risk analysis, and in the management of food safety and public health events, and emergencies; and

- the tools for developing/enhancing risk communication capability and capacity in food safety, including their practical application;
- opportunity to share knowledge and experience on good risk communication principles and practices and key factors & considerations for contextual adaptation.

She highlighted the ‘Learning Outcomes’ namely that by the end of the workshop, participants should:

- be familiar with good principles and practices of food safety risk communication;
- understand similarities and differences between food safety risk communication in the context of application of risk analysis framework, and management of emerging and re-emerging events or crisis situations; and
- be able to assess food safety risk communication capability and capacity building needs at the organizational, country, regional and global levels, and practical approaches for addressing such needs.

The Outputs were presented as Country case studies prepared and presented, around 40 participants trained in food safety risk communication and its use by national food safety authorities within the context of risk analysis, and report of training giving the discussions, country case studies and recommendations produced. This was followed by an overview of the programme and an introduction of resource persons and participants. The Opening Session concluded with the Opening Address by Dr Dr Tipvon Pariyasiri, Director, Food Control Division, Thai Food and Drug Administration, Ministry of Public Health, Government of Thailand.

Dr Pariyasiri began her Opening Address remarking that issues related to food safety was a matter of great concern for several countries of the world including the western World because unsafe food affected millions of people resulting to increase in the magnitude of health burden. She observed that lack of integrated control measures amongst several agencies involved in a country led to less effective in implementation of food safety requirements. FAO Regional Office at Bangkok, in the year 2012, had initiated an important initiative towards integration of national food safety policies with the aim to strengthen national food control system. It is imperative that cooperation, coordination and communication between ministries, agencies and stakeholders connected with food chain, food safety and food security are crucial factors for effective food control system at national and regional levels. The three-day training of participants from thirteen countries of Asia, who are involved in food control system in their respective countries, was of immense importance as it will enhance their knowledge and sharpen their skills for bettering their service to their nations. She observed that while communicating to stakeholders, media, one should be truthful, communicative, clear, precise and professional. Full text of her speech is given at **Annex 4**.

## *2.2 Technical sessions*

The technical sessions were spread over three days and consisted of lecture sessions, case studies and group work. Prior to start of the technical sessions, participants were given index cards and asked to list down their expectations from the training programme. A gist of their expectations is given below:

- Build/enhance effective national/regional risk communication system, applicable to food safety.
- Training for spokesperson for risk communication to public, health promotion, food safety emergency and non-emergency settings.

- Training on good risk communication practices when dealing with uncertainty (limited laboratory facility, uncertainty of laboratory diagnosis or source of hazard/risk)
- Importance of post-event documentation (e.g. crisis is over), review, evaluation and continual improvement in risk communication procedures.
- Use of social media – pro and con.
- Build effective risk communication capacity for food safety in Thailand.
- Use regional/national INFOSAN network meetings and CODEX meetings as fora for building and maintaining advanced competencies in risk communication.
- Develop and post an inventory of case studies and post-event evaluations generated through various FAO and other collaborative initiatives.
- Training on early warning system.

Highlights of the lectures are given below and the power point presentations in the same order are given in Annex 11.

### *Session 1 Lecture 1a)*

#### **Ms Shashi Sareen – “Main food safety issues, challenges and initiatives at the regional level”**

Ms Shashi Sareen, Senior Food Safety and Nutrition Officer, FAO RAP, Bangkok in her lecture said that in today’s era of globalization, there is increasing transboundary movement and trade of food across countries, both imports and exports, leading to a wide variety of foods available for consumers to choose from. The potential and probability of spread of different types of food contamination is high with the continuously increasing global food supply chain and transboundary movement of foods. This is posing an increasing challenge for governments who have the mandate for ensuring health and safety of its citizen. In this background FAO has an important leadership role in advancing the food safety agenda in the region – including the concept of risk analysis.

The issue of food safety is also receiving critical attention in Asian countries. There have been several cases of food contamination either of indigenous produce or of imported items. The major aspects of contamination are presence of residues of pesticides, veterinary drugs, environmental toxicants, other chemical contaminants and toxins, like dioxins, melamine, allergens; adulterants like non-permitted food additives, food colours, toxic preservatives like formalin etc; pathogens and spoilage micro-organisms; zoonotic diseases like avian influenza. There are other issues, such as presence of volatile organic pollutants and heavy metals arising from industrial or automobile pollution, issues like mislabeling, wrongful claims, frauds etc.,

Major food safety challenges in the region were highlighted to include the continually changing or emerging newer foodborne hazards and their rapid transmission across borders due to globalization and trade liberalization, the need to find or maintain appropriate balance between food safety and food security, linking the final product to the primary food production with greater focus on traceability aspects, poor multiagency coordination, absence of data for taking risk-based decisions, poor measurement or unclear indicators for food safety due to which this area is not given an appropriate focus by governments, low focus on awareness and trainings and not much emphasis on product labelling for consumers information and product differentiation.

Ms Sareen highlighted the food safety definition of the FAO/WHO Codex Alimentarius Commission *General Principles of Food Hygiene CAC/RCP 1-1969*) as an assurance that food will not cause harm to the consumers’ health when it is prepared and/or eaten according to its intended use. Food Safety implies absence or presence at acceptable and safe levels of

contaminants, adulterants, naturally occurring toxins or any other substance that make food injurious to health on an acute or chronic basis.

She added that the importance of food safety has been recognized by FAO as a critical area and FAO supports countries by providing technical assistance and guidance through its food safety and quality programme. The FAO Vision “Achieving food security for all is at the heart of FAO’s efforts to make sure that people have regular access to enough high-quality food to lead active, healthy lives”. Food security means that all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life (World Food Summit, 1996).

Food safety, as explained by Ms Sareen is important for protection of consumer’s health from food borne illnesses; protection from fraud a food can be adulterated, unwholesome, mislabelled; reduction of food losses and wastes; promoting consumer confidence; contributing to economic development by maintaining confidence in food systems; facilitating market access by meeting regional and international requirements and strengthening national reputation.

Ms Sareen highlighted that FAO is currently supporting several programmes both at regional and country level in the Asia Pacific region, covering capacity strengthening in different aspects of food safety and quality which broadly address:

- Food safety policies, legislation and governance (including coordination mechanisms)
- SPS, standards and norms and Codex related activities
- Enforcement and surveillance related aspects including inspection, testing, enforcement, food-borne disease surveillance (FBDS)
- Food safety in various agro food supply chains (including street foods and organised retail); linkage to primary production
- Food safety emergency management and recall systems
- Certifications and accreditation
- Trainings, awareness and education
- Development of guidelines and manuals

The ongoing projects and programmes of FAO RAP were elaborated including those related to risk analysis. Some priority areas of current focus were also highlighted. A priority subject highlighted is risk based approach to food safety. It is challenge for national food safety authorities in establishing or enhancing risk analysis capacity in food safety to include risk assessment, management and communication. This is an area which has been of significant focus in the region. Other areas include support to countries in relation to food safety policy dialogue and development, strengthening coordinated actions and mechanisms through multidisciplinary approaches and partnerships, sound evidence base through the generation and access to data and information, facilitation and support to implementation of Standards and agreements (SPS/TBT) in terms of harmonization at both country level and international/ regional, strengthening participation in international standards setting, strengthening role of voluntary/ private standards for regulatory purposes and recognition of certifications and accreditations, trade facilitation support through equivalence and recognitions.

### *Session 1 Lecture 1b)*

#### **Dr Andrijana Rajić - “FAO’s programme for improving food safety globally - Newer Activities and Tools”**

Dr Andrijana Rajić, Food Safety Officer, Food Safety and Quality (AGD-F), Agriculture and

Consumer Protection Department, Food and Agriculture Organisation of the United Nations (FAO) reiterated that achieving food security for all is at the heart of FAO's efforts – to make sure people have regular access to enough high-quality food to lead active, healthy lives. The safety and quality of food is at the centre of FAO's mandate. Unsafe food can cause considerable morbidity and mortality due to contamination with bacteria, viruses, parasites, natural toxins, pesticides, and chemical or radioactive substances. Exposure to these contaminants can lead to infectious diseases, acute toxicities, cancers and developmental defects. Millions of people fall ill every year and many die as a result of eating unsafe food or drinking contaminated water. Food safety hazards can also spread through distribution of unsafely produced, processed or handled food and result in food chain incidents. Such events can easily occur in two or more countries and sometimes result in regional or global food safety emergencies. Food safety incidents, beyond direct public health consequences, can have significant food security and economic impacts both in developed and developing countries. This is due to agri-food trade disruptions, losses of food and incomes, and health care and productivity costs. It is crucial to detect and prevent spread of food safety hazards early (e.g. foodborne pathogens, chemical residues).

Food safety and quality have an ever-increasing profile at the international, regional and national level. Growing membership of the World Trade Organization (WTO), and the need to comply with the Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement) and the Agreement on Technical Barriers to Trade (TBT Agreement), has transformed the global context for trade in agricultural and food products. At the same time, new and established food-borne risks, the emergence of serious transboundary food scares and increased consumer awareness have highlighted the challenges faced.

Dr Rajić highlighted that FAO has been working for more than forty years, in collaboration with national governments, the World Health Organization (WHO) and other international, regional and donor organizations, food enterprises, scientific institutions and NGOs, to improve the safety and quality of food. The five elements of FAO's global food safety program are:

1. Strengthening national food control capacities;
2. Supporting science-based food safety governance and decisions;
3. Enhancing food safety management along food chains;
4. Providing food safety platforms and databases; and
5. Guidance and tools (e.g. food chain surveillance/intelligence) for prevention of food safety emergencies and improving resilience.

She defined food control as a mandatory regulatory activity of enforcement by national or local authorities to provide consumer protection and ensure that all foods during production, handling, storage, processing, and distribution are safe, wholesome, and fit for human consumption, conform to safety and quality requirements, and are honestly and accurately labelled as prescribed by law. She explained that a National Food Control System entails the integration of a mandatory regulatory approach with preventive and educational strategies that protect the whole food chain. National food control systems play a pivotal role in protecting the health of consumers and ensuring fair practices in trade. While the Codex Alimentarius provides the Principles and guidelines for National Food Control Systems, countries are free to determine how to best design their food control system and implement specific control measures. These systems must fit the specific national situations, for example appropriate level of public health protection; legal and institutional set up; availability of support services, such as analytical resources, etc., therefore no two systems are alike. However, whatever the architecture of the national food control system, measuring its effectiveness is universally important to verify that resources are being well-used and to inform plans for further strengthening of the system. Being able to demonstrate

performance can also be very important, while discussing with potential trading partners, to open new markets or improve trading relationships and in building stakeholder confidence domestically.

The resources aimed at supporting development of food control systems are shown in Table 1.

Table 1

Regulatory and policy framework	
Guidance on establishing national food control systems	Perspectives and guidelines on food legislation
Developing food safety policies & decisions	FAO/WHO National Food Control Systems Assessment Tool
Specific technical capacities	
E-learning course on Food Safety and Quality Standards	Guide for developing national food recall systems
Risk-based food inspection manual	Manual on Food Import control
Guidelines for risk-based fish inspection	Manual on risk-based meat inspection
Laboratory	
FAO/IEAE Laboratory development	Sampling tools (mycotoxin, micro, histamine)

The resources aimed at supporting guidance for prevention of food safety emergencies recently developed by FAO and WHO include INFOSAN, National Food Safety Emergency Response, Application of Risk Analysis Principles and Procedures during Food Safety Emergencies and Developing and Improving Food Recall Systems.

Dr. Rajić has briefly summarized some newer initiatives that might be relevant to the countries and region. These include Enhancing Early Warning Capacities for Food Safety, Early Warning System for Food Safety, Knowledge Synthesis and Transfer in Support of Food Safety Decision Making.

An early warning system is an integral element of a food control system, working together with other elements such as food inspection, laboratory networks, surveillance programmes and risk assessment capacities. To strengthen food safety early warning systems, FAO, in collaboration with WHO and other organisations:

- develops surveillance and intelligence tools for prevention and control of food safety incidents;
- facilitates development of early warning systems in food safety, including rapid alert and communication networks;
- supports food safety emergency preparedness capacity building;
- promotes inter-sectoral and trans-disciplinary synergistic partnerships and collaborations among food safety stakeholders using the principles of a One Health approach.

A new training package is being developed through which the above mentioned activities can be accomplished. The package includes a comprehensive Handbook, which explains how to identify,

investigate and assess data and information on adverse food safety signals and events. The emphasis is placed on importance of effective communication and co-ordination of actionable response before larger incidents or emergencies happen and cause severe consequences. The handbook provides short theoretical overviews, illustrations and contextual exercises for early warning surveillance, intelligence gathering, assessments and investigations, rapid alert and communication networks, and critical over-arching aspects (e.g. communication, co-ordination, risk communication) for ensuring timely provision of actionable risk mitigation options to risk managers and decision makers. The handbook also includes a checklist that guides countries and regions on how to assess their strengths and weaknesses in early warning capacities and capabilities applicable to food safety, and generate pragmatic action plans for their enhancement as part of overall food control system. The training package can be tailored to the specific needs and contexts of different countries and regions worldwide

Knowledge Synthesis and Transfer in Support of Food Safety Decision Making - Management of priority food safety issues provides numerous challenges from assessing the importance of food safety risks, through identifying, evaluating and selecting the most effective risk mitigation strategies, to communicating the basis of such decisions in the context of other competing (e.g. socio-economic) factors. In many sectors, knowledge synthesis and transfer are recognized as the cornerstone of transparent, evidence-informed decision making. Recently, knowledge synthesis and transfer have been used to greater extent in food safety arena. Knowledge synthesis (KS) refers to reproducible and transparent methods to identify, appraise, characterize and synthesize the global body of knowledge about a topic. Systematic reviews (SR) and meta-analysis (MA) methods are the most frequently used KS methods in food safety. They can be used to investigate a variety of questions, including intervention efficacy, prevalence and concentration of outcomes, and diagnostic test accuracy. Engagement of stakeholders early in the process is critical to ensure that the results will be appropriately transferred or exchanged and used to support risk management and decision-making. Key logistical requirements for application of KS in agri-food public health sector are experienced and multidisciplinary team, sufficient resources, and organizational commitment to use KS approaches. Various KS methods can be effectively used to support transparency, credibility and risk manager confidence in the process and results of scientific assessments (e.g. exposure assessment, quantitative risk assessment, MCDA). The application of knowledge synthesis and transfer approaches, particularly systematic reviews and meta-analysis, has increased considerably in the agri-food public health sector over the past decade and this trend is expected to continue. A new training modules on KS provide science to policy professionals in food safety with better understanding of knowledge synthesis and transfer methods and approaches, and practical ways to identify, critically appraise, extract and utilize relevant research knowledge when performing scientific assessments.

These approaches have been recently utilized to support recent FAO/WHO initiatives, related to the Codex, and relevant to the region and countries. These are ranking low moisture foods in support of microbiological risk management; microbiological hazards in spices and dried aromatic herbs; and evaluating efficacy of farm-to-processing interventions for salmonella in beef and pork.

### *Session 1 Lecture 2*

#### **Dr William K. Hallman - “Introducing Food Safety Risk Communication”**

Dr William K. Hallman, Professor/Chair, Department of Human Ecology, Rutgers University, USA explained the concept of risk communication, its key goals and the factors which potentially impact on the success of food safety risk communication. He stated that worldwide about 2.2 million children under five years of age die annually due to suffering from diarrhoea. The number

is more than the deaths due to malaria, measles, and AIDS combined (excluding neonatal deaths). According to World Health Report of WHO (2005), a large proportion of diarrhoeal diseases originate from contaminated food and drinking water. Food-borne illnesses remain a major public health problem in both developing and industrialized countries. Up to thirty percent of population even in industrialized countries are estimated to suffer from food-borne illnesses every year.

Foodborne diseases affect economic development, particularly challenging the tourist, agricultural and food (export) industry. The access to food export markets will depend on the capacities of developing countries to meet the international regulatory requirements. Unsafe exports can lead to significant economic losses.

Food safety risk communication can have a profound impact on the ability of a country's population to make informed decisions about health, environmental protection and quality of life. The need for effective food safety risk communication is underpinned by the ethical need to ensure that society is protected from food safety risks to the best extent possible.

Prof. Hallman gave the example of serious health risks caused to humans and domestic animals in Africa, because of Aflatoxin contamination of agricultural commodities, namely maize, groundnuts. The Aflatoxin contamination has a direct bearing on food security, being the major cause of pre- and post-harvest losses. Aflatoxin contamination has a significant negative effect on maize production and results in more than nine percent loss of total household income on average across all regions in Kenya. An even higher reduction of total income, about twenty percent has been experienced by maize-producing households having land holdings of 1.01 hectares and below, primarily due to poor knowledge among producers about how to limit Aflatoxin or evaluate the risks involved.

Prof. Hallman emphasized that as defined by the Codex Alimentarius Commission, Food Safety is the assurance that food will not cause harm to the consumer when it is prepared and/or eaten according to its intended use. Food Safety Risk Communication is defined as "the exchange of information and opinions concerning risk and risk-related factors between people, specifically about risk and risk-related factors associated with food safety hazards and risks".

The risk analysis framework is internationally endorsed and has been adopted by many national and regional food safety authorities around the world. Risk analysis is based on the interaction of three components, namely Risk Assessment, Risk Management and Risk Communication. Dr. Hallman emphasized that Risk Communication is an essential part of the risk analysis process and is integral to both Risk Assessment and Risk Management.

A Government has the fundamental responsibility for risk communication when managing food safety. It also has the responsibility for managing risks including the explanation of risk assessment findings and the basis of risk management decisions. The Government shall also have the obligation to ensure effective communication with interested parties when developing scientific and technical analyses. Decision-makers must also involve the public and other interested parties when appropriate in the risk analysis process.

Dr. Hallman also discussed various goals for effective risk communication. For example, providing food safety risk information may help people make better decisions about whether to avoid a particular food, how to handle or prepare it in order to reduce risk, or what they can do to protect themselves if they are exposed to the risk. To enable people to make informed food safety risk decisions, it is important that risk is conveyed in a compelling manner. It is readily understood and perceived to be accurate and trustworthy, taking into account the target audience needs and



concerns and helps them decide how to proceed.

In other situations, people have to simply follow food safety regulations to protect public health, and the decision to engage in them is not theirs to make. In these cases, communication about food safety risks is often aimed at increasing people's understanding of why they need to engage in these practices and persuading them to adopt them, rather than enabling them to make their own risk decisions.

While providing information about food safety risks, in some cases, can involve communicating both risks and benefits associated with particular food choices. For instance, the case when benefits of a varied diet outweigh certain risks, or when a food that is risky for some consumers may be beneficial to others. In order to enable people to make well-informed food consumption decisions under these circumstances, it is important to target information about risks to those groups in the population who are most vulnerable to them, and to ensure that information about both risks and benefits is available to all stakeholders.

The overall goal of food safety risk communication is to protect people's health through provision of information that enables people to make informed food safety risk decisions. Food safety risk information may help people make decisions about whether to avoid a particular food, how to handle or prepare it in order to reduce risk, or what they can do to protect themselves if they are exposed to the risk.

The second goal is to facilitate understanding and dialogue between all stakeholders, including consumers, about food safety issues, when circumstances indicate that this is appropriate. When possible, food safety risk communication should involve dialogue and interaction between all concerned with the risk communication process. It is important to engage in a two-way dialogue with those exposed and vulnerable to the risk, people who may influence and control the risk, other affected or interested stakeholders, and the public in general.

Another goal of food safety risk communication is to improve the on-going risk analysis process through societal engagement. Risk assessment and management decisions can be potentially controversial. Different stakeholders (community members, activists, government officials, scientists, and corporate executives) may disagree about the nature, magnitude, or severity of the risk in question, or the best way to manage it. Understanding societal priorities for risk assessment, management, and communication may contribute to more inclusive decisions about food safety risks and their assessment and management. For this purpose, stakeholders' engagement should begin at the start of the risk analysis process, and not at the end. For example, when risk assessment questions are identified by risk managers, it is recommended that they be posted (e.g. on a website) and open for comments and discussion with stakeholders. Risk assessments conducted with at least some form of stakeholder involvement could result in lower stakeholder opposition, and enhanced understanding of the results across all stakeholders. Similarly, risk management decisions developed at least in some consultation, and preferably collaboration with stakeholders, tend to be better received and more effective.

Food safety risk communication may involve communicating both risks and benefits. Providing information about both risks and benefits allows people to make informed decisions about food choices.

It is important to understand and address public perceptions of food safety risks in order to develop effective risk communication messages. How people perceive risks serves as the basis of their attitudes, intentions, and behaviours.

Different types of food safety issues require different approaches to risk communication. Emergency food safety events require a rapid response, for example, in case of foodborne illness outbreaks, while enduring food safety problems as in case of low levels of Aflatoxin in food, which is an important risk in public health terms, but not urgent will require on-going communication with target audiences and stakeholders, including consumers.

There are many potential benefits in including stakeholders in food safety risk communication efforts, such as identifying the gaps in knowledge about the food safety risks that are under consideration; understanding the stakeholders' risk perceptions and concerns. It will also help in identification of potential communication barriers; selecting the most appropriate information sources and channels of communication and also in identification of and addressing any unintended consequences of the communication.

A collaborative process with stakeholders in food safety risk communication will have further advantages, namely in generation of more ideas; exposing concerns not otherwise recognized; facilitating the coordination of communication efforts among various governmental departments, for example health, agriculture, and trade; and other stakeholders sharing responsibility for food safety at the national or other levels.

For all of these reasons, identifying stakeholders and target audiences and engaging them in a two-way dialogue to inform risk communication decisions increases the chances for successful food safety risk communication and enhanced risk management.

### *Exercise 1 News paper article*

*Prof. Hallman, in the context of risk communication introduced an exercise (Exercise 1) using a news article, "Rare birth defect found in cluster" amongst residents of Brownsville, USA, which illustrated how perception of risk is based on a combination of cognitions (thoughts) and affect (emotions). The summary of feelings expressed by the participants on first reading of the article ranged from confusion, uncertainty, sadness, frustration to being scared and even panic. The news article was re-read and analysed by participants after Dr Hallman explained goals of risk communication and risk perception factors. It was concluded that food safety risk communication to be effective should be objective, factual, without expressing emotions and indicating the findings of risk assessors with technical details in a language understood by public. The newspaper article is reproduced given at Annex 5.*

### *Session 2 Lecture 3*

#### **Prof Lynn J. Frewer – "Principles of Good Risk Communication"**

Prof Lynn J. Frewer, Professor of Food and Society, Agriculture, School Food and Rural Development, Newcastle University, UK defined trust as the belief in the honesty, fairness, and empathy expressed by an information source (for example, an individual or institution) to assess, manage, and communicate about food safety risks, in order to promote public and environmental health.

Trust is important for effective risk communication. People may not believe or act on information which they distrust and this can result in ineffective risk management and potential severe health, environmental, agri-food trade and economic impacts. People are more inclined to trust credible information sources or institutions that they perceive them to have the necessary knowledge and

expertise relevant to the topic of communication, and a demonstrated record of integrity and skills relevant to the topic of communication, and a record of honesty and skills relevant to the topic of communication. People need to have confidence in the abilities of those responsible for assessing, managing and communicating about food safety risks. People also tend to trust information sources which are perceived to be honest, by conveying information about a risk in an open, truthful and transparent way. Distrust is often associated with a history of exaggeration, denial or distortion.

It is important that people trust that institutions responsible for food safety are working for the public interest, and will take actions to protect the health of humans, animals, and environment above the economic, political, or personal interests of specific individuals, companies, or political organizations. This is sometimes referred to as “social trust”.

Trust can be easily eroded or lost through ineffective or inappropriate communication. The consequences of losing the public’s trust can be severe for many sectors and have negative impacts for delivery of effective risk communication, as well as different sectoral sectors. For example, interrupting or banning agri-food trade, and has severe economic consequences. Mechanisms of transparency, openness, responsiveness and timeliness are not only essential to establishing and maintaining trust, but also contribute to the slow process of rebuilding trust when it is low.

Food safety risk communication should be based on good communication principles. These include openness, transparency, timeliness and responsiveness, which are all important to the development and maintenance of trust.

Openness refers to the opportunity for dialogue and engagement with all food safety stakeholders, including those affected by the risk and those potentially responsible for it. Risk assessment, management and communication should be performed in an open environment, which includes opportunities for dialogue with stakeholders at appropriate points. This is also known as “knowledge exchange” or “stakeholder engagement”. For example, stakeholders may be invited to submit evidence for consideration by decision-makers to participate in a meeting where risk management options are discussed, and/or comment on draft messages before they are finalised.

Transparency means that policies, practices and procedures that enable stakeholders and the interested public to understand how decisions on risk assessment, management and communication have been made and are available to external (public) scrutiny. In other words, information on the evidence on which decisions are made, and documentation about the decision-making process should be made accessible to stakeholders and the public. For example, research reports and minutes of meetings can be published on websites or be available on request.

Communicating in a timely manner is essential for the protection of public health and contributes to building and maintaining trust, and can prevent the development of rumours and misinformation. Communicating early is also important to prevent disruption of agri-food trade and the respective negative economic impact, which may result from rumours and misinformation. Many controversies become focused on the question, "why didn't you tell us sooner", rather than on the risk itself. Even when there is little information to offer, it is recommended to communicate how authorities are investigating the event and when more information will be available. In order to be timely and transparent, it is often necessary to communicate about uncertainties around the food safety risk. Food safety situations which require urgent communication to prevent or reduce the risks of significant harm are often associated with many gaps in knowledge. Where there is uncertainty, this should be acknowledged and explained, together with what is being done by risk assessors and managers to address the uncertainty, and what the implications are for target audiences.

When faced with a significant public health risk, communicating in a timely and transparent manner, even when all the facts are not known, is essential for protecting people from the risk and for maintaining the public's trust. With rapid circulation of food safety information and communication on the Internet and social media, it is also important to communicate early and often. If an organization does not communicate in a timely manner, others will and this could damage the organization in achieving its communications objectives.

Responsiveness is the extent to which those responsible for food safety address the target audiences' risk communication needs and expectations in their communication activities. For example, people may distrust risk messages if these do not address their concerns and perceptions, and only contain technical information about risk assessments. For responsive risk communication it is thus important to understand target audiences' information needs and communication expectations and to include these in the communication activities. Risk communicators should also be responsive to changes in the external environment, including unplanned and unforeseen events (e.g. misinformation, emerging questions and concerns, misconceptions), and revise or reinforce messages accordingly.

Planning is central to the process of developing effective food safety risk communication. Although it is impossible to anticipate, prepare and plan for every possible food safety issue, prioritizing and planning ahead should result in a faster and more effective communication response, which may in turn reduce the negative impacts on the public and stakeholders.

At its most basic level, the food safety risk communication plan should clearly identify who will do what and how before, during and after a food safety issue has occurred. Some aspects of planning risk communication differ between emergency and non-emergency situations. For example, during an emergency food safety incident, risk messages often need to be developed in a very short time frame and in consultation with a wider range of agencies than in normal situations.

Planning food safety risk communication is important to all food-chain stakeholders and although some aspects are generic, many plans are organisation specific. Risk communicators need to build, maintain and sometimes restore trust to ensure stakeholders listen and act on risk communication messages. For this purpose, it is useful to create opportunities for dialogue with stakeholders at appropriate times throughout the risk analysis process; make publicly available documents that enable stakeholders to understand and scrutinize the decision-making processes; communicate in a timely manner, even when there are uncertainties as timeliness is essential; be responsive to the needs and concerns of those potentially affected by the risk. Dialogue with stakeholders and monitoring risk communication while a food safety issue is being addressed can help communicators to be responsive to stakeholder needs and changes in the external environment.

While preparing for communicating about a food safety issue, the risk communication team should:

- prioritize food safety issues and gather information
- identify the high probability and/or high impact food safety issues;
- gather information on these food safety issues;
- identify the risk communication activities required;
- gather information about available people and resources for communication activities, and identify gaps in capacity and other resources including colleagues in the same organization or external experts (scientists, subject matter experts, public relations experts and others), depending on the skills and knowledge needed;
- identify and understand target audiences, and work with stakeholders;

- develop and disseminate messages addressing these needs and providing relevant information about the risk;
- monitor and evaluate the outcomes and incorporate improvement opportunities in the planning document.

Food safety issues affect multiple stakeholders, including vulnerable populations, frontline healthcare workers, industry and primary producers, and government partners. It is challenging to identify all these stakeholders particularly as some may not be close to one's organization.

### *Exercise 2 When to Communicate what to whom*

*In this exercise the goal was to increase understanding on when and what to communicate with whom when there is uncertainty or lack of knowledge about a food safety risk. The participants worked as countries and took on the role of public health (or food safety) authorities and worked from their own country perspective. There were six steps in this exercise and cards were handed over to participants which covered one step at a time. In each step additional data and information became available. Countries had to develop risk communication recommendations on when and what they would communicate to whom, and why after each piece of information. The exercise demonstrated how the communication changes over time as additional information becomes available. A summary of observations is given at **Annex 6**.*

### *Session 3 Lecture 4*

#### **Dr William K. Hallman - "Understanding the Nature of the Food Safety Issue" -**

Dr Hallman explained that to be effective, risk communicators must have a clear understanding of the nature of the food safety issue that they need to communicate about, and a good understanding of how to adapt communication efforts accordingly. Without such an understanding, the messages developed and necessary interactions with stakeholders and target audiences are likely to be unproductive. There may be misunderstanding, mistrust, and even damage to organizational credibility if the communication is based on faulty information or not responsive to target audiences' needs. This may ultimately result in a failure to protect public health, the environment, or the safe food production and agri-food trade.

It is important to have a good understanding of risks and benefits that are associated with the specific food safety issue. At its most basic, this involves collecting essential information regarding:

- Who and what are likely to be affected?
- To what extent?
- With what consequences?
- With what probability?
- In what timeframe (i.e. immediate or delayed effects)?

When consequences are immediate and severe, communication needs to be delivered with urgency and often differs from communication addressing non-emergency food safety risks. In reality, the urgency with which one must communicate typically falls along a continuum. Indeed, food safety risk issues are often initially addressed as the result of unanticipated public health emergencies which require immediate responses. Later, however, risk communication efforts regarding those same risks may become part of ongoing overall strategies designed to prevent future emergencies of the same type.

Understanding the probability and severity of effects of a food safety risk is important for

determining risk communication strategies with different stakeholders. For example, when the probability of adverse effects is very low but the potential consequences are severe, providing risk information on the organisation's website may be required for communicating with the general public, if public awareness is not high. There should be increased efforts to communicate with stakeholders, for example, food safety inspectors, law makers, industry that can help monitor for the food safety risks and minimize the probability of adverse effects.

It is important to understand who and/or what is affected for determining to whom communication may need to be targeted. The identification of vulnerable population and their potential exposure levels are of particular importance because many of the most vulnerable in every society are the very young, very old, pregnant women, and those with weakened immune systems, resulting from illness or inadequate nutrition. Information will need to be targeted to these groups, who may have very specific communication needs.

Risk communicators should carefully evaluate whether diverse levels of risk tolerance exist, and acknowledge these where they exist. To prevent unwanted changes in consumption behaviours, it is also important to evaluate whether the benefits of a particular food safety issue outweigh the risks, and whether this differs between people.

Understanding the nature of the risks involved with a particular food safety issue can be usefully informed by gathering information from stakeholders (for example, market figures, distribution systems, tracing of ingredients) and consumers (for example, dietary intakes).

Risk communicators must have a clear scientific understanding about the nature of the hazard involved with a particular food safety issue, as well as how people may respond to different hazards. Examples include the levels of exposure to the hazard (in what amount and over what time), and whether the risk is posed by a chemical or biological hazard. In the case of biological hazards, an understanding of the amount of pathogen that must be consumed to create illness (the infective dose) is critical for assessing the potential risk. Healthy adults can be exposed to limited levels of hazards through the consumption of contaminated raw agri-food products (for example, produce or fish) or improperly processed, handled or cooked foods, without becoming clinically sick. Raw meats, fish, poultry, fruits, vegetables and other food products are rarely sterile. Exposure to high levels of the hazards could result in serious illness.

Importantly, people tend to be concerned about a food hazard when many people are exposed (for example, the hazard is present in commonly used products, or a wide range of products), when those seen as most vulnerable are exposed, when a hazard is perceived as unnatural (for example, chemical hazards), or when a hazard can have severe health effects, irrespective of the level of exposure. Under these circumstances, it is particularly important to incorporate and address these concerns in the communication, and sometimes it may be necessary to clearly communicate the significance of the hazard and the actual level of risk involved with a food safety issue. For some hazards, such as certain types of *E. coli*, any amount of contamination may lead to illness and if they are discovered, result in the immediate recall and destruction of the foods that are affected. In these cases, rapid communication is obviously needed.

The consequences of long-term exposure to certain chemical hazards in foods also need to be considered and addressed in the communication. For example, exposure to small amounts of certain toxins (such as lead) may accumulate in the body over time and create long-term problems. Often these long-term effects are not well understood. This should be acknowledged in the communication in order to be transparent and enable people to make well-informed decisions.

When the hazard is still unknown or the level of risk has not been quantified, collecting information from stakeholders can be helpful (for example, access to international experts for quick risk assessment). Sometimes scientific knowledge cannot provide a clear understanding about the nature of a hazard. Dealing with uncertainty or lack of knowledge in risk communication then becomes important. Sometimes the data needed to address the nature of the risks and benefits involved with a food safety issue are available within the regular risk analysis process. However, particularly in situations where urgent communication is required to prevent or reduce the risks of significant harm, incomplete and uncertain data are often the norm.

To communicate effectively under conditions where risk information is associated with uncertainty, risk communicators need to have an adequate understanding of the uncertainties that exist regarding the food safety risk. This requires risk assessors to document uncertainties that arise during risk assessment, and to communicate these properly to risk managers and risk communicators.

The limitations of the risk assessment may also need to be expressed in a way that can be understood by a non-technical audience in order to increase transparency and enable interested stakeholders to comprehend the decision-making processes and make informed choices as the situation evolves.

Risk communicators need to understand what people can do to limit their exposures to a hazard. Personal control is very important to people and risk communication should address what steps people can take to reduce their risk. When people don't have personal control over a risk, it is particularly important to communicate what other measures are being taken to reduce the risk on their behalf.

Dialogue with stakeholders may usefully inform risk management decisions. To effectively manage a food safety risk, it is critical for risk managers to have a good understanding of what can be done to mitigate the risk, and who has the ability to do it. For example, deciding to implement an information campaign designed to encourage food handlers to wash their hands will obviously be ineffective if they do not have easy access to clean water. Gaining such access is likely to be beyond the control, authority, and resources of individual workers, and instead depends on those who own or control the infrastructure. Communication should therefore also be targeted to those who own or control the place where they work.

In addition to understanding who is able to do what, it is necessary for risk managers to understand what available motivations or incentives may be needed to successfully implement risk mitigation measures. For example, if farmers and traders are not motivated to adopt good production practices to improve on-farm agri-food production control because of incurred costs, positive or negative incentives may be necessary to promote behaviour change (for example, compensation, enforcement of laws).

Two-way dialogue with stakeholders can provide risk managers with insights on who has the ability to effectively minimize the risk, and the motivations or incentives that may be needed to successfully implement risk mitigation measures.

It is important to go through a deliberative process designed to identify, anticipate and lessen any potential unintended consequences. This includes those associated with both the communication which brings attention to the risks, and the efforts that are designed to address them. For example, alerting affected low-income populations that their staple foods may be contaminated or unhealthy, without providing suitable alternatives, may simply create anxiety without producing any gains in

protecting public health.

### *Session 3 Lecture 5*

#### **Prof Lynn J. Frewer – “Key considerations – target audience needs”**

Prof Lynn J. Frewer explained the factors which need to be taken into account when developing risk communication relevant to the needs of the target audience. She also discussed about the different methods for understanding target audiences’ needs, and for what purposes these methods can be used.

In order to develop insights about which topics target audiences need to be better informed, the type of information they need, the following aspects are important to identify:

- What do target audiences already know about the risk?
- How do they act on this knowledge?
- Which gaps in knowledge need to be addressed?
- What are the target audiences’ specific concerns and perceptions about the risk?

The identification of target audiences depends on the purpose of the food safety risk communication, which may include:

- Providing information to allow informed decisions;
- Persuading people to adopt a particular approach (i.e. health promotion, for example in UK, campaign was done for per capita reduction in salt intake);
- Initiating dialogue and engagement to arrive at the best approach

The target audience may include those who are likely to be directly affected by the risk, who can influence, both positively and negatively, the issue and who can effectively minimise or mitigate the risk and provide solutions. They could be compromised vulnerable people in the population, the medical personnel, government etc. Examples of target audience could be the public in general; at-risk populations; women as main food handlers/buyers; public health practitioners; retailers, food vendors, employers, employees; farmers/primary producers; large/medium/small food manufacturers; informal food producers; agro-chemical dealers; and policy makers, food safety regulators

Risk communicators must take into account the unique roles that food and food preparation practices play in cultures and society when developing food safety risk messages. Food preparation and consumption practices are often rooted in specific food cultures and culinary traditions. Suggesting problems with these food preparation or consumption practices (what people do), may be perceived as criticisms of their identities (who people are). As a result, such beliefs, traditions, and practices are difficult to change simply by providing food safety risk information. For example, in some cultures, bare hand contact with the food is perceived as an essential part of preparing the food in the traditional, “authentic” way. The suggestion that food preparers should wear gloves may be interpreted as an accusation that they and their culturally-determined cooking practices are inappropriate. Instead of simply communicating risk information, messages may be more effective if they provide information about methods for reducing the risk, but which do not fundamentally change the meaning of the food or practice.

Food and food preparation practices play a unique role in cultures and society and must be taken into account when developing food safety risk messages. For example, it may be the case that:



- Foods are part of religious, cultural and traditional practices (e.g. the ritual preparation and consumption of certain foods).
- Food choices are a way to communicate one's personal identity or cultural membership, or as an expression of ideological viewpoints (e.g. not eating certain meat products or indeed any meat at all).
- Some foods have special symbolic importance (e.g. milk, honey, fruit and vegetables can be associated with health, purity and wholesomeness). Adulteration of such products may be seen as especially objectionable, and the risks connected with the contamination of these foods may also be perceived as much greater because of their symbolic value.

Food safety risks can also not be completely avoided, and in some circumstances decisions on the acceptability of food safety risks are driven by simple economic realities. In the absence of the availability of affordable alternatives, many may have little choice but to consume foods that are to some varying extent unsafe. For such populations, communicating only about the risks associated with these products, without providing information or resources necessary to minimize the risk or enable different food choices, is unlikely to advance public health.

Specific gender roles and responsibilities related to the acquisition and preparation of food, control over resources, and access to education, and rates of literacy may also differ significantly across societies and cultures. In many cultures, women are the principal gatekeepers who determine which foods the family will eat and how they will be prepared. In many countries women also bear primary responsibility for growing the food. Safe (and unsafe) food selection and preparation practices are often shared among women, and are typically taught by mothers to their daughters. As such, because many food safety risks are under their control, specific food safety risk communication efforts may logically be targeted to women.

In contrast, cultural or religious traditions in some countries create expectations that males will be the principal decision makers, even if the responsibility for feeding the family falls to women. In other cultures and families, food selection and food preparation practices are shared decisions, and in some cases men may be the principal purchasers (or growers) and preparers of food.

Specific risk communication strategies, messages, channels, and methods of interaction need to consider whether the target audiences are primarily comprised of men, women, or both, and what the cultural norms and expectations define as appropriate gender roles.

Multicultural, multilingual societies require multicultural, multilingual risk communication efforts. Unfortunately, because of the additional skills and resources that are required to communicate in multiple languages, the default for many risk communicators is to interact with target audiences in the dominant language. However, communicating essential food safety risk information in a single language may unintentionally have detrimental effects on the health of those who do not speak that language; or send the message to those who do not speak that language that the communicator does not care about their health.

Particularly in the event of foodborne illness outbreaks or contamination incidents, if an affected food product is consumed in villages, neighbourhoods, or regions where a particular language or dialect is spoken, efforts to alert the public about those products must also be in that language or dialect.

Access to written notices about food safety risks and the ability to read them may vary among populations due to distribution problems, vision problems, and literacy problems. As a result, communicating about food safety risks only in written form is unlikely to meet the needs of many

audiences, even in affluent countries. For these people, risk information needs to be delivered in ways that don't rely on people's ability to read (e.g. radio, video/TV, podcasts, word-of-mouth, stories, and songs, acted out in plays or other performances).

Food safety risk communication can only be effective when delivery mechanisms are used that are appropriate for the intended audiences. For each of the target audiences, it is important to understand the preferred and most appropriate information sources, channels and methods of communication. To determine which information sources can help to communicate food safety risks, risk communicators must understand which sources of information each of the target audiences see as trustworthy, credible, and reliable. It is important to note that the most trusted information sources are not necessarily the most frequently used information sources. In addition to understanding levels of trust in sources of information about food safety risks, it is therefore important to understand which sources are frequently used, and which sources can best reach the target audiences. Risk communicators should collaborate with credible and accessible information sources to deliver food safety risk information to target audiences.

For example, in countries where the population is diverse and some people are difficult to reach and likely to be excluded from receiving risk communication, it may be important to engage grassroots or community-based organizations to reach all target audiences. Community-based risk communication programmes have proven their effectiveness, but they are also time, capital and labour intensive. NGO's, international organizations and community-based organizations are often useful for conducting these programmes, and governments may benefit from supporting and collaborating with these organizations.

Organizations must also choose a spokesperson to communicate with the public. Effective risk communication depends on being both understood and believed. Therefore, in choosing the right person to communicate about food safety risks, it is important to select someone who is technically competent and clearly knows the issues related to the risk, is confident in his or her ability to talk about them, and, through their demeanour and actions, is able to ensure the trust and confidence of others.

To ensure trust, the communicator (and the communications) should demonstrate evidence of knowledge and expertise, genuine openness and honesty, and sincere concern, care, and empathy. Identifying technical experts who can demonstrate the requisite knowledge and expertise regarding food safety risks is usually not difficult. Yet, while technical expertise is critical to establishing trust and credibility, it is only a part of what is needed. Demonstrating substantial expertise without an accompanying ability to connect with ordinary people may simply suggest the communicator's detachment from "normal" people, reducing both their trustworthiness and effectiveness.

Therefore, in addition to finding communicators with good technical expertise, it is important that they are able to talk with people easily and honestly, understand their concerns, and be able to respond appropriately. Good communicators adapt their communications approaches to best meet the needs of those with whom they are seeking to communicate. They are also willing to acknowledge when they don't have all the answers, and know how to adjust their communication accordingly.

It can be difficult to find a single person who has the necessary technical expertise and communication skills and expertise, so it may be necessary to assemble teams of people who, in combination, have the requisite skills. Sometimes this means choosing a lead communicator who possesses good communication skills and expertise, who is then supported by a group of technical experts. It may also be beneficial to provide technical experts training in important social issues

and risk communication, so that they can more effectively communicate about risks.

Having a trusted and well trained spokesperson is particularly important during emergency food safety risks. However, the importance and usefulness of having a spokesperson isn't restricted to emergency situations. For example, celebrity spokespeople can be used for promoting food safety risk awareness campaigns.

Using appropriate communication channels and methods to communicate about a food safety risk is essential for reaching target audiences. Communicators must understand which communication channels and methods (e.g. media, websites, community meetings) are most appropriate to communicate with each of the target audiences. Not all target audiences will have access to, or want to use, the same communication channels. Websites may for example be of little use in developing countries where the majority of the target audience may have limited access to the Internet. However, websites are often used by professionals (food businesses, environmental health officers, health workers, and media) who may disseminate the information to consumers.

To determine the type of information necessary to address a particular food safety issue, communicators also need to consider the historical, political and media environment in which a food safety issue occurs. Food-based safety risks must be discussed within the particular context in which they arise.

To more fully understand the context of a food safety issue, it is essential to be aware of the history of the food safety risk. For example, if a company has recurring food safety issues that affect its products, existing levels of public trust in that company are likely to be low. When that company subsequently experiences another food safety problem, risk communicators will not only have to communicate about the food safety risk itself, but will also need to address public trust and explain why the same problem has happened again, and what is being done to prevent it from happening in the future.

Approaches to communicating about a food safety risk may also be different if it is the subject of controversy, such as diverging political opinions, diverging scientific opinions, or strong or diverging opinions of advocacy groups or other NGOs. Sustained communication is often required and communicators will need to consider when and how to address and respond to the diverging opinions of other stakeholders who are communicating about the risk.

### **Historical, Political and Media Environments –some examples**

- *Historical context*
  - If a company has recurring food safety issues that affect its products, existing levels of public trust in that company are likely to be low
  - When that company has another food safety problem, risk communicators will not only have to communicate about the food safety risk itself, but will also need to address public trust and explain why the same problem has happened again, and what is being done to prevent it from happening in the future
- *Diverging opinions*
  - Sustained communication is often required and risk communicators will need to address and respond to the diverging opinions of other stakeholders who are communicating about the risk.
- *Media coverage*

- How food safety issues are being portrayed in the media will likely influence what people know about the risk, how they think about it and determine which concerns and topics need to be addressed in the communication

The needs of target audiences can be assessed through conversation with and feedback from stakeholder groups, such as consumer organisations, special interest groups (e.g. allergy sufferers, religious groups), trade associations. Research can be conducted to ascertain the knowledge levels of consumers, their specific concerns and perceptions about the risk, their understanding levels of the ongoing food safety issues, available response mechanisms etc.

#### *Session 4 Lecture 6*

#### **Prof Lynn J. Frewer – “Putting Food Safety Risk Communication into Action (1)”**

Prof Lynn J. Frewer in her lecture provided practical guidelines for coordination of risk communication and collaboration with relevant stakeholders in the development and delivery of food safety risk messages, and for developing food safety risk messages.

Most food safety risk communication issues directly involve and have implications for different governmental departments and groups within society, namely public health departments, agriculture departments, individual businesses and industry groups, consumer organisations and individuals.

The coordination among the stakeholder groups for communicating information is just as important and essential as the coordination of other response efforts and represents an integral part of the response plan. During emergency situations, such coordination becomes particularly important and challenging as messages need to be changed frequently or must be developed in a very short time frame. This is particularly so because of the need for consultation on a continuous basis with a wider range of agencies than in normal situations. Such efforts to coordinate among stakeholders for providing communication efforts reduces the likelihood of confusion and even providing contradictory public information and prevents loss of organization’s credibility and effectiveness.

It is often useful to identify one governmental agency, during an emergency situation associated with a food safety incident to coordinate communication efforts. . One spokesperson should be appointed on behalf of multiple governmental agencies to ensure consistency in order to deliver risk messages on behalf of the government and to avoid confusion. Coordination and collaboration amongst the relevant stakeholders will also result in better understanding of the situation, and provide feedback on the concerns or confusions about target audiences. It will draw overall benefit by providing better communication and improve the credibility of all organizations involved in the efforts.

Some examples about coordination of risk communication are:

- during a product recall, food retailers can provide useful feedback about concerns and perceptions of the public and consumers’ confusion about which products to avoid;
- enable the modification of risk messages to provide necessary clarifications and to address public concerns and perceptions;
- governmental agencies can benefit from the communication capacity and credibility of national and regional industry associations;
- rapid communication about regular updates can be provided by producers, to shippers,

retailers, wholesalers, foodservice distributors and others.

A system for providing communication needs effective coordination and collaboration and strong relationships with stakeholders, which cannot be easily established while managing emergencies. It will be necessary to identify, build and maintain working relationships with relevant stakeholders in advance. Plans and protocols need to be developed, tested and exercised in advance to guide how organizations will work together following the occurrence of a food safety incident..

Methods for establishing strong working relationships with relevant stakeholders are as follows:

- establish and maintain contact lists so information can be shared and stakeholders engaged quickly when needed;
- share information with stakeholders on a regular basis to maintain relationships on
- ongoing research
- explaining how food safety issues are managed and
- outlining the roles of organizations in food safety risk management.

This will ensure that stakeholders are well informed and can communicate accurately amongst themselves when a food safety risk needs to be addressed. There should be regular meeting of stakeholders to exchange information, gain intelligence about target audiences, seek feedback on approaches and negotiate partnerships to improve communication

This will result in identifying common ground and leveraging opportunities amongst stakeholders to develop implement and test mutually agreed-upon communication plans and protocols. This will also establish relationships with relevant stakeholders and make them part of routine business making better coordination and easier collaboration when a food safety risk needs to be addressed.

### Developing Risk Messages

It is important to determine a Single Overarching Communications Outcome (SOCO). This requires following the four steps as given below:

**Step 1:** What is the food safety issue?

**Step 2:** Why do you want to focus on this issue and why do you want to focus on it now?

**Step 3:** Who needs to change their behaviour (audience)?

**Step 4:** What is the change that you want to see in your audience as a result of your communication? This is the SOCO.

An example of steps for determination of SOCO is given below:

Step 1	What is the food safety issue?	Exposure to aflatoxins in staple foods in Africa.
Step 2	Why focus on the issue, and why now?	Aflatoxins pose serious health risks to humans and domestic animals in Africa, because they frequently contaminate agricultural commodities (maize, groundnuts). Aflatoxin contamination has a direct bearing on food security (major cause of pre- and post-harvest losses). Loss of revenues and profit from domestic, regional

		commerce and international trade. Awareness of the problem is low.
Step 3	Who needs to change their behaviour?	Many audiences can help reduce the risks of aflatoxins contamination of agricultural commodities. For this example we focus on farmers.
Step 4	What is the change you want to see in your audience? (Your SOCO)	Farmers to implement practices that limit or prevent contamination. For example: Pre-harvest: Good Agricultural Practices (GAP), which typically include use of insect resistant crops, good tillage and weeding practices, appropriate use of fertilizers, irrigation, and crop rotation. Post harvest: Thorough drying, prompt storage and transport using clean, dry containers.

### Characteristics of a Good SOCO:

#### A SOCO:

- must be explicit about the change wanted.
- must be realistic and achievable.
- must, together with other interventions (programmatic, advocacy, etc.), contribute to a larger programme goal or objective.
- It will be the fixed point on which communicators keep their mind when communicating.
- The change I want to see is that my audience is:

× told.....	+ changed
× informed...	+ influenced
× made aware....	+ donating funds
+ reassured.....	+ modifying behaviour
+ convinced...	+ changing or accepting policy...
+ prevented from...	
+ confident...	

Example: Farmers to adopt Good Manufacturing Practices

### Developing Risk Messages

Important questions to consider include:

- Message Development
- A good understanding of the nature of the food safety issue and the target audiences' communication needs leads to the development of messages addressing these needs and providing relevant information about the risk. In designing messages, the following questions are important to consider in relation to the target audiences:
  - What is the food safety issue?
  - What is the risk to the target audience(s)?
  - Which concerns and perceptions do the target audiences have about the risk?
  - What can the target audience(s) do about the risk to protect themselves?
  - What is not known or uncertain about the risk?
  - What is being done to reduce the uncertainty?
  - What is being done to manage the risk?

- What other context is relevant to the target audience(s)?

It is also important to develop key messages that summarize the issues that need to be communicated. The following steps can be useful in developing key messages:

- Identify specific concerns.
- Analyze the concerns to identify recurring themes and general concepts to be addressed.
- Develop key messages for those concerns (both general and specific) that need to be addressed.
- For each key message, identify facts and information to support it.
- Test messages with the participation of the target audience(s) to whom they are directed.
- Plan for the delivery of messages (including identifying suitable dissemination channels for the target audiences).

It can be helpful to convene an interdisciplinary team of stakeholders to fully assess the concerns and priorities of the different target audiences and develop key messages.

To avoid distortion or misrepresentation of scientific information, it is important to present the information to the target audience in a language that is understandable and in a user-friendly manner. For public audiences for example, well-targeted messages using non-technical language are most effective. Consumers are especially interested in specific information on the nature, form, severity, or magnitude of the risk and what they can do, if they are exposed to the risk.

The messages should be **STARC** which is:

- Simple (avoid jargon and technical language)
- Timely (up-to-date information)
- Accurate
- Repeated (to facilitate remembering)
- Consistent (among communicators and across various audiences)

It is important to always include and prominently feature the actions people can take to reduce their risk. Messages should not only point out the severity of the risk and the audience's vulnerability to it, or what is being done to manage the risk, but also empower them to avoid the risk or manage the risk themselves where possible.

When developing messages it is important to consider whether visual aids (e.g. diagrams, illustrations) can be used to capture the target audience's attention, reach out to parts of the population that would be more receptive to pictures than words, or to explain facts that would be otherwise difficult to put into words. Visuals are often appropriate when communicating with immigrant populations unfamiliar with the language, and with people with low literacy levels.

Generally, the messages can be supported with simple graphic representations (bar or pie charts); true stories that illustrate key message points and that the target audience can identify with; visual images that depict the nature of the risk; recommendations from authoritative bodies; and best practices. It is also important to mention the source of the evidence provided in the message to increase credibility of the message.

It is particularly important to consider the needs of the visually impaired audience; those with speech, hearing and other disabilities; and all those disadvantaged in ways that could affect how they receive information. The message must reach all target audiences and must meet their information needs. In Appendix 3 there are recommendations on how to write messages for low

literacy stakeholders.

Considering potential unintended consequences of messages and monitoring for them when managing a risk issue is critical for effective risk communication. Validating messages with relevant stakeholders during message development, and the testing of messages with target audiences, helps to identify potential unintended consequences of the risk communication in advance.

If it is not possible to engage stakeholders during message development, relevant stakeholders should be informed of the messages ahead of a broader audience, in particular if they are then expected to help with the dissemination of these messages or to answer questions related to the risk or its mitigation.

#### *Session 4 Lecture 7*

#### **Dr Andrew D. Powell – Putting Food Safety Risk Communication into Action (2)**

Dr Andrew D. Powell, CEO, Asia BioBusiness Pte. Ltd., Singapore in his lecture discussed interaction with the media, an essential part of most food safety risk communication strategies.

To effectively interact with the media, it is important to be aware of some of the key factors that drive media coverage of risk issues. The press is particularly interested to cover stories where there is: -

- Fear
- Conflict
- Blame to be apportioned
- Cover-ups
- A David versus Goliath situations (a conflict between imbalanced competing interests, where the underdog overcomes the odds and triumphs over the stronger opponent)
- Visual impact
- High-profile issues or personalities

When a food safety risk issue needs to be addressed, the following practices will increase effectiveness of the media interaction:

- Being proactive. Leading voices often influence the tone of coverage better than trailing ones.
- Identifying and targeting the media outlets that serve the target audiences, and tailoring media materials for them.
- Coordinating the media responses with stakeholders whenever possible.
- Considering various methods for reaching media stakeholders (e.g. regular news conferences, teleconferences, webcasts, news releases, online content, social media channels, etc.).
- Detecting and correcting. Monitoring media coverage closely and correcting errors or misleading coverage as quickly as possible will help ensure that errors are not repeated.

Evaluating media interactions after a food safety issue has been addressed will provide useful insights for future engagement. This may include:



- Reviewing and analysing the media coverage on the food safety issue to measure the effectiveness of the media approach. For example, were the messages reflected accurately? Were they covered in the targeted media outlets?
- Working with stakeholders to refine coordination based on lessons learned.
- Consulting with key journalists for feedback on the approach.

It is important to appreciate that food safety risk communication is a two-way process. It is not merely a question of transmitting a message, but rather more a question of determining what target audiences want to know, determining what the organization needs to tell them, and then checking to be sure that the message is well received and understood, and leads to optimal decisions that protect and enhance food safety and public health.

The media is a vehicle to deliver the single overarching communication objective (SOCO). In preparation, questions have to be anticipated and draft answers prepared. One should also be aware and prepare for reporters' tactics; by conducting quick online research about the journalist (or outlet) so that the journalist's likely "angle" can be anticipated.

The problem and solution should be clearly defined, and details of the response and what others can do detailed. Three key messages should be delivered in a clear and concise manner. As an interviewer will likely use tactics to generate greater impact. It is extremely important to stay on message and to avoid being drawn into saying things that may impact the SOCO; it is the interviewer's job to fill the time. Bridging statements may be needed to ensure that all the key messages are delivered.

Some Golden Rules for interviews include: -

- Never lie
- Never say "no comment"
- There is no such thing as "off the record"
- Be short, to the point, and take account of the target audience
- Stay calm, confident and in charge
- Use simple language, avoid jargon
- Be human, and smile when appropriate
- It is OK to say "I don't know but I will find out"
- Do not speculate

Developing a risk communication approach that includes research as well as stakeholder engagement will likely increase its effectiveness. In addition, monitoring risk communication and evaluation of communication efforts both during and after implementation, allows for meaningful adjustments to be made while the food safety issue is being addressed, and valuable lessons to be learned for addressing food safety risks in the future.

Risk issues constantly evolve and those related to food safety often evolve rapidly. A comprehensive, systematic and ongoing monitoring and evaluation approach is essential to make risk communication activities as effective as possible. For example, monitoring for unintended consequences of the communication, and emerging questions, concerns, and misconceptions, allows an organization to address these in a timely and responsive manner.

Effective monitoring and evaluation of risk communication will not only inform what, how and with whom an organization needs to communicate on a food safety issue, but can also offer valuable insight into how the risk itself should be managed. Monitoring and evaluation of risk communication will collect feedback from target audiences that can offer valuable insight into how the risk itself should be managed.

### *Exercise 3 Communication Role Play*

*A role play exercise was organised using hypothetical potential emerging food safety signal, which becomes over time major public health event. The focus of exercise was on demonstrating complexity of challenges including demonstration of good communication in practice when communicating food safety problems in presence of uncertainty, new information, and under serious media pressures. 4 volunteers from participants were identified to play the role of manufacturer, regulator, public health representative and NGO (representing consumer). The 3 resource persons served as journalists of US media and Singapore media. The topic was food contamination with Listeria. The journalists posed questions to the 4 volunteers as the press normally would and based on the reactions discussed the importance of the key points highlighted earlier namely spokesperson should be well prepared with facts and figures as well as about actions in progress and planning of future steps. Preparation should involve answers for unexpected questions. Replies to media should be in a diplomatic and honest manner. There shall not be any expression of emotion by those facing media or public.*

### *Session 5 Analysis of Case Studies*

Prior to the training programme, countries were asked to prepare case studies, one by each country, based on a guiding outline as given in **Annex 7**. This could be a real food safety issue that country food safety authorities had handled in the past or a created issue. It could relate to a food safety emergency or be more in the line of a routine food safety issue. The countries had sent their case studies prior to the training. These were then presented on Day 3 and discussed for completeness as well as lessons learnt. A gist of these case studies of each country is given at **Annex 8**. Countries were further asked to revise their case studies and send the same to FAO for inclusion in the report and they were to also inform if they would be interested in having their case studies used as reference material for the purpose of trainings.

### *Session 6 Assessing Food safety Risk Communication Capability and Capacity*

Under this Session, countries were asked to assess their organization/ country ability to respond rapidly during a food safety emergency and document their capability in the four areas namely Transparency and first announcement of a real or potential risk; Public communication coordination; Information dissemination including media outreach; and Listening through dialogue. This part of the exercise was for their personal use. Participants were further asked to summarize their countries' main strengths and the needs on the institutional and/or personal level and then present the summary (5 min per country)

The strengths and needs and priorities of each country are given at **Annex 9**.

### **2.3 Training Evaluation and Feedback**

The evaluation proforma were consolidated and presented during the Concluding Session. Overall, the result of the evaluation indicated that participants were “highly satisfied” in terms of Subject coverage, materials and handouts, organization of the programme and technical inputs by experts. Both the technical sessions and quality of exercises were generally rated as “highly satisfied” and above.

Overall, the technical and logistical arrangements were well appreciated. The technical sessions and exercises were found very useful by participants. Some comments were also presented. Details of the feedback and suggestions of participants for future programmes are given at **Annex 10**.

## 2.4 Closing Session

In the Closing Session, Ms Shashi Sareen invited the rapporteur to summarise and present the evaluation. She then invited Dr Hallman on behalf of the resource persons for his comments and observations of the programme. Dr Hallman expressed that he and other resource persons had really enjoyed the experience in the region and indicated that it was also a great learning for them also from the experiences shared by participants. On behalf of participants Mr Saleem Veljee thanked FAO and resource persons for organizing and conducting the event which was extremely useful and enjoyable. This was followed by presentation of 'Certificates of Participation' to all participants. Ms Sareen on behalf of FAO concluded the session. In her concluding remarks, she expressed great appreciation to the participants for their active and lively participation throughout the three days as also their very constructive suggestions, involvement and sharing their experiences. She hoped that the participants had benefitted from the exchanges and would be able to go back to their countries and implement the suggestions discussed. Ms Sareen committed to support further actions to strengthen risk communication in countries. She sincerely thanked all resource persons for sharing their experiences which she hoped would benefit participants. She thanked participants for their active involvement, FAO colleagues and NEDAC for the support extended which contributed to the success of the training. She also thanked the rapporteur for his support. Finally, she added her best wishes to the participants for a safe journey back to their home countries.

## 2.5 Conclusion and Moving Forward

The regional training was very valuable in that it provided participants with an enhanced understanding of food safety risk communication and its importance, good risk communication principles and practices and contextual use by national food safety authorities within the context of risk analysis, and in the management of food safety and public health events, and emergencies; and exposed them to the FAO tool on the subject. The training also exposed participants to an example of rapid risk communication assessment tool that they reviewed, which could be applied at the organizational or country level, primarily under emergency setting, and discussed opportunities to potentially pre-test and adapt such tool, or share similar tools among countries. The use or adoption of similar tool could allow an organisation or country to assess their food safety risk communication capability and identify strengths and capacity building needs (based on weaknesses). The tool could be potentially tailored in future for regional level, for other purposes (e.g. used as part of broader food safety capacity assessment) or simply used for rapid self-assessment to identify specific capacity building needs, develop plan for strengthening capacity and demonstrate improvements.

The working group sessions including role play session facilitated significant discussions towards understanding the importance, principles and good practices of risk communication. The training also helped to identify the capacity needs of countries in this important area based on which countries can request support for strengthening their capacity.

Some areas for potential risk communication initiatives at country and/or regional level as identified during discussions are as below:

### ***Country level***

1. Creating pragmatic opportunities for dialogue with stakeholders at appropriate times throughout risk analysis process
2. Using multi-stakeholder networks to collaborate in risk communication is particularly beneficial when resources are limited

3. Identifying one or more spokespersons who would have the responsibility in carrying out the risk communication activity on food safety issues, when such situation arose may be useful. Such persons may need to be professionally trained in addressing public at large, media persons. Countries generally felt that training support for spokespersons is needed.
4. Effective risk message crafting and pre-testing of messages with targeted audiences is essential

### ***Regional level support***

Based on the priority areas identified, the participants recommended FAO led support in both introductory and advanced training in risk communication applicable to food safety but specifically in the following areas which in their view would be very beneficial to countries:

- Training of personnel for dealing/briefing of Media on risk communication
- More opportunities to connect with other countries through networking and better utilization of INFOSAN Asia network
- Support countries in carrying out an assessment of risk communication in their countries

## PROGRAMME

**FAO Regional Training on  
Enhancing Risk Communication Capacity in Food Safety  
13-15 May, 2015; Bangkok, Thailand**

Hotel Anantara Bangkok Riverside Resort and Spa, Bangkok, Thailand

<b>13 May 2015 (Day 1)</b>	
<b>Time</b>	<b>Programme</b>
08.00 – 09.00	<b>Registration</b>
<b>Opening Session</b>	
09.00 – 10.00	<b>Opening session</b> <ul style="list-style-type: none"> <li>• <b>Welcome Address</b> – <i>Mr Adnan Quereshi</i> on behalf of ADG, FAO Regional Office for Asia and the Pacific</li> <li>• <b>Workshop overview and expectations and structure of the programme</b> – <i>Ms Shashi Sareen</i>, Senior Food Safety and Nutrition officer, RAP</li> <li>• <b>Opening Address</b> – <i>Dr Tipvon Pariyasiri</i>, on behalf of Secretary General, FDA, Ministry of Public Health</li> <li>• <b>Introduction of participants</b></li> <li>• <b>Group photo</b></li> </ul>
10.00 – 10.30	Tea Break
10.30 – 11.00	<b>Session 1</b> <ul style="list-style-type: none"> <li>• <b>Lecture 1a)</b> Main food safety issues, challenges and initiatives at the regional level – <i>Ms Shashi Sareen</i></li> <li>• <b>Lecture 1b)</b> Importance of food safety capability/capacity building – <i>Dr Andrijana Rajić</i></li> </ul>
11.00 – 13.00	<b>Session 1 Lecture 2</b> Introducing food safety risk communication - <i>Dr William K. Hallman</i> (What is food safety RC and why it is important? Use of RC in food safety. Risk perception) <i>Hands-on exercise 1</i> – Newspaper
13.00 – 14.00	Lunch
<b>Afternoon Session</b>	
14.00 – 15.30	<b>Session 2 Lecture 3</b> Principles of good risk communication: openness, transparency, responsiveness, timeliness, stakeholders - <i>Prof Lynn J Frewer</i> <i>Hands-on exercise 2-</i> When and What to Communicate and to Whom – <i>Dr Andrew Powell</i>
15.30 – 15.45	Tea Break
15.45– 17.00	...Session contd
17:00– 17.45	<i>Brief presentation of topics of case-studies / instruction for group work and team presentations</i>
<b>14 May 2015 (Day 2)</b>	
<b>Time</b>	<b>Programme</b>
<b>Morning Session</b>	
08:25 – 08:30	Recap of day 1
08:30 – 10.30	<b>Session 3 Lecture 4</b> Key Considerations - Understanding the nature of food safety issues – <i>Dr William K. Hallman</i>

	(Nature and importance of issue; risk and benefits; quality and certainty of data; what can be done about risk?; unintended consequences; context of communication; perception of risk; socio-cultural and economic factors)  <b>Session 3 Lecture 5</b> Key considerations – target audience needs - <b>Prof Lynn J Frewer</b> (Language; reader's ability; gender; public trust; political and media environments; engagement in food safety RC; the right Risk communicator; internal and external resources. Selecting the best risk communication strategy)
10:30 – 11:00	Tea Break
11:00 – 12:00	....Session contd - Review of <i>Hands-on exercise 2</i> - <b>Dr William K. Hallman, Prof Lynn J Frewer and Dr Andrew Powell</b>
12:00 – 13:00	Lunch
<b>Afternoon Session</b>	
13.00 – 14.30	<b>Session 4 Lecture 6</b> Putting Food safety risk communication into action (1) - <b>Prof Lynn J Frewer</b> (Good practices: Knowing your audience; stakeholder interactions; dealing with uncertainty, rumors and outrage)  <b>Session 4 Lecture 7</b> Putting Food safety risk communication into action (2) - Mr Andrew Powell (Good practices: Message development; communication channels/tools; dealing with the media; monitoring and evaluation)
14.30 – 15.00	Tea Break
15.00 – 17.00	....Session contd - <i>Hands-on exercise 3</i> Communication Role Play: Participants, <b>Dr William K. Hallman, Prof Lynn J Frewer and Dr Andrew Powell</b>
<b>15 May 2015 (Day 3)</b>	
08:25 – 08:30	Recap of day 2
08.30 – 10.00	<b>Session 5</b> <i>Analysis of the case studies based on approaches/tools introduced: Lessons learned.</i> Finishing group work and team presentations
10.00 – 10.30	Tea break
10.30 – 13.00	....Session contd
13.00 – 14.00	Lunch
14.00 – 15.30	<b>Session 6</b> <i>Assessing food safety risk communication capability and capacity</i> - <b>Dr Andrijana Rajić/ Ms Shashi Sareen</b> Participating country presentations / Follow-up initiatives
15:30 – 16:00	Tea Break
16:00 – 16:30	Evaluation
16:30 – 17:00	<b>Closing Session</b> - Training wrap-up and <i>Closing Remarks</i>

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## WELCOME ADDRESS BY FAO

### Welcome Address by Mr *Hiroyuki Konuma* Delivered by Mr *Adnan Quereshi*, Senior Administrative Officer, FAO RAP

*Dr Tipvon Pariyasiri, Director, Food Control Division, Thai Food and Drug Administration, Ministry of Public Health, Government of Thailand.*

*Distinguished Participants, Resource persons, Colleagues from FAO, Ladies and Gentlemen,*

It gives me great pleasure to welcome you to this three days Regional Training on Enhancing Risk Communication Capacity in Food Safety, organized by the FAO Regional Office for Asia and the Pacific, with support of faculty from FAO HQs and internationally recognized risk communication specialists, the resource persons. I would like to thank Ms Tipvon, Director of Food Control Division, Thai Food and Drug Administration for giving the opening remarks on behalf of the Ministry of Public Health, Government of Thailand. I would like to thank our resource persons for making available their valuable time to come for this important training, the first of its kind in the region.

I am extremely pleased to see around 40 participants from 13 countries in the region participating today, and representing senior managerial and technical staff from food safety, veterinary and public health institutions with formal mandates in risk analysis functions and covering various Ministries and Departments who either are or will become food safety communication professionals in their respective countries.

The subject of discussion is very pertinent in today's context of globalization with increasing demand by consumers for variety in foods. In such a scenario, the potential for spread of contamination in food is high with increasing challenges and risks to consumer health and safety. The concept of risk analysis as a risk management framework has been adopted by many national and regional food safety authorities around the world. Risk communication which is an essential part of the risk analysis paradigm is defined as the exchange of information and opinions concerning risk and risk-related factors among risk assessors, risk managers, consumers and other interested parties. The main goal of food safety risk communication is to increase understanding among various food safety stakeholders regarding the rationale behind the decisions taken to assess hazards and manage food safety risks, and to help people to make more informed judgments about the food safety hazards and risks they face in their lives. Food safety risk communication also frequently informs and enhances risk assessment and risk management decisions. For example, risk communication is needed in helping risk managers understand the likely impact of their different decisions and thereby assess how effective their decisions would be. To reduce the risks of food safety hazards, food safety risk communication is often on-going (e.g. promotion of hygiene practices) and should always include relevant stakeholder groups (government, consumers, industry, others).

#### **Ladies and Gentlemen,**

The risk management responsibilities of national food safety authorities have increased considerably in recent years. Traditionally, risk analysis capacity building efforts applied to food safety have been focused around risk assessment and risk management, and/or other related functions (e.g. surveillance) that are important to inform risk analysis and policy decision making. It is important to note that governments have a fundamental responsibility for risk communication

when managing food safety, regardless of the management methods applied. With the responsibility for managing risks comes the responsibility to communicate information about risks to all interested parties at the appropriate level of understanding for each audience. Decision-makers within governments have the obligation to ensure effective communication with interested parties when developing scientific and technical analyses. Decision-makers must also involve the public and other interested parties when appropriate in the risk analysis process. Risk managers also have the obligation to understand and respond to the factors driving public concerns about health risks, as well as technical risk assessments.

The post-event analysis of recent global, regional and national food safety and public health events demonstrated their adverse impact on consumer's confidence in safety of agri-food production, supply and trade. A need has emerged for more effective use of updated risk communication principles and practices by shift from the current generic approach to more proactive perspective and issue specific risk communication practices targeting stakeholders within their competencies and vulnerable groups.

Risk communication is an area not well addressed in countries but a most important part of risk analysis and countries have been requesting support. In view of the requests as well as the importance of this subject, the regional training on enhancing risk communication capacity in food safety is being organized.

**Ladies and Gentlemen,**

The Food and Agriculture Organization of the United Nations (FAO) has been focusing on food safety at the international level as well as regional level. FAO in addition to setting international standards, also responds to the needs of individual countries and support them in strengthening capacities to develop and implement food control activities including standards and their implementation.

In spite of various efforts and initiatives in the region by FAO as well as other developing partners, it has been observed that there are challenges being faced by governments in strengthening food safety, an important one being the need to deal with the risk communication at various levels, between departments and Ministries, with officials, FBOs, consumers as well as governments of other countries and international organizations.

This timely Regional training brings together food safety professionals from various countries of the Region and provides a valuable opportunity to them to increase their understanding on risk communication principles and their implementation within countries thereby leading to stronger food safety systems.

**Ladies and Gentlemen,**

Finally, I wish you a successful training and hope that by the end of the training you will have gained significantly to become food safety communication professionals in your countries

Thank you.

## OPENING ADDRESS

by

**Dr Tipvon Pariyasiri, Director, Food Control Division, Thai Food and Drug Administration,  
Ministry of Public Health, Government of Thailand**

*Distinguished delegates, Ladies and Gentlemen,*

On behalf of Ministry of Public Health and Government of Thailand, I would like to welcome you to the regional consultation workshop on “enhancing Inter-ministerial Coordination for strengthening Food Safety”. We are delighted to have you here to participate in this special event organized by the FAO Regional Office for Asia and Pacific (RAP) in collaboration with the Institute of Nutrition, Mahidol University.

It’s not surprising that issues like food safety have been of great concern of several countries, world over because unsafe food is still affecting millions of people resulting in an increasing magnitude of health burden. Many countries including Thailand have recognized that controlling food safety along the food chain is very essential to solve the unsafe food problem for protection of consumer health. Unfortunately, lack of integrated control measures by the multi-agencies responsible for food safety control systems leads to have less effectiveness of their implementation on the food chain approach.

In Thailand, the integration of multi-agencies responsible on food safety control system has been highly achieved by the Thai Government. The National Food Committee Act has come into force as of 2008 to coordinate the national food control system among 30 national agencies related to food safety and food security aspects. The National Food Committee consists of sub-committees and experts from relevant agencies with co-secretaries from Ministry of Public Health and Ministry of Agriculture and Cooperatives. However, the effectiveness of integrated policy and implementation is very challenging to all the agencies.

In December 2012, the FAO Regional Office had started an important initiative regarding food safety policies with the aim to strengthen national food control systems improving the regional coordination among the countries of Asia. The coordination, cooperation and communication between ministries, agencies and relevant stakeholders of the countries are crucial factors in consolidation of food safety control systems in both national and regional levels.

The principal issue is enhancement of inter-ministerial coordination to foster effective interagency collaboration for betterment in food safety. A coordination mechanism will enable strengthening the effectiveness in implementation of food control measures as well as promoting the organizational linkages among the agencies in the food safety control system.

Therefore, the three-day Regional Consultation on Enhancing Inter-Ministerial Coordination to strengthen food safety will address our coordination mechanism between government ministries and agencies at the national and regional levels. This will improve collaboration better and efficient inter-ministerial coordination in order to ensure that all controlling food safety measures from relevant agencies are competent and effective to protect the consumer health which is the ultimate goal for all of us.

I wish all participants a fruitful collaboration and discussion with substantiate and practical outcomes.

Thank you very much.

## EXERCISE 1 Newspaper Article

# Rare birth defect found in cluster

By John M. McClintock  
Brownsville Sun

BROWNSVILLE, Texas — In less than 36 hours last spring, three children were born without brains at Valley Regional Medical Center here.

Two of the babies were stillborn. The third hung on for three days, doomed by a fatal defect that leaves infants with an open skull and only the rudiments of a brain.

The deaths from the rare defect, known as anencephaly, puzzled Margaret Diaz, an occupational health specialist. She thought the three cases could have been a statistical fluke. Then, she had a chance conversation with a radiologist.

He had recently performed ultrasound examinations on seven pregnant women. Each, he said, was carrying a child without a brain.

Doctors soon learned of at least 10 more cases, most of them clustered in this city of 98,000 along the Rio Grande. The outbreak here and in surrounding Cameron County may be the largest ever in the United States.

Across the river in Matamoros, Mexican health officials are worried, too. Two anencephalic children were delivered at the general hospital in 1990, but 10 were born last year.

Diaz's alarm has prompted full-blown investigations by the U.S. Centers for Disease Control, three Texas agencies and a local group of lawyers, doctors and chemists. So far, they have few answers.

"We think something terrible happened to cause this, but we don't know what it is," said William Lipps, a Brownsville chemist assisting the CDC.

But some here have their suspicions. Long uneasy about the heavy pollution in their sister city of Matamoros, Brownsville residents now fear that an environmental time bomb has gone off.

Like other Mexican border towns, Matamoros is struggling under the residue left by years of unchecked industrial growth.

It is dominated by U.S.-owned companies that came south over the last three decades for cheaper labor, favorable trade rules and lax enforcement of environmental laws. Today, Matamoros is an ugly sprawl of industrial plants and shacks housing Mexican workers. Its open sewers contain toxic wastes and human refuse. Its factories spew fumes and leak chemicals.

While CDC experts are considering environmental factors in their investigation of the outbreak, they say that the inquiry is in its early stages and that they have no evidence linking anencephaly to the chemical stew in Matamoros.

"It would be a tremendous medical breakthrough if we could find what caused just half of those Texas cases," said Gregg Sylvester, an epidemiologist who is leading the investigation. "I suspect that the causes of anencephaly may involve a multitude of factors and that we won't find a single cause."

Even as the medical detectives search for answers, the tragedy is unfolding. Another anencephalic baby was born at Valley Regional on Christmas Day.

To the parents of the children, the horrible nature of the defects is devastating.

"Many of the patients were poor

*Brownsville residents fear environmental problems across the border are the cause.*

Mexican-American women who had no idea what to expect," said Vikki Barton, head nurse in the hospital's nursery. "It is very shocking when you're expecting a normal baby."

Mexican culture stigmatizes women who produce deformed children. Doctors know that anencephaly occurs in the early days of pregnancy as the brain and spine are formed. But they don't know what triggers the defect.

A British study last year established that folic acid — a vitamin found in green leafy vegetables, bread, rice, citrus fruit and nuts — is critical in the first weeks of pregnancy. The study showed that adding folic acid to the diets of high-risk mothers sharply reduced their chances of producing anencephalic babies.

Researchers have also shown that exposure to solvents — chemicals used to clean or mix in paint, plastics and electronics factories — has been linked to central nervous system defects. A 1979 Finnish study tied such defects to a mother's exposure to solvents.

More recently, epidemiologists at the Texas Department of Health found in a 1990 study that men who used solvents faced higher risks of fathering anencephalic children.

Preliminary test results show residues of heavy concentrations of organic solvents in the soil around Matamoros and in the Rio Grande.

Investigators in the Texas outbreak are theorizing that exposure to some chemical or other environmental or genetic factor prevented the Brownsville mothers from having sufficient folic acid in the crucial first weeks of pregnancy, said Dr. James E. Cheek, a CDC epidemiologist.

The scientists are also trying to discover whether there is a predisposition to anencephaly among Mexican-Americans, since the defect occurs in Mexico at nearly six times the U.S. rate. Even so, other factors may be involved because no anencephalic outbreaks have occurred in similar Mexican-American border populations in California, New Mexico or Arizona.

To Casimiro Vasquez, a Brownsville resident who lives just a half-mile from Matamoros, the questions raised by the medical mystery are particularly haunting.

He is the father of 9-month-old Blanca, who suffers from spina bifida, a nervous system defect closely related to anencephaly. She may never walk or control her bladder or bowels, doctors say.

"When she was born with this sack of nerves hanging off her back, we were scared that something evil had befallen us," Vasquez said.

"Then we heard from the doctors about these other cases — these babies without brains — and we thought: We are living through a truly great tragedy."

Anencephaly: A serious birth defect in which a baby is born without parts of the brain and skull.

## EXERCISE 2 WHEN TO COMMUNICATE WHAT TO WHOM

Handouts of each of the six steps, Step 1 to Step 6 were distributed to groups of participants. The summary of observations as follows:

### STEP 1

#### What is your Plan?

- To inform through advisory;
- Through website;
- Through Media – print (newspapers)/TV/Radio

#### What is the disease

- Children affected
- Report to Disease Control department for investigation;
- Epidemiological investigations required;
- Study of demography;
- Clinical testing – including samples of food

#### Establish the problem

- Communicate to stakeholders;
- Advise public;
- Immediate message to public, schools;
- Reheat food before serving;
- Arrange recall
- Investigate preparation, distribution, storage
- Check supply channel;
- Collect general public perception

### STEP 2

- Suspend product distribution;
- Carry out self check;
- Inform public to stop consumption
- Stop import (if involved)

### STEP 3

- Warning schools, teachers, parents, public;
- Testing of other foods;
- Investigate what products children had eaten

### STEP 4

- Inform findings in simpler language as will be understood by teachers, parents and public;
- Ensure communication does not contain any aspect which may cause panic in public/children;
- Arrange for collecting material available for sale/distribution;



## **STEP 5**

- Advisory through media for stopping consumption;
- Communicate international networks;
- Seek product recall with timeline

## **STEP 6**

- Initiate legal action as per country's laws;
- Consider payment of compensation;
- Investigate where things had gone wrong;
- Corrective actions

The summarization was:

- Anticipation is necessary to ascertain how people might react. This will come from knowledge about current incident and experience of the past;
- Entire product should be discarded;
- Payment of incentive to be considered for returning product by bulk sellers, Super Markets etc;
- Regular monitoring, surveillance;
- Factual communication in a manner not to create panic.

## GUIDING OUTLINE FOR CASE STUDIES

Guiding outline for developing case study on the real food safety situation that happened in the country and where the lessons learned relate to food or feed safety risk communication that was given to countries is as below.

### **CASE STUDY: Brief title**

#### *1. Introduction and overview of case:*

##### Brief background

- 1.1 Nature of hazard:
- 1.2 Who is affected:
- 1.3 Identification of uncertainties where they exist:
- 1.4 Ability to control the risk:
- 1.5 Historical background and context (e.g. political, media environment):
- 1.6 Level of communication required – public health impact/public concern:
- 1.7 Emergency vs. Non-emergency situation:
- 1.8 Timelines of event (what happened when):

#### *2. Evidence and application of the principles and best practices for risk communication in the case:*

- 2.1 Trustworthiness of information sources (honesty, credibility, care):
- 2.2 Openness:
- 2.3 Transparency:
- 2.4 Responsiveness:
- 2.5 Timeliness:
- 2.6 Targeted audience (how are risk communication activities tailored to targeted audiences?)
- 2.7 Stakeholder interactions and coordination
- 2.8 Message development (how are stakeholders involved to inform risk messages?)
- 2.9 Risk messages:
- 2.10 Channels and tools used:

#### *3. Lessons learned and implications drawn from the use of principles and practices for effective food safety risk communication (this also includes recognition of how things could have been done differently):*

#### *4. Short and clear summary of overall case*

## ANALYSIS OF THE CASE STUDIES BASED ON APPROACHES/TOOLS INTRODUCED: LESSONS LEARNED

A gist of these case studies of each country as presented and lessons learnt are given below:

### **Bangladesh**

Several children from different villages of a particular district were admitted in the hospital with symptoms of encephalitis. Investigations by physicians, epidemiologists clinical tests and examinations were conducted. 13 children died. It was later established to be cases of poisonings due to consumption of litchis and mangos, fruits commonly grown in the area. The fruit trees were sprayed with pesticides. Clinical, epidemiological and exposure histories of the cases suggested that the outbreak was due to unintentional pesticide poisoning.

#### *Lessons learnt:*

1. Training of farmers in use of pesticides.
2. Village level workers to be trained for alerting local population about farming operations and spreading of awareness about use of pesticides and food safety issues.

### **Bhutan**

H5N1 Influenza virus re-surfaced in Asia towards the end of 2003 when Bhutan was making good progress in its poultry sector. Given the experiences of the past with the Influenza virus and the way in which it portrayed during its resurgence, made the world respond to it in a different way as compared to any other disease. Bhutan did its part to prevent the disease from entering the country as well as conducted lot of awareness campaigns to communicate risk to people so that they know how to protect themselves should the disease occur. Some individuals initially were of the view that the government was being over reactive to this disease situation, however, it worked out well as Bhutan did not see even a single human case even though we had 8 different outbreaks over a period of 6 years time.

#### *Lessons learnt:*

Regular surveillance is required for risk identification, risk analysis and risk communication. In addition, risk management shall be done, depending on the severity of the incidence, situation.

### **China**

In China, some people lack scientific understanding of food safety **risk**. Such as adding edible pigment into the steamed bread which are not allowed, mutton roll mixed with other meat, foodborne diseases, pollutants exceed the standard in food detection. All of these events were considered as food safety incidents.

The Government of China has taken several steps in recent years to strengthen public food safety risk communication, recognizing its importance within the risk analysis paradigm.

Risk communication materials are available in various formats, including handbooks and

flyers for community organizations, schools and other enterprises. Food safety events have been conducted on “International Consumer Rights Day”, “ food safety awareness week”, “National science day” et al..

Food safety risk warning is released timely, such as wild mushroom poisoning, summer food safety, dumplings and moon cakes consumption tips and release textured screw pufferfish toxin poisoning prevention.

The government also uses its website to release information on food inspections and food sampling. Social media and micro blogs have helped with rumour control on issues ranging from anthrax-contaminated beef products.

### **Cambodia**

852 persons were affected eating meat pickle. Investigations done and established about use of spoiled meat and unhygienic processes. Through public announcement systems, the local population was made aware of the food safety issue. Warnings were issued cautioning people of the dangers to health.

### **India**

A consignment of refined edible oil, vegetable and milk ghee imported in 2009 for direct distribution to the consumers as packed or by again repacking the bulk items; failed under the labelling and technical standards and some only on labelling standards.

The importer was advised to re-export to the exported country or destroy the goods. The importer unable to re-export due to procedures involved being long and cumbersome and high costs involved in destruction. Having lost economically, the importer abandoned the cargo. The Container Freight Station where the cargo was stored in a Custom Bonded Area became the custodian of the cargo. It was their responsibility now to dispose the cargo as per procedures under Customs Act.

The timeline for notice to the Importer for cost recovery and legal, financial requirements to dispose the cargo by the custodian took 5 years. Once the decision to finally dispose the cargo was taken, the Customs asked the procedures for the same from the Port Health Officer. The cargo being food products and to balance the best use of natural resources and preventing loss to the service provider, the bulk consignment of oil was disposed to the soap manufacturing unit and rest of the cargo being highly sensitive from pilferage was destroyed in an environmentally safe manner at a recycling plant.

*Lessons learnt:*

#### **National Level:**

- a.) Imparting education for the importers and exporters on the Food Laws before they plan to import or export a food product. Importer must know the Indian laws to ensure the standards as per law is ensured and exporter must ensure the product exported is as per the standards of the exporting country to prevent its rejection and re-import. Minor labelling deficiencies only may be allowed to be complied at Port of entry (PoE) before releasing the cargo. [(Now done by India under the Food safety and Standards Act (FSSA-2006) and Food safety and standards Regulations (FSSR-2011)]

#### International Level:

- b.) To plan to harmonize rules with international standards by modifying the parameters to a range of widely prevalent acceptable standards.
- c.) Development of International Standardized Referral Food Testing Laboratories (Similar to the Disease Testing Referral Laboratories in various WHO Regions) acceptable by state parties for import and export food cargoes. The parameters and test levels are to be mentioned and further testing is to be done only in case the test levels are above the local food law. Random testing may be done by the state party to create the data backup of the comparison of sensitivity and specificity of the test levels of referral laboratory. The overriding powers are to be given to the state party for testing samples if needed.

#### Indonesia

Adulteration of milk products with melamine - The scandal broke in July 2008, after sixteen infants of a Province, who had been fed on imported milk powder were diagnosed with kidney stones. The government inspections revealed the problem existed to a lesser degree in milk products imported from a country, all containing melamine.

The food safety incident involved milk and infant formula and other milk food products adulterated with melamine. The use of melamine was done in the country where adulteration of milk with addition of water had been done to raw milk to increase its volume. The diluted milk had a lower protein concentration. Companies using the milk for further production (e.g. of powdered infant formula) normally check the protein level through a test measuring nitrogen content. The addition of melamine increased the nitrogen content of the milk and therefore its apparent protein content.

Melamine has shown to have carcinogenic effects in animals. The use of melamine to increase the nitrogen content in fresh milk or milk product is not allowed by any authorities. Communication to public is needed to be clear and responsible so society will not be confuse or dispute with the problem/case.

After the alert from INFOSAN about milk product adulteran with melamine outbreak in China, messages/press release were ongoing but intensified annually by NADFC through media and website when the AQSIQ or INFOSAN informed about the outbreak in China. Government and industry/distributor/retailer had increased communication in advance.

#### *Lessons learnt :*

- Food safety emergency event requires: timely rapid response, strong and independent scientific expertise, transparency during the process, good and clear risk communication
- Trigger to stronger food control
- Stakeholder participation is needed
- China/exporter should redouble its efforts to consolidate and upgrade its dairy industry and win the trust of consumers.
- The authorities in importer country should make more of an effort to promote the benefits of breast-feeding.
- After all, milk formula is not an equal substitute, for nutrition and immunity, except for mothers who cannot breast feed.

## **Malaysia**

*Listeria monocytogenes* was found in apples from USA. The issue was raised due to information received from International Food Safety Authorities Network (INFOSAN) under WHO- FAO. US Food and Drug Administration (USFDA) investigated an outbreak of *listeriosis* in the United States of America (USA) linked to pre-packaged caramel apples. According to the US Center of Disease Control and Prevention (CDC), until 9th January 2015, 32 people were infected with the outbreak strains of *Listeria monocytogenes* in the US where 31 ill people were hospitalized. *Listeriosis* contributed to at least 3 deaths to date. 10 illnesses were pregnancy-related, with one illness resulting in fetal loss. Bidart Bros., California voluntarily recalled *Granny Smith* and *Gala* apples as the environmental testing revealed contamination with *Listeria monocytogenes* at the firm's apple-packing facility.

An official warning was issued by the Ministry of Health (MOH) to the importer, under Section 13C (1) Food Act 1983, to recall contaminated apples within 14 days. It is the importer's responsibility to inform its consumers (wholesaler/ supplier/ retailer/ shopkeeper/ seller) to remove the products from shelves and return them to the importer. Simultaneously, a press release was made by the MOH and inspections at local markets were done in order to ensure the contaminated apples were removed from store shelves.

### *Lessons learnt:*

Implicated products must be identified correctly such that only the products involved are recalled and destructed. This will reduce the cost incurred by the importers and unnecessary fear among public.

## **Maldives**

The U.S. Food and Drug Administration (FDA) along with the Centers for Disease Control and Prevention (CDC) and state and local authorities investigated a *listeriosis* outbreak linked to commercially-produced, prepackaged whole caramel apples. *Listeriosis* is caused by the bacterium *Listeria monocytogenes*.

On January 6, 2015, Bidart Bros. of Bakersfield, California voluntarily recalled *Granny Smith* and *Gala* apples because environmental testing revealed contamination with *Listeria monocytogenes* at the firm's apple-packing facility. Those same strains are associated with *Listeria monocytogenes* infections (*listeriosis*) linked to commercially produced, prepackaged caramel apples.

World Health Organization through INFOSAN (International Food Safety Authorities Network) shared this information with its member countries including the focal point of Maldives, which is the Maldives Food & Drug Authority (MFDA).

Maldivian Health Authorities investigated if this product has been imported to the Maldives and the alert was raised and brought to notice of the concerned authorities, including the public. Initially the Health Authorities were not sure if the same product which was being recalled in US were imported into the country. Later, *Granny Smith* apples originated from US were identified in the country.

However the importer of these identified US apples could not prove if those apples did not have a link to the company of California where the products have been recalled. Therefore,

considering this as a high risk case, decision was made to destroy the identified products, since it was not confirmed that these products did not have a link with the recalled products from US.

As soon as MFDA had communicated the food alert, it was popularly reported by the media and hence it was drawn to the attention of the public very quickly.

Consumers mitigated risk through choice of apple type following the precautionary steps communicated by the concerned government authorities (MFDA & HPA). However these mitigation actions had unintended consequences. For example, reducing consumption of apples which may result in an unhealthy diet that increases health risks.

#### *Lessons learnt:*

- ✓ The importance of carefully planned media releases.
- ✓ The importance of contingency arrangements planned before incidences.
- ✓ The vital role of effective coordination between and among relevant authorities.
- ✓ The involvement of other relevant stake holders to increase the chances for successful risk communication and enhance risk management.
- ✓ The need to have procedures in place that can respond appropriately to emergency situations.
- ✓ The importance of involvement of relevant stakeholders who should be involved in the crisis in a timely manner so that all parties involved can be prepared to such emergency situations.
- ✓ And most importantly, the importance of establishing a food import control system in a country like Maldives which is highly import dependant.

### **Mongolia**

40% of potatoes, vegetables and fruits which grown in Mongolia and 80% of potatoes, vegetables and fruits imported from China are contaminated by chemical substances (pesticides).

#### *Lessons learnt:*

- When conflicting messages appear to be equally backed with credible, scientific data, people rely heavily on public opinion, social influences and personal trust in the spokesperson to determine which message(s) to believe.
- When risk-benefit information is complex, two-way dialogue with the target group(s) can be particularly helpful in identifying barriers to message reception and in developing effective strategies to overcome those barriers. That consumers are concerned about pesticides in food has been studied, but more research needs to be done on why that is and what are the barriers to reducing risk perception.
- Subjective terms (such as “unreasonable” or “safe”) should be avoided or defined as clearly as possible. In the absence of a clear definition any group may define the terms or use the ambiguity to their benefit.

## **Philippines**

Harmful Algal Blooms (HAB) of *Pyrodinium bahamensis* var. *compressum*, a toxic dinoflagellate also known as Red Tide Toxin, have affected the shellfish and other fishery industries that raised public health concerns mainly because of paralytic shellfish poisoning (PSP) resulting from the ingestion of infected shellfish.

Government mitigates risk by alerting residents in the affected areas. The Red Tide alert is disseminated to the public through print and broadcast media whenever toxicity in shellfish collected from affected areas exceeds the regulatory limit. Public are warned not to consume shellfish from the affected areas to avoid paralytic shellfish poisoning (PSP). Public meetings and seminars are also being conducted to educate the fishermen about the red tide situation. Primers are also distributed, and audiovisual information is presented through local television.

### *Lessons learnt:*

Despite of the control measures undertaken by Bureau of Fisheries and Aquatic Resources and Local Government Units, the annual red tide occurrences in the Philippines are happening and fatalities still reported. The government is looking at how to improve the risk communication that would eliminate fatalities in cases of an outbreak.

## **Thailand**

Potable ice is always contaminated with non-pathogenic bacteria such as Coliform bacteria during post-processing steps such as transportation and storage especially at retail. Government mitigates risk by applying GMP standard at ice factory to decrease ice contamination to control personal hygiene of worker, equipment and ice machines. Food sanitation standard and hygienic practices are applied at retail, restaurants, street food vendors, coffee shops etc.

### *Lessons learnt:*

When communicating, it is important to prepare all related information and spokesman about the subjects and audience for a better understanding, trust and transparency. It is also necessary to work closely with other stakeholders to develop messages and media that are clear and correct for public.

## **Vietnam**

On July 30, 2013, an outbreak of Histamine had already sickened 26 workers without any death in Ho Chi Minh City in Vietnam. Once receiving information in regard of this outbreak from the Preventive Health Center (PHC) of Binh Chanh District, the Food Administration Department of Ho Chi Minh City – the agency responsible for managing and overseeing food safety coordinated with PHC to take on-site visit for an epidemiological investigation. Histamine fish poisoning results from the consumption of inadequately preserved and improperly refrigerated fish. It resembles an allergic reaction but is actually caused by bacterially-generated toxins in the fish's tissues. Histidine decarboxylase (HDC), found in *Escherichia coli*, *Morganella morganii*, and in *Proteus* and *Klebsiella* species, converts histidine, present in fish tissue, to histamine. Without adequate cooling, these bacteria multiply, increasing the histidine-to-histamine conversion rate and raising histamine levels.



In fish left at room temperature, the histamine concentration rapidly increases, reaching toxic concentrations within 12 hours. Out of 58 workers eaten fish that day in that company, 26 persons were hospitalized and confirmed illnesses without any fatality.

*Lessons learnt:*

- When communicating, it is important to be tailored to audience specific through appropriate communicative channels, tools and materials.
- It is very necessary to have close cooperation and coordination between related stakeholders during developing messages and communicative materials. It helps messages and communicative materials being understood easily by different targeted groups.
- It is important that officials inform stakeholders who are involved in the crisis in a timely manner so that all parties involved can be prepared to participate in investigation and announce updated news on HFP outbreak via mass media.

## RISK COMMUNICATION RAPID ASSESSMENT

### Summary of Countries' main strengths and needs on the institutional and/or personal level

#### Bangladesh

##### *Strengths*

- Transparency and first announcement of a real or potential risk:
  - Food borne illness surveillance;
  - 24/7 Hot Line at IEDCR;
  - Media monitoring service;
  - Ability to rapidly approve warning messages for the public through radio and TV
- Public communication coordination
  - Effective access to risk communication among public during emergency;
  - Ability to work with community networks which has distinct and cultural groups
- Listening to dialogues
  - Interview affected population, partner organization, NFSA, individual and communities and process their views and perception of a serious food safety event;
  - Ability to adapt communication materials and messages after processing the views and perceptions of the affected population.

##### *Needs/priorities*

- Information dissemination including media outreach
  - Quickly to reach vulnerable, hard to reach, disadvantaged or minority population with accessible and relevant emergency information (tailored for language use, literacy rate and socio-economic condition);
  - Need strengthening and effective access other dissemination channels including Internet, SMS, T&T help lines, social media, emails etc.

#### Bhutan

##### *Strengths*

- Transparency
- Rapid approval and dissemination of warning messages
- Ability to identify lead spokesperson
- Responsible media professionals
- Coordination among stakeholders.

##### *Needs/priorities*

- Laboratory facilities
- No trained risk communicators
- Geographical features hinder accessibility to outbreak spots for investigation
- Lack of system (Database) to record cases of food safety issues

## **Cambodia**

### *Strengths*

- The ability to rapidly approve warning messages for the public during potential food safety risk (Hotline, RRT);
- The ability to basic information/education/communication/material and messages have been developed and translated (supported by WHO, USAID .....);
- The ability to access work with community network which can access distinct language and culture groups (FORT – Food Outbreak Response Team)

### *Needs/ priorities*

- Ability t evaluate how decision making and action affected transparency after communication response – fragmented system – Food Safety Authority
- Ability to identify Lead Spokesperson – lack of spokesperson
- The ability to effectively response to the high demand of emergency mass media inquiries including plan that address a high volume of media questions and need for frequent media briefing
- Ability to reflect findings of listening and evaluation process back to emergency management decision making.

## **China**

### *Strengths*

- Ability to issue warning messages of a potential risk during non-business hours, e.g evenings & holidays;
- Ability to effectively access other dissemination channels including SMS, telephone helplines etc;
- Ability to work with community networks which can access distinct language and cultural groups'

### *Needs/ priorities*

- Ability to evaluate how decision making and action affected transparency after a communication response;
- Ability to ensure trained public spokespersons are prepared and available to speak to journalists during food safety emergencies;
- Ability to adapt communication materials and messages after processing the views and perceptions of the affected population.

## **India**

### *Strengths*

- Democratic, transparent society with a vibrant/aggressive media (watch dog) raising all public interest issues.
- Strong legal system
- System of health workers at grass root/agriculture – whose services can be channelized for communication.

- Public dialogues. Country has wide spread NGOs/Universities/Research Institutions so data availability/generation is possible.

#### *Needs/priorities*

- Availability of trained public spokesperson. Need to look for such persons within systems.
- Documentation/SOPs/Coordination and networking within institutions/agencies
- Outreach of risk communication at villages/rural areas/tribals – literacy issues. Power availability – huge challenge for information dissemination with all modern information tools.

### **Indonesia**

#### *Strengths*

- Transparency – immediate press release
- Information dissemination – media gathering, media outreach
- Listening through dialogue – integrated system with several ministries in every province

#### *Needs/priorities*

- How to deliver effective messages
- How to evaluate the media/public communication
- How to evaluate the trust of public to government after the case close

### **Laos**

#### *Strengths*

- Infrastructure
  - Emergency team of MOH;
  - Risk communication team
- Transparency – coordinate with key stakeholders to take decisions;
- Public commentator- We have media to communicate
- Information dissemination – TV, radio.

#### *Needs/priorities*

- Food safety issues not very clear;
- Release of news quite slow as approval has to be awaited;
- Not easy to reach rural areas

### **Malaysia**

#### *Strengths*

- Transparency and first announcement of real or potential risk – system/information/intelligence
- Public communication coordination – good relationship with the stakeholder (MoA/MoTC) & Local Authority
- Information dissemination including media outreach – good relationship with media

- Listening through dialogue – through discussions and meetings conducted annually such as FEM/NGOs

#### *Needs/priorities*

- Transparency and first announcement of real or potential risk – perception on the first respond to the public
- Public communication coordination – EREP team will assemble the data and information needed for risk communication.
- Information dissemination including media outreach – the information will be shared to media by spokesperson
- Listening through dialogue – the dialogue will be conducted with various stakeholders related with issue periodically.

### **Maldives**

#### *Strengths*

- Food safety and consumer health protection departments are under the same organisational structure (under Ministry of Health)
- Availability of identified spokesperson for risk communications
- Reachable and supportive media
- Access to internet and having a social media friendly public

#### *Needs/priorities*

- Staff involved in risk communications need to be trained for the purpose
- Better coordination with relevant stakeholders
- Needs to strengthen legal power (Food Act to be passed and implemented)
- Capacity building of food testing laboratory
- Establishing a food import & export control system

### **Mongolia**

#### *Strengths*

- Place of private TV, Media – no censor in communication
- Democracy (Individual)
- Private TVs. No limitation - Internet
- Respect, MOU

#### *Needs/priorities*

- Consumer health, safety and business prestige should be balanced
- Open information system should be improved, Training
- Improvement in knowledge of media people (journalist)
- Regulation – training

## **Philippines**

### *Strengths*

- Transparency and first announcement – issuance/announcement of advisory in a timely manner and provision of updates from time to time.
- Public communication coordination – communication among inter-agency personnel and partner organizations, especially during emergencies
- Information dissemination including media outreach
  - management officials are responsible for providing or attending media briefings;
  - use of brochures, pamphlets or other IEC materials which are translated into local dialects.

### *Needs/ priorities*

- Transparency
  - More evaluation on decision making and effectiveness of communication response;
  - The country should develop evaluation criteria after communication response;
- Public communication coordination
  - Some agencies (Govt) should assign spokesperson to communicate food safety risk;
  - Strengthen community networks which can access remote areas/hard-to-reach places
- Information dissemination
  - Proper training for identified spokesperson;
  - Develop or strengthen access to information dissemination to vulnerable population

## **Thailand**

### *Strengths*

- Transparency
  - Ability to rapidly approve warning messages to public;
  - Ability to issue warning messages;
  - Ability to follow existing plans;
  - Ability to evaluate how decision making actions affected transparency
- Information dissemination and media outreach
  - Trained public spokespersons
  - Effectively respond to high demand of emergency mass media
  - Effectively access other dissemination channels
  - Ensure basic information/education/communication materials and messages.

### *Needs/ priorities*

- Public communication coordination
  - Unable to identify lead spokesperson
  - Problem on communication coordination structure
  - Unable to share communication messages and strategies
- Listening through dialogues
  - Interview affected proprietor, partner, organization
  - Unable to monitor traditional and non-traditional media
  - Unable to reflect findings back to emergency management decision making

## **Vietnam**

### *Strengths*

- Transparency and first announcement – 24/7 hotlines to receive realtime reports on food safety from public
- Information dissemination including media outreach – public spokespersons assigned/appointed by law

### *Needs/priorities*

- Listening through dialogue – media modifies/exaggerate information for economic gain
- Listening through dialogue – limited capacity in reaching affected parties
- Public communication coordination – difficulties in communication with minority of population due to gaps in languages and culture.

## SUMMARY OF TRAINING EVALUATION

Name: All participants (40)

Country: Consolidated

1. How do you evaluate the quality of the Training Course in general?						
		1 = Very unsatisfied	2	3	4	5 = Very satisfied
1.1	Subject coverage	1	-	4	29	6
1.2	Material and handouts	-	1	3	23	13
1.3	Organization of the programme	-	1	2	24	13
1.4	Technical inputs by experts	1	-	6	23	10
<b>Summary</b> 1. Subject coverage – Very satisfied - 15% and Highly satisfied -73% 2. Material and handouts – Very satisfied - 33% and Highly satisfied -58% 3. Organization of the programme – Very satisfied - 33% and Highly satisfied -60% 4. Technical inputs by experts – Very satisfied - 25%; Highly satisfied -58% and Satisfied – 15%						

2. How do you evaluate the quality of lecture delivery in the Training Course?						
		1 = Very unsatisfied	2	3	4	5 = Very satisfied
2.1	Introducing Food safety Risk Communication	-	1	4	29	6
2.2	Principles of Good risk Communication	1	-	3	28	8
2.3	Key Considerations: Understanding Target Audience Needs	1	-	7	26	6
2.4	Putting Food safety Risk Communication into Action (1)	1	-	4	27	8
2.5	Putting Food safety Risk Communication into Action (2)	-	-	-	33	7
<b>Summary</b> 1. Introducing Food safety Risk Communication - Very satisfied - 15%; Highly satisfied -73% and Satisfied – 10% 2. Principles of Good risk Communication – Very satisfied – 20%, and Highly satisfied -70% 3. Key Considerations: Understanding Target Audience Needs - Very satisfied - 15%; Highly satisfied -65% and Satisfied – 17% 4. Putting Food safety Risk Communication into Action (1) - Very satisfied - 20%; Highly satisfied -67% and Satisfied – 10%						



5. Putting Food safety Risk Communication into Action (2) - Very satisfied - 17%; Highly satisfied -83% and Satisfied – 10%

3. How do you evaluate the quality of each exercise?						
		1 = Very unsatisfied	2	3	4	5 = Very satisfied
3.1	Risk Perception Newspaper Article	1	-	5	26	9
3.2	Assessing Capabilities to Respond Rapidly in Case of Emergency	1	-	8	24	7
<b>Summary</b> 1. Risk Perception Newspaper Article - Very satisfied - 23%; Highly satisfied -65% and Satisfied – 12% 2. Assessing Capabilities to Respond Rapidly in Case of Emergency - Very satisfied - 17%; Highly satisfied - 60% and Satisfied – 20%						

#### Summary of Comments/Observations

##### Day 1

- i) Will help in making communication in a better way;
- ii) It has got me thinking;
- iii) Concept of risk is clear;
- iv) Lecture material very good for TOT to increase awareness of stakeholders;
- v) Importance of trust in communication is very important in our future work;
- vi) Very relevant to our work as FSA and very useful for improving our work;
- vii) Preparing for media interviews will practically help;
- viii) Intend to apply all learnt because there is great need in our country to do risk analysis;
- ix) Shall use the material in our national language for vulnerable population

##### Day 2

- i) Informative, empowering skills to handle communication strategy;
- ii) Will help in handling risk communication in public;
- iii) Psychologist sharing of information was critical, casual and ideal in understanding perception and realizing issues in risk communication vis-a-vis behavioural pattern;
- iv) Mock interview between communicator, media, audience and NGO was useful;
- v) Excellent methodology to convey key messages;
- vi) My job is state management and the training will be very useful and helpful.

##### Day 3

- i) Very useful interaction with participants and resource persons;
- ii) Learnt actual scenario and solution to problems.

### Recommendations/Suggestions

- i) More time for lecture and examples will be useful;
- ii) Pace of lecture delivery was sometimes not use to follow. Slower speed in lecture will help us due to language problems;
- iii) Answers to exercises could be addressed in specific manner so that we could adopt for application;
- iv) Training material on real case studies;
- v) Training required to protect public from hoax;
- vi) Need more problem solving exercises;
- vii) Explanation is required as how to make public believe in government after a case is closed;
- viii) Link with Handbook is required. How will it be useful;
- ix) raining required on rapid communication methodology

# Power Point Presentations of all lecture Sessions



## MAIN FOOD SAFETY ISSUES, CHALLENGES AND INITIATIVES AT THE REGIONAL LEVEL

at

Regional Training on Enhancing Risk Communication Capacity in Food Safety  
(13-15 May 2015)

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## Introduction

- **Globalization** - increasing consumers demand for variety in food
- Creation of **global market** – food trade across countries
- Potential for **spread of contamination** high with **increasing challenges** & risks to consumer health/safety
- **Quality, health, safety, labelling, food fraud** incidents (melamine, horsemeat) acquiring global focus
- Governments mandate to ensure health & safety of populations (ensure safe food supply) – **risk-based concept** is important – risk analysis
- FAO has an important leadership role in advancing the food safety agenda in the region – including risk concept

An important part of risk analysis is **RISK COMMUNICATION**

## FAO Vision

- **Achieving food security for all** is at the heart of FAO's efforts – to make sure people have regular access to enough high-quality food to lead active, healthy lives.

**Food security:** all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life. [World Food Summit, 1996]

## Food safety

- Assurance that food **will not cause harm to the consumers' health** when it is prepared and/or eaten according to its intended use

(FAO/WHO Codex Alimentarius, General Principles of Food Hygiene CAC/RCP 1-1969)

- Food Safety implies
  - absence or
  - acceptable and safe levels of contaminants, adulterants, naturally occurring toxins or any other substance that make food injurious to health on an acute or chronic basis

[http://www.fao.org/trade/docs/LDC-foodqual\\_en.htm](http://www.fao.org/trade/docs/LDC-foodqual_en.htm)

## Importance of Food Safety

- ☐ **Protecting health of consumers** – acute food borne illnesses; long term health impacts (chemical substances & toxins)
- ☐ Protect from **fraud** – mislabeled, adulterated, unwholesome
- ☐ Facilitate **market access** - regional/international requirements
- ☐ Reduce **food losses/wastes** (spoilage/destructions)
- ☐ Promote **consumer confidence**
- ☐ Contribute to **economic development** by maintaining confidence in food systems
- ☐ Strengthen **national reputation**

## Food Safety and Quality Programme at FAO – in brief

<http://www.fao.org/food/food-safety-quality>

- ❖ Scientific advice for international standard setting and on specific regional or country matters
- ❖ Capacity development:
  - Strengthening food safety control systems
  - Effectively participate in setting Codex standards
  - Application of Codex standards and guidelines
  - Preparedness and response for food safety emergencies
- ❖ Proactive identification of emerging food safety issues and their prevention
- ❖ Development of guidelines, manuals, training materials

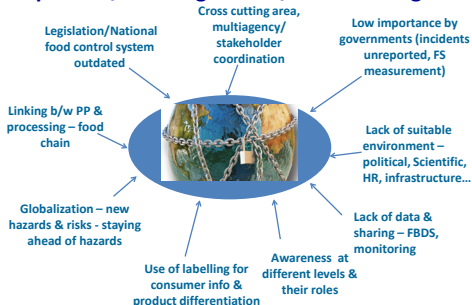
## A Snapshot of Q & Safety (in Asia)



- ❑ **Residues & contaminants** (pesticides, veterinary drug residues, environmental toxicants, naturally occurring toxins, POPs - dioxin)
- ❑ **Pathogens & spoilage micro-organisms** (due to poor, unhygienic handling/ storage conditions, lack of adequate temp control)
- ❑ **Zoonotic diseases** – avian influenza
- ❑ **Adulterants** - food additives including food colors, artificial sweeteners, borax, formalin, melamine
- ❑ **Technology issues** – GMOs, nano technology
- ❑ **Physical contaminants**
- ❑ **Food allergens**
- ❑ **Labelling & claims** – incorrect, BB date
- ❑ **Fraud**

All these require effective **RISK COMMUNICATION**

## Important/Challenges in FS/RC in the Region



## Food Safety Approaches



- ❑ **Food chain approach** – hazards may arise at different stages of the food supply
- ❑ **Preventative risk-based approach** is followed rather than a reactive one based on sampling & testing (GAP, GMP, HACCP)
- ❑ **Sound national food control & regulatory systems essential** – standards & implementation - **Codex standards** – referenced as baseline in SPS Agreement – risk basis
- ❑ **Roles and responsibilities** for food safety - all actors in the food chain namely- farmer or producer, processor, handlers, government, consumer

## FAO's Regional Food safety & Quality Programme

- Around **15 - 20 projects/ programmes** on food safety & quality (national/ regional) & tools & GL developed
- Broadly cover:
  - **Food safety policies, legislation, governance** (including coordination mechanisms)
  - **SPS/standards & norms/ Codex** related activities
  - **Enforcement/surveillance**-inspection, testing, FBDS
  - Food safety in various agro food supply chains (including street foods/ retail); linkage to **primary production**
  - Food safety **emergency** management/ recall systems
  - **Certifications and accreditation**
  - **Trainings/ awareness/ education**

## Snapshot of Ongoing Projects in Asia ...1

### Regional projects:

- **ASEAN** - Support to CB & Implementation of International **Food Safety Standards** in ASEAN Countries' (WS, training course, case studies, guidance documents)
- **GMS** - Promotion of rural development through development of **Geographical indications** at regional level in Asia
- **SAARC** - Good Agriculture Practice (GAP) Standards & Certification Scheme
- **Asia** – Enhancing Inter-ministerial Coordination to strengthen/ promote food safety

## Snapshot of Ongoing Projects in Asia ...2

- **Country Projects:**
  - Improving food safety & Institutionalization of Food Safety in Bangladesh for safer Food (**Bangladesh**)
  - Enhancing SPS Capacity of Ginger Exports through PPP and Policy assistance for **bio-secure** agro-food supply chain(**Nepal**)
  - Developing food law (**Laos**)
  - Strengthening of Food Safety and Standards (**Bhutan**)
  - Strengthening of National Codex Capacity (**Mongolia**)
  - Institutional Strengthening on FS & QC in Supply Chain Management of Livestock Products & **INFOSAN (Thailand)**
  - Strengthening the **FS information, education, communication capacity** to implement FS Law and National Strategy (**Vietnam**)
  - CB to improve market access for fish & fishery products (**Myn**)
  - Strengthening SPS capacity for trade – improving safety & Q of fresh vegetables through value chain approach (**Vietnam**)

### Specific FAO Technical Assistance for capacity development in food safety risk analysis

- Technical Training on Risk Analysis for SAARC Countries; Delhi, India, June 17-21, 2013
- Technical Workshop on Chemical Risk Analysis in the Food Chain: 13 -16 March 2013, Beijing, China
- FAO Training WS on Food recall and traceability -Application in National food safety control: 15 -17 February 2013, Chiang Mai , Thailand
- FAO/WHO Pre-CCASIA Workshop on "Food recall/traceability within the risk analysis framework": 2 November 2014, Tokyo, Japan
- Strengthening Capacity in Data Collection and Generation for Food Safety Risk Analysis: 10-13 June 2013, Tokyo, Japan
- Regional Consultation Workshop on Guidelines for Development of Food Safety Policy for Countries in Asia: December 17-19, 2012
- Regional Consultation on Enhancing Inter-ministerial Coordination for strengthening Food Safety : 1-3 April 2015, Bangkok, Thailand
- Guidelines for risk categorization of food & food establishments (ASEAN, Bangladesh)
- Risk-based import controls (India)
- Risk-based food inspection (S.Korea, Bhutan, B'desh)

### Some Priorities / Focus Areas...1/2

- ❑ Facilitate, promote and support food safety **policy dialogue/ development**
- ❑ Strengthening **co-ordinated actions/ mechanisms** through multidisciplinary approaches and partnerships
- ❑ Sound **evidence base** through the generation and access to data and information, indicators
- ❑ **Risk based approaches** – risk analysis (RA, RM and RC)
- ❑ Facilitate and support implementation of **Standards** and agreements (SPS/TBT)
  - Harmonization
  - Strengthening participation in **international standards** setting
  - Strengthening role of **voluntary/ private standards** for regulatory purposes – certifications/ accreditations
  - Trade facilitation support – **equivalence/ recognitions**

### Some Priorities / Focus Areas...2/2

- ❑ Strengthening **preventative approaches (GAP/GMP/ HACCP)** : developing schemes & certification systems, strengthening SMEs, **food retail**
- ❑ Strengthening **food control systems** – domestic and import regulation/ implementation, risk categorization
- ❑ Food safety emergencies - **recall & traceability** –support for application in National FS Control, FBO, Food safety intelligence and foresight
- ❑ Food safety platforms/ databases – GM Platform, INFOSAN, safety for food retail
- ❑ **Branding** – in agriculture e.g Geographical Indications
- ❑ **Institutional capacity and infrastructure** (testing, HR)

### Some regional publications on food safety



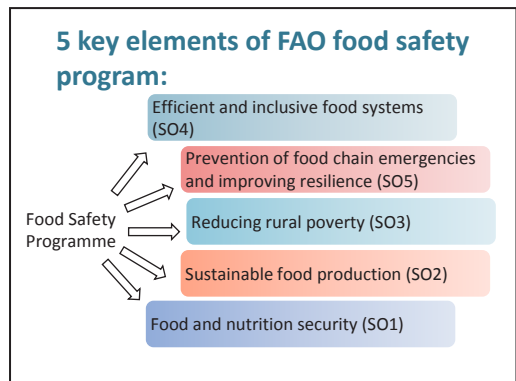
### Important websites

- FAO Food Safety and quality home page <http://www.fao.org/food/food-safety-quality/home-page/en/>
- Web page on Vet & Public Health, Feed & Food Safety; [www.fao.org/ag/AGInfo/programmes/en/AG6.html](http://www.fao.org/ag/AGInfo/programmes/en/AG6.html)
- Emergency prevention & early warning in area of food safety (EMPRES Food Safety): [EMPRES-FS@fao.org](mailto:EMPRES-FS@fao.org)
- INFOSAN – International food safety authorities network – for dissemination of important global food safety information – INFOSAN Community Network <https://extranet.who.int/infosan/>
- \*FAO Regional office for Asia and the Pacific <http://www.fao.org/asiapacific/rap/home/en/>
- \*Capacity Building and implementation of international food safety standards in ASEAN countries <http://foodsafetyasiapacific.net/>
- Food retail network in Asia <http://foodretailnetwork.asia>

### THANK YOU



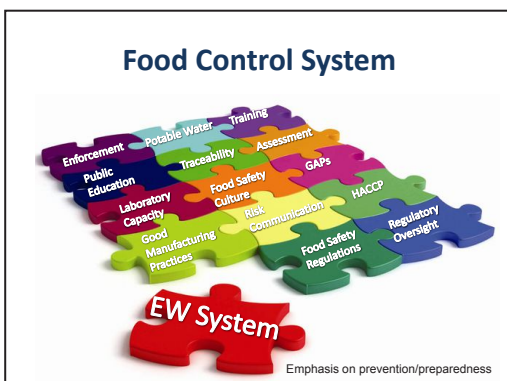
Any Questions?



- 5 key elements of FAO food safety program:**
1. Strengthening national food control capacities
  2. Supporting science-based food safety governance and decisions
  3. Enhancing food safety management along food chains
  4. Providing food safety platforms and databases
  5. Developing food safety intelligence and foresight

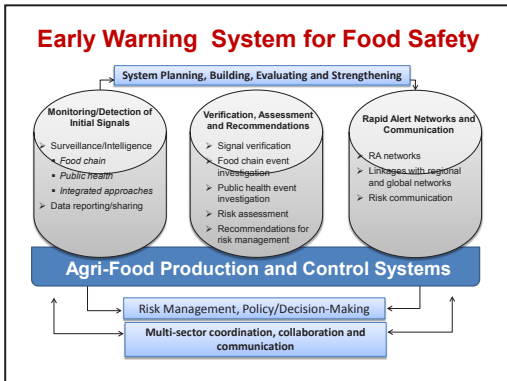
**1 - Resources aimed at supporting development of food control systems**

Regulatory and policy framework	
Guidance on establishing national food control systems	<a href="#">Perspectives and guidelines on food legislation</a>
<a href="#">Developing food safety policies &amp; decisions</a>	<a href="#">FAO/WHO National Food Control Systems Assessment Tool</a>
Specific technical capacities	
<a href="#">E-learning course on Food Safety and Quality Standards</a>	Guide for developing national food recall systems
Risk-based food inspection manual	<a href="#">Manual on Food Import control</a>
Guidelines for risk-based fish inspection	Manual on risk-based meat inspection
Laboratory	
<a href="#">FAO/IEAE Laboratory development</a>	Sampling tools ( <a href="#">mycotoxin</a> , micro, <a href="#">histamine</a> )

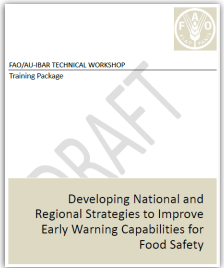


**4-5 Tools for food safety intelligence and foresight**

INFOSAN
National Food Safety Emergency Response
Application of Risk Analysis Principles and Procedures during Food Safety Emergencies
Developing and Improving Food Recall Systems
<i>Publications on Early Warning and Rapid Alert Systems Applicable to Food Safety</i>
New Generation Food Safety Surveillance?
Global food chain analysis?




### EW Handbook / Training package

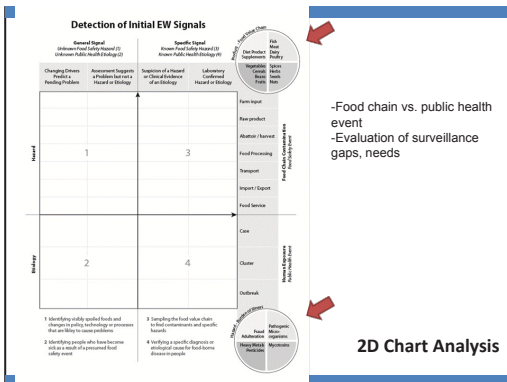


**Approach**

- Regional mapping
- Handbook/Exercise guide
- Training program of various lengths (1-5 days)
- Actionable (country and region - level) proposals



*East Africa champions present region-level EWS proposal: Aflatoxin as an entry point*



### Actionable Proposals

- Appraise and Analyze**
  - Why build or enhance EW system capabilities?
- Objectives**
  - What results must EW system accomplish?
- Strategies**
  - How will EW system objectives be achieved?
- Policies**
  - How will EW system operate?
- Build Systems**
  - Implement EW system
- Evaluate Systems**
  - Did the Early Warning strategy result in functional systems?

**Checklist**

### 2 - Tools and activities to support science-based food safety governance and decisions

Global Level	
Providing scientific advice to Codex	
Training and guidance materials	
Enhancing participation in Codex	FAO/WHO Risk Analysis Tools
Handbook for Codex Delegates and Chairs	<b>Risk communication</b> Handbook/Training package introductory, semi-advanced, advanced
Risk analysis: guidance for national food safety authorities	<b>Knowledge synthesis and transfer (KST)</b>
Basic awareness course on microbiological risk assessment	<b>Risk profiling, ranking and prioritization</b>

### Evolution of KST in Food Safety

## KST Handbook



### Knowledge Synthesis, Transfer and Exchange in Agri- Food Public Health:

A Handbook for Science-to-Policy  
Professionals

Andrijana Rajic and Ian Young

"The handbook is a superb resource for those interested in supporting the use of research evidence in agri-food public health. It puts in one place all of the key evidence and insights needed to work in this domain."

Dr. John Lavis, McMaster University



➤ [http://www.uoguelph.ca/omafra\\_partnership/ktt/en/worktogether/Handbook.asp](http://www.uoguelph.ca/omafra_partnership/ktt/en/worktogether/Handbook.asp)

## Questions?

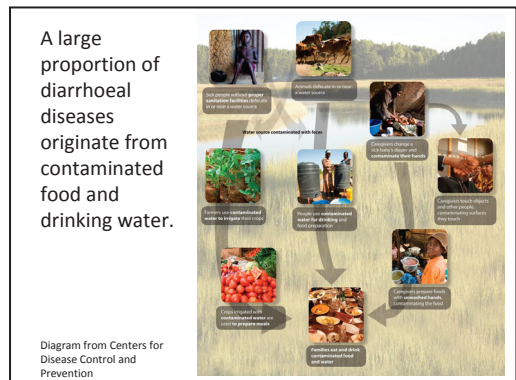
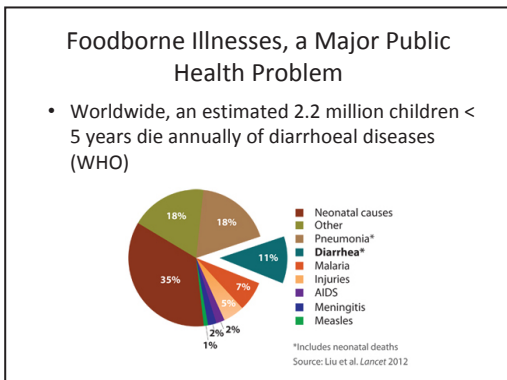






### Presentation Outline Overview

1. Importance of Food Safety Risk Communication
2. What is Food Safety Risk Communication?
3. Goals of Food Safety Risk Communication
4. Why is Risk Perception important?
5. Use of Food Safety Risk Communication
6. Stakeholders and Target Audiences



### Foodborne Illnesses, a Major Public Health Problem

- Up to 30% of people in industrialized countries are estimated to suffer from food-borne illness each year (WHO)
- Everyone is at risk from food-borne illness

### Importance of Food Safety Risk Communication

- Risk communication can improve:
  - People's health status;
  - The environment in which they live (animal, environment and plant health), and;
  - Their overall quality of life, including socio-economic factors such as livelihoods and psychological factors.

## Aflatoxins

A quarter of the world's food crops are affected by aflatoxins each year.

**Human health:** Aflatoxicosis and liver cancer

**Economic losses and food security:** 9.5% to 20% loss of total household income in Kenya



Animal health

**Knowledge** of how to limit aflatoxins or evaluate risks is **often poor** among producers

## What is Food Safety Risk Communication?

- Food safety:
  - The assurance that food will not cause harm to the consumer when it is prepared and/or eaten according to its intended use.
- Food safety risk communication:
  - “The exchange of information and opinions concerning risk and risk-related factors between people, specifically about risk and risk-related factors associated with food safety hazards and risks”

## Risk Communication in The Risk Analysis Process



**Risk assessment** is the process that is used to quantitatively or qualitatively estimate and characterize risk.

**Risk management** is the weighing and selecting of options and implementing controls as appropriate to assure an appropriate level of protection.

**Risk communication** is the exchange of information and opinions concerning risk and risk-related factors among risk assessors, risk managers, consumers and other interested parties.

## Rare birth defect found in cluster

*Brownsville residents fear environmental problems across the border are the cause.*

## Exercise 1

- Read the Article



- How do you feel after reading it?
- What is the message of the article?
- Write your answers on the back of the page.

## Goals of Food Safety Risk Communication

1. To protect people's health through provision of information that enables people to make informed food safety risk decisions.

### Communicating Risks and Benefits

- Providing information about food safety risks can, in some cases, involve communicating about both risks and benefits associated with particular food choices.



- Providing (targeted) information about both risks and benefits allows people to make informed decisions about food choices.

### Communicating Risks and Benefits

- People tend to focus on and retain negative more than positive information
  - Sometimes benefits must be emphasized
  - Talking about *overall* effects of eating certain foods may be beneficial



### Goals of Food Safety Risk Communication

2. To facilitate dialogue and understanding between all interested stakeholders.
- Dialogue: *Exchange* of information and ideas between different stakeholders.
    - Those exposed and most vulnerable to the risk
    - People who may influence and control the risk
    - Other affected or interested stakeholders
    - The public in general

### Dialogue with Stakeholders

- To inform:
  - Risk communication decisions
  - Risk assessment decisions
  - Risk management decisions

### Goals of Food Safety Risk Communication

3. To improve the overall effectiveness of the risk analysis process through societal engagement.
- Societal engagement: The process by which an organization involves stakeholders, and other interested individuals or organizations, *in developing policies* to manage the food risk (e.g. consensus conference, citizens jury).

### Societal Engagement

- Risk assessment and management decisions can be potentially controversial.
- Societal engagement could result in:
  - Lower stakeholder opposition and enhanced understanding of risk assessment results
  - Better received and more effective risk management decisions

### Why is Risk Perception important?

- To effectively communicate risk, one has to understand how people *perceive* risks.
  - How people *perceive* risks serves as the basis of their attitudes, intentions, and behaviours.
- Food safety risk communication should not only communicate about risks identified in the risk assessment, but also address the factors that influence risk perception.

### What is Risk Perception?

- A **hazard** is a biological, chemical or physical agent in, or condition of, food with the potential to cause an adverse health effect.
- A **risk** is a function of the probability of an adverse effect resulting from a hazard in food, and the severity of that effect.
- **Risk perception** is the judgment that people make about the characteristics, likelihood and severity of a specific risk.

### Perception of Risk Involves Both Cognition and Affect

#### Cognitive components Thoughts

- Understanding of the likelihood/consequences of the hazard
- Mental models of how/why the particular hazard poses a threat
- Understanding of the contexts surrounding the hazard

#### Affective components Feelings

- Dread
- Outrage
- Fear
- Worry
- Frustration
- Sadness
- Anger
- Disgust
- Protectiveness
- Others

### Risk as Feelings

- Affect (feelings) play an important role in how people judge risk
- Affect can strongly influence decisions
  - Information “conveys positive and negative feelings”
  - “People look to their positive and negative feelings as a guide to their evaluation of risks and benefits”

### Cognition and Affect

- Many psychologists (and especially economists) believe that affect is the byproduct of cognition.
  - People evaluate the information they are given, which leads to an overall affective reaction (i.e. fear, anger, dread, outrage).



### Cognition and Affect

- However, research suggests that people have a remarkably poor understanding of what influences their perceptions and behaviors.
  - They can't say
    - Why they feel the way they do.
    - Why they made a particular choice.
    - Why they act the way they do.



### Affect Can Come First

- Affect can also drive future cognition.
    - First impressions matter.
    - “Curb appeal”
    - Cyclical thinking
- I like it because it is good, and it is good because I like it.



### Key Factors Influencing Risk Perception

- Voluntariness
- Control
- Perceptibility of Exposure



### Key Factors

- Familiarity



### Key Factors

- Natural or Industrial?



### Key Factors

- Purposeful or accidental?



### Key Factors

- Dreadfulness of the Consequences



### Key Factors

- Risk to Future Generations



### Key Factors

- Memorable
- Catastrophic
- Ability to imagine the consequences
- Immediate consequences
- Irreversible consequences



### Key Factors

- Memorable
- Catastrophic
- Ability to imagine the consequences



### Key Factors

- Known to experts
- Equitable distribution of risks
- The possibility of alternatives
- Moral dimensions
- Can empathize with victims



### More "Contextual Factors"

- The ability to blame someone
- Trustworthy sources
- Responsive process



### Exercise 1

- Take another look at the article



- What risk perception factors can you recognize?
- How does the author use these factors to influence the emotions of the reader?
- How does the author use quotes to get his points across?

## Factors Influencing Risk Perception

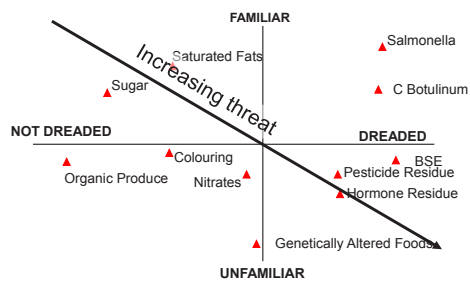
### "Safe"

- Voluntary
- Individually controlled
- Exposure can be perceived
- Familiar
- Natural
- Not dreaded
- Not memorable
- Consequences obscure
- Chronic
- Consequences delayed
- Consequences reversible
- No risk to future generations
- Known to experts
- Fair
- No alternatives
- Morally irrelevant
- Anonymous victims
- Unable to blame someone
- Trustworthy sources
- Responsive process

### "Risky"

- Coerced
- Controlled by others
- Exposure is invisible
- Exotic
- Industrial
- Dreaded
- Memorable
- Can imagine consequences
- Catastrophic
- Consequences immediate
- Irreversible consequences
- Risk to future generations
- Unknown
- Unfair
- Alternatives available
- Morally relevant
- Can empathize with victims
- Able to blame
- Untrustworthy sources
- Unresponsive process

## Consumer perceptions of food risks



(Fife-Schaw and Rowe, 2000)

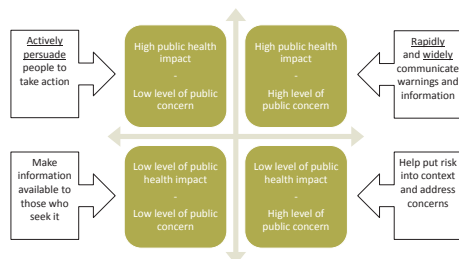
## Implications for Risk Communication

- Risk communication needs to go beyond the risks identified in the risk assessment, and address people's perceptions and concerns.
  - Information may be discounted
  - Perception that concerns are not considered in risk assessment and/or risk management may decrease confidence in risk analysis

## Communicator's Responsibilities for Food Safety Risk Communication

- Determining the level of intervention and effort required to address a particular food safety issue
  - Level of potential public health impact and level of public concern

## Communicator's Responsibilities for Food Safety Risk Communication



## Use of Food Safety Risk Communication

- Different type of food safety issues require different approaches to risk communication.
- Emergency food safety risks (e.g. foodborne illness outbreak)
  - Rapid response
  - Uncertainty (e.g. about the source of the risk)
  - More frequent communication
  - Communication coordination

### Use of Food Safety Risk Communication

- Non-emergency food safety risks:
  - Sustained communication.
  - More time to consult with all relevant stakeholders in the message development phase.
  - Sometimes may need to *increase* public concern.

### Aflatoxins



- A generally low level of awareness of the problem. Furthermore, because the toxin can be unobservable and its health consequences (e.g. cancer) are often delayed, people generally believe that there is no risk.
- Need to raise awareness of the aflatoxin problem and its mitigation measures among farmers, consumers and all other actors along the food chain.

### Response

- A sustained aflatoxin awareness campaign was implemented in Benin, Ghana and Togo by Rotary Clubs and the International Institute of Tropical Agriculture from 2001 to 2004.
- Many stakeholders were involved in the development of messages (e.g. public opinion survey, stakeholder workshops).
- To increase concern to appropriate level, incorporated location-specific data on aflatoxin incidence in the messages.

### Use of Food Safety Risk Communication

- Crises of risk perception:
  - Require an emergency-like response (rapid and wide information dissemination).
- The identification of a food risk could result in the affected foods, or foods produced in the affected region, being “stigmatised”.
  - Put risk in context, provide accurate information about the risk, and address concerns.

### Communicating about the use of ammonia in “Lean Finely Textured Beef”

- In 2012, the production and use of Lean Finely Textured Beef (LFTB) was negatively portrayed by US media.
- Level of public health impact likely to be low, potential negative economic impact from the media portrayal could be large.
- Company needed to respond to elevated public risk perception and low acceptability to prevent economic disruption, and the loss of a lean and inexpensive source of protein for consumers.



### Response by Company Involved

- Initial response was largely scientific in nature and did not address public risk perceptions
- Perceived unnaturalness of chemicals in food: The company explained that ammonia is naturally present in the food supply, and argued that slightly increasing the level ammonia already present in beef actually improves food safety.
- Involuntary exposure: Announced commitment to voluntary label beef products containing LFTB.
- These messages came later in the crisis than is desirable, and were disseminated only through the company's website.
- In crises of risk perception, communicators may have to put the risk into context, while appropriately addressing the underlying reasons for the public's concern.
- Crises of risk perception require *rapid* and *wide* risk communication to prevent negative economic impacts.



### Stakeholders and Target Audiences

- There are many potential benefits to including stakeholders in food safety risk communication efforts.
  - Identify gaps in knowledge.
  - Understand stakeholders' risk perceptions and concerns.
  - Identify potential communication barriers and the preferred and most appropriate information sources and channels of communication.
  - Identify and address any *unintended* consequences of the communication.

### Stakeholders and Target Audiences

- In addition, a collaborative process with stakeholders will for example;
  - Generate more ideas.
  - Expose concerns not otherwise recognized.
  - Include different perspectives.
  - Potentially create buy-in and builds broad support for the communication effort.
  - Facilitate the coordination of communication efforts among various governmental departments (e.g. health, agriculture, and trade) and other stakeholders sharing responsibility for food safety.

### Stakeholders and Target Audiences

- For all of these reasons, identifying stakeholders and target audiences and engaging them in a two-way dialogue to inform risk communication decisions increases the chances for successful food safety risk communication and enhanced risk management.

### Wrapping up

- Food safety risk communication is the *exchange of information and opinions* between people about the risks and risk-related factors associated with food safety issues.
- Food safety risk communication is important to protecting public, animal, plant and environmental health, and people's quality of life, including socio- economic factors.



### Wrapping up

- The goals of food safety risk communication are:
  - To enable people to protect their health from food safety risks by providing information that enables people to make informed food safety risk decisions;
  - To facilitate dialogue and understanding between all interested stakeholders, and;
  - To improve the overall effectiveness of the risk analysis process.



### Wrapping up

- It is important to understand and address public perceptions of food safety risks in order to develop effective risk communication messages. How people *perceive* risks serves as the basis of their attitudes, intentions, and behaviours.
- Different type of food safety issues require different approaches and methods to risk communication.





## Presentation Outline Overview

1. The Importance of Trust
2. Principles of Food Safety Risk Communication
3. Planning Food Safety Risk Communication

## The Importance of Trust

- Trust is essential for risk communication
  - Many food safety risks are invisible
    - Bacteria
    - Viruses
    - Chemical contaminants
  - Information is often incomplete or uncertain
  - Much of the public cannot understand available information themselves



## The Importance of Trust

- People who distrust food safety risk messages are unlikely to believe or act upon the information.
- This can have severe health, environmental, agri-food, trade, and economic implications.

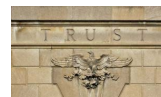


## Trust Components

- **Credibility** - The extent to which a source or institution is perceived to have the knowledge and expertise to assess, manage and communicate about a risk.
- **Honesty** - The extent to which a source or institution conveys information about a risk in an open, truthful and transparent way.
- **Care** - Care for the interests of the other party and that the source or institution shares the same values and concerns.

## Trust and the Consumer

- Consumers are well aware that different stakeholders have different roles.
  - Companies need to demonstrate competence and honesty.
  - Governments need to demonstrate care for those whom they represent.



### Principles of Food Safety Risk Communication

- Openness
- Transparency
- Timeliness
- Responsiveness
- All are essential to *establishing* and *maintaining* trust, and contribute to *rebuilding* trust when it is low.

### Openness

- The opportunity for dialogue and engagement with all food stakeholders:
  - Those affected by the food safety problem.
  - Those who may have caused the problem.
  - Those who have the responsibility for solving the problem.

### Openness

- Risk assessment, management and communication should be performed in an open environment, including opportunities for dialogue with stakeholders at appropriate points.
- For example, stakeholders may be invited to
  - submit evidence,
  - participate in a meeting where risk management options are discussed,
  - comment on draft messages before they are finalised.

### Openness

- Dialogue and engagement demonstrates **care**, and can enhance the ability of an institution to appropriately respond to public concerns.
  - Engagement in the process is not the same as trying to seek consensus or allowing others to make decisions.
  - Asking about, but not addressing consumer concerns can lead to anger and resentment.

### Transparency

- Policies, practices, and procedures that enable people to understand how decisions on risk assessment, management, and communication have been made.
- Make information accessible (e.g. on websites, available on request, observers):
  - Information on which decisions are made (research reports, data).
  - Documentation about the decision-making process (minutes of meetings).

### Transparency

- Transparency is important for perceptions of **honesty**
- But,
  - Transparency alone does not ensure trust
  - Trust is a result of perceptions of institutional honesty, concern for public welfare and credibility

## Transparency

- Transparency can only lead to trust when it is clear that the decisions that have been made are in the public interest.

Transparency → Trust

## Transparency

- Not all information can be made public in all cases.
- However, this cannot be used as a justification for secrecy.
- A lack of transparency can lead to distrust
  - The rules around transparency must be clear, well justified, and consistently applied.

**CONFIDENTIAL**

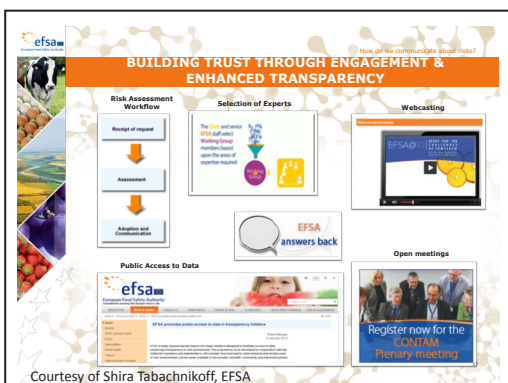
## Transparency and Openness

- Transparency and openness are not interchangeable
- To ensure best practice in risk communication, both openness and transparency are essential



## Examples of Transparency and Openness

- EFSA re-evaluation of aspartame
  - Transparency:
    - Providing regular updates on the process
    - Publication on website of all data they were going to consider (given past controversy over availability of original studies)
  - Openness:
    - Publicly **consulted** on EFSA's draft opinion on aspartame



## Timeliness

- Rapid communication:
  - Can prevent or reduce the risks of significant harm to public health.
  - Builds and maintains trust (credibility and care) if it appropriately informs the public.

### Timeliness

- If you do not rapidly communicate, others will do so (e.g. through the Internet, social media).
  - The information they share may be inaccurate, or worse.
  - You may be perceived or portrayed as hiding information



### Timeliness

- Rapid communication:
  - Can prevent or reduce the development of rumours and misinformation.
  - These can disrupt trade, and have other economic impacts.



### Timeliness

- Sharing uncertain information is necessary
  - Acknowledge and explain the uncertainty
  - Say what is being done to address the uncertainty
  - Talk about the implications for target audiences

### Responsiveness

- People may distrust risk messages if these do not address their concerns and perceptions
  - Include *target audiences' information needs and communication expectations* in communication activities.
  - Revise or reinforce messages to *changes in the external environment*, including unplanned and unforeseen events (e.g. misinformation, emerging questions and concerns).

### Example of Responsiveness

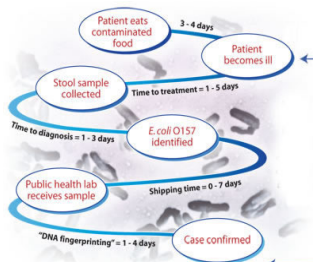
- FDA advised consumers not to eat bagged fresh spinach because an epidemiological investigation had pointed to spinach as a possible cause of an E.coli outbreak .
- Shoppers *confusion about which products to avoid*.
- The FDA modified its risk communication to provide clarifications.



### Examples of Responsiveness

- Reporters and consumers *perceived the risk to be increasing* as government health officials reported increasing number of illnesses linked to the outbreak.
- Number of illnesses increased because of the average 15-day delay in reporting.

Authorities posted on their website a timeline for reporting E.coli cases to *address public risk perceptions*.



Source: National Center for Infectious Diseases

## How to Build and Maintain Trust?



## How to Build, Maintain or Restore Trust?

- Create opportunities for dialogue with stakeholders at appropriate times and when feasible.
- Make publicly available documents that enable stakeholders to understand and scrutinize the decision-making processes.
- Communicate in a timely manner, even when there are uncertainties. Timeliness is essential.
- Be responsive to the needs and concerns of those potentially affected by the risk.

## The Importance of Planning

- Planning can result in a faster and more effective communication response, which may in turn reduce the negative impacts of a food safety issue.



## Steps in Planning Risk Communication

1. Prioritize food safety issues
2. Identify risk communication activities required
3. Identify people, skills, resources, and assess capacities to communicate risks
4. Identify and understand target audiences and stakeholders
5. Develop and disseminate messages
6. Monitor and evaluate

## Wrapping up

- *Trust* in information and governing institutions is essential for effective food safety risk communication. Risk communicators should actively work to demonstrate credibility, honesty and care.
- Food safety risk communication should be founded on good communication principles. These include *transparency, openness, responsiveness* and *timeliness*.

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## Wrapping up



- It is important to be open and transparent about the decision-making processes. In food safety risk analysis, this specifically applies to the interface of risk assessment, management and communication of decisions, and should include timely opportunities for *dialogue* among stakeholders when appropriate and feasible, and *public inspection* of the process.



## Wrapping up


- Communicating in a responsive and timely manner, even in the presence of uncertainty or knowledge gaps about the risk, is instrumental in protecting public health and building and maintaining trust. Adequate planning enables organizations to develop a timely, well-coordinated and effective response to food safety risks.



## Key Considerations:

### Understanding the Nature of the Food Safety Issue

FAO/WHO Regional Workshop "Enhancing Risk Communication Capacity in Food Safety"  
03-06 June 2014, Budapest, Hungary


### Presentation Outline Overview




1. What is the Nature of the Risk and Benefits?
2. Understanding the Nature of the Hazard
3. What is the Quality and Certainty of the Data?
4. What Can Be Done about the Risk?
5. Anticipating and Addressing Unintended Consequences
6. Communicator's Responsibilities for Risk Communication
7. Exercise 2: When and What to Communicate

### What is the Nature of the Risks and Benefits?

- Collecting essential information regarding:
  - Who and what are likely to be affected?
  - To what extent?
  - With what consequences?
  - With what probability?
  - In what timeframe (i.e. immediate or delayed effects)?
  - Do benefits outweigh risks, and for whom?


### Collecting information from stakeholders about nature of risks

- Industry: market figures, distribution systems, tracing of ingredients
- Consumers: dietary intakes

### What is the Nature of the Hazard?

- For example:
  - Levels of exposure to the hazard (in what amount and over what time)
  - Chemical, biological or other hazard
  - Unknown hazard



### Assessing the Quality or Certainty of Available Data

- Collecting essential information from stakeholders to reduce uncertainties or gaps in knowledge
- Risk assessors need to document and properly communicate uncertainties that arise during risk assessment



### Uncertainty: When to Communicate?

- Reasons risk managers cite for why they will not communicate uncertain information:
  - Fear of panic
  - Fear of losing control
  - Fear of economic loss
  - Lack of dietary alternatives



- Communicating even in times of uncertainty:
  - empowers target audiences to take action to protect themselves;
  - increases the organization's ability to effectively communicate about (future) food safety risk issues by fostering trust among target audiences, and;
  - can mitigate the long-term financial cost of the risk issue to the community.

### Uncertainty: What to Communicate?

- Acknowledge and explain areas of uncertainty
- Say what is being done to reduce uncertainties
- Talk about the implications of remaining uncertainties for food safety
- Provide advice about what people can do to protect themselves

### Uncertainty: What to Communicate?

- In addition, it is important to;
  - Acknowledge that early messages may change as further information is gathered and /or verified.
  - Release and discuss more complete information when it becomes available, its implications, and any revised course of action that may further protect food safety and prevent illness.



### Example Quotes

- 'Although it is too soon to say for certain what the likely cause of infection is, a potential link to watermelons has been identified.'
- 'We are monitoring the situation and working closely with the European Commission, other countries, local authorities and the food industry, to investigate further.'
- 'As soon as we have any significant additional information we will update consumers.'
- 'In the meantime, it is important for people to follow sound food hygiene practice when preparing any food. It is always advisable to wash fruits and vegetables before consumption to reduce the risk of possible illness.'

### Understanding What Can be Done about the Risk

- Collecting information to inform decisions on effective risk mitigation measures:
  - What can be done, by whom?
  - Are incentives or motivations needed?



## Collecting Information from Stakeholders

- **Industry experts:** Information and perspectives on possible food safety control measures, their effectiveness and their technical and economic feasibility.
- **Consumers** (e.g. represented by consumer organizations and other NGOs): Can provide insights on risk management options that include information-based measures, such as consumer education campaigns or warning labels.

## Example Methods

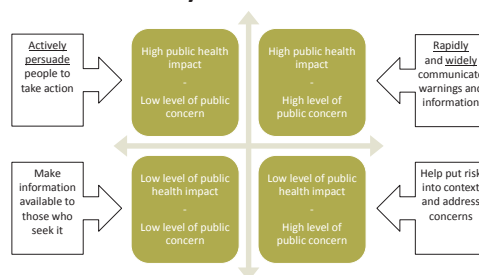
- Online consultations
- National food safety advisory committees



## Anticipating and Addressing Unintended Consequences

- From risk communication
- From risk mitigation measures
- Dialogue with stakeholders, and testing messages with target audiences, help identify potential unintended consequences in advance.

## Communicator's Responsibilities for Food Safety Risk Communication



## Wrapping up

- To determine appropriate communication methods and approaches, it is critical to understand:
  - The nature of the risk and hazard involved
  - The quality/certainty of the available data
  - What can be done about the risk, who has the ability to do it, and what unintended consequences might arise in addressing the risk
  - The level of potential public health impact and public concern

## Wrapping up

- When it is necessary to communicate about a food safety risk when information is uncertain and/or incomplete, communicators should clearly indicate what is known, what is relevant but uncertain, and what is being done to reduce uncertainty and respond more effectively.




## Key Considerations: Target Audience Needs

FAO/WHO Regional Workshop "Enhancing Risk Communication Capacity in Food Safety"  
03-06 June 2014, Budapest, Hungary

## Presentation Outline Overview

1. Understanding People's Perceptions of Risk, and identify Knowledge Gaps
2. Taking Cultural and Socio-Economic Factors into account when Designing Communication strategies
3. How to Reach Target Audiences
4. Historical, Political and Media Environments
5. Methods for Understanding Target Audiences
6. Exercise 3: Tailoring to Target Audience Needs

## Training objectives

To understand what factors need to be taken into account when **developing risk communication** which is relevant to the **needs of the target audience**

To know some of the **different methods for understanding target audiences' needs**, and for what purposes they can be used

## Food safety risk communication is only effective when the communication ...

- ....addresses target audiences' concerns and needs
- ....is delivered using delivery mechanisms (information sources, channels and methods) that are appropriate for the target audiences.

It is important to consider the **historical, political and media environment** in which a food safety issue occurs.

## Who are the Target Audiences?

- The identification of target audiences depends on the purpose of the food safety risk communication, which may include
  - Providing information to allow **informed decisions**
  - **Persuading** people to adopt a particular approach (i.e. health promotion)
  - Initiating dialogue and engagement **to arrive at the best approach**
- Who are the **target audiences**?
  - Who and/or what is **directly affected** by the risk?
  - Who can **influence**, both **positively and negatively**, the issue?
    - who can effectively minimise or mitigate the risk and provide solutions?
  - Who is **indirectly affected** by the issue and needs to know about the risk?
    - e.g. care givers, governments

## Examples of Target Audiences

- The **public in general**
- **At-risk** populations
- **Women** as main food handlers/buyers
- **Public health practitioners**
- **Retailers**, food vendors, employers, employees
- **Farmers/primary producers**,
- Large/medium/small **food manufacturers**
- **Informal** food producers
- **Agro-chemical** dealers
- **Policy makers**, food safety **regulators**



### Quick question..?

- Is the Internet or social media always the best way of communicating with vulnerable audiences?



### Perceptions of Risk, and Knowledge Gaps

- When developing risk communication it is important to develop insights into
  - Under what circumstances target audiences need to be better informed and
  - To understand the type of information they need
  - To address their concerns, priorities and perceptions as part of the communication process



### When developing risk communication for specific target audiences

Some key questions that need to be asked

- What do target audiences **already know** about the risk?
- Do they **act** on this knowledge?
- Which **gaps in knowledge** need to be addressed?
- What are the target audiences' **specific concerns and perceptions** about the risk?
  - Does the target audience consider the risk to be **high or low**?
  - Who does the target audience perceive to be **most vulnerable** to the risk?
  - Does the target audience perceive the risk as **uncontrollable**?

### Cultural and Socio-Economic Factors

- The **unique** role of food in culture and society
  - Foods are part of **religious, cultural** and **traditional** practices
  - Food choices are a way to communicate **identity, cultural membership**, or **ideological** viewpoints
  - Consumption of unsafe foods cannot always be avoided, for example, if **alternatives are not available**



Risk communication **must** respect and take into consideration audiences' culture, beliefs and socio-economic status.

### Consideration of a number of cultural, social, and economic factors

- The unique roles that food and food preparation practices play in cultures and society must be taken into account when developing risk messages.
  - Food preparation and consumption practices are often rooted in specific food cultures and culinary traditions.
  - Foods are part of religious, cultural and traditional practices.
    - e.g. the ritual preparation and consumption of certain foods
  - Food choices are a way to communicate one's personal identity or cultural membership, or as an expression of ideological viewpoints
    - e.g. not eating (certain) meat products.



### The symbolic importance of certain foods

- Some foods have special symbolic importance
  - e.g. milk, honey, fruit and vegetables may be associated with health, purity and wholesomeness.
  - Adulteration of such products may be seen as especially objectionable
- The risks connected with the contamination of these foods may also be perceived as much greater because of their symbolic value.
- The risks to health may also be discounted for the same reason



### The importance of cultural context

- Suggesting problems with local food preparation or consumption practices may be perceived as criticisms of peoples identities
- When developing food safety risk messages, risk communicators must respect and take into account such cultural practices and beliefs
- Provide information about methods for reducing the risk which do not fundamentally change the meaning of the food or food preparation practice
  - e.g. providing information about how to cook traditional foods to minimum safe temperatures, rather than advising people to use gloves in cultures where bare hand contact with the food is perceived as an essential part of preparing the food in the traditional, “authentic” way

### Food safety risks can also not be completely avoided

- In the absence of the **availability of affordable alternatives**, many people may have little choice but to consume foods that are unsafe.
- Communicating **only about the risks** associated with these products, without providing information or resources necessary to minimize the risk or enable different food choices, is unlikely to advance public health.



### Cultural and Socio-Economic Factors

- Gender Roles
- Language
- Reading Abilities
  - Distribution problems (access)
  - Vision problems
  - Literacy problems

### Gender roles

- Gender roles and responsibilities related to the acquisition and preparation of food may also differ significantly across societies and cultures.
- In many cultures, **women are the principal gatekeepers** who determine
  - which foods the family will eat
  - how they will be prepared.
  - women also bear primary responsibility for growing the food.
- Safe (and unsafe) food selection and preparation practices are often shared among women, and are typically taught by mothers to their daughters.
  - Specific food safety risk communication efforts may logically be **targeted to women**.

### Gender roles

- In contrast, cultural or religious traditions in some countries create expectations that males will be the principal decision makers, even if the responsibility for feeding the family falls to women.
- In other cultures and families, food selection and food preparation practices are shared decisions.
- In some cases men may be the principal purchasers (or growers) and preparers of food.

*Specific risk communication strategies, messages, channels, and methods of interaction need to consider whether the target audiences are primarily comprised of men, women, or both, and what the local cultural norms and expectations define as appropriate gender roles*

### Language

- Multicultural, multilingual societies require multicultural, multilingual risk communication efforts.
- Unfortunately, because of the additional skills and resources that are required to communicate in multiple languages, **the default for many risk communicators is to interact with target audiences in the dominant language**.
- However, communicating essential risk information in a single language may unintentionally:
  - Have detrimental effects on the health of those who **do not speak that language**
  - Send the message to those who do not speak that language that the **communicator does not care about their health**

## Reading ability

- Access to written notices about food safety risks and the ability to read them may vary among populations due to
  - distribution problems
  - vision problems
  - literacy problems
- *communicating about food safety risks only in written form is unlikely to meet the needs of many audiences, even in affluent countries.*
- For these people, risk information needs to be delivered in ways that don't rely on people's ability to read
  - e.g. radio, video/TV, podcasts, word-of-mouth, stories, songs, acted out in plays or other performances.

## Example of Tailoring Risk Messages to Target Audiences



Courtesy of Françoise Fontannaz, WHO

## How to Reach Target Audiences

- Information Sources
- Spokesperson(s)
- Communication Channels and Methods

## Choosing Information Sources

- Important to understand:
  - Levels of **trust** in sources of risk information
  - Which sources are frequently **used**
  - Which sources can best **reach** the target audiences

Risk communicators should collaborate with **credible and accessible information sources** to deliver food safety risk information to target audiences

## Trust and Credibility

- Risk communicators must understand which sources of information each of the target audiences see as trustworthy, credible, and reliable.
- The public does not equally trust all sources of information. Trust in information sources may also change over time, depending how well they have performed in the past. Which sources are trusted may also vary depending on the specific food safety risk involved.



## Trust and Access to Information Sources

- The **most trusted** information sources are not necessarily the most frequently used information sources.
- It is important to understand which sources are **frequently used**, and which sources can best reach each of the **target audiences**.
  - e.g. in countries where the population is diverse and some people are likely to be excluded, it may be important to engage **grassroots** or **community-based** organizations to reach all target audiences



## Choosing an (appropriate) spokesperson

- Being both understood and trusted
- To ensure trust, the communicator (and the communications) should demonstrate:
  - Evidence of **knowledge and expertise**
  - Genuine **openness and honesty**
  - Sincere **concern care and empathy**



## Choosing the right spokesperson

- Effective risk communication depends on being both **understood** and **trusted**
- Communicators must have
  - good **knowledge and expertise** about the issues related to the risk,
  - are able to talk with people **easily and honestly**
  - understand their **concerns** and respond to these appropriately
- Good communicators
  - adapt their communications approaches to **best meet the needs** of those with whom they are trying to communicate
  - acknowledge **when they don't have all the answers**, and adjust their communication accordingly

## Choosing the right spokesperson

- May be necessary to assemble teams of people who, in combination, have the requisite skills
  - Choose a lead communicator who **possesses good communication skills** and expertise, who is then supported by a group of technical experts
- Provide technical experts with **training in important social issues and risk communication**, so that they can more effectively communicate about risks.

## Choosing Communication Channels and Methods

- Important to understand which channels are both:
  - **Accessible** to audiences
  - **Used** by audiences



## Communication Channels and Methods

- Using **appropriate communication channels** and methods to communicate about a food safety risk is essential for reaching target audiences.
- Communicators must understand **which communication channels and methods** (e.g. media, websites, community meetings) are most appropriate to communicate with different target audiences:
  - **Accessibility:** Websites may for example be of little use in developing countries where the majority of the target audience may not have access to the Internet.
  - **Frequently used:** Websites are often used by professionals (food businesses, environmental health officers, health workers, media), who may disseminate the information to consumers.

## Examples of Communication Channels and Methods

- |   |  |
|---|--|
| • Media (electronic and print)  | groups   |
| • Websites  | • Public consultations                             |
| • Emails  | • Partners/stakeholder network                     |
| • Printed materials (publications, fact sheets, t-shirts and caps, car stickers, key holders, posters, billboards etc.) | • Social media (Facebook, Twitter, LinkedIn, etc.) |
| • Digital publications  | • Blogging   |
| • Meetings, workshops, focus  | • Podcasts   |
|   | • Webinars   |
|   | • Information days/meetings                        |

### Channels of Particular Relevance to Low and Middle Income Countries

- Drama and live role-play by traditional groups in the communities
- Documentaries
- Community workshops/town meetings
- Information service (e.g. using information vans)
- Talks at religious or festival gatherings
- Community meetings
- Demonstrations
- Focus group talks with opinion leaders
- National quiz competitions
- Extension programs (food safety, nutrition, agricultural, health)

### Choosing Communication Channels and Methods

- The effectiveness of different communication channels is also influenced by:
  - The **goal** of the risk communication
  - The **content or nature of the message** (e.g. the urgency)
- It is important to combine various methods as much as possible

### Using **Social Media** to Communicate about Food Safety Risks

Some advantages

- Reach an **enormous and still-growing audience** around the world.
- Valuable to help identify **target audiences** and **stakeholders affected** by the issue.
- Can be used to respond to **questions, concerns and misinformation** on the issue, and inform **communication plans** and messages.
- Building **a following on social media** before a risk issue occurs and communicating proactively through these channels when a risk needs to be addressed can help position an organization as a **trusted and credible** source of information on the issue.
- Can be used to share information in formats that can be “repurposed”
  - podcasts (radio)
  - videos (television)
  - tweets
  - updates (print)

### Examples of Uses of Social Media



### Using Social Media to Communicate about Food Safety Risks

#### Limitations:

- Reaches only people who are online.
  - Many vulnerable groups are not online and so other methods are needed to ensure these target audiences are reached.
- In an **emergency**, the infrastructure to use social media may not be available
  - e.g. no electricity or internet service.
- **Usage patterns continually change** and demand **real-time assessment** to determine if they will reach target audiences
- The impact of messages shared through social media on **changing people's behaviour is limited**, based on current research

### Historical, Political and Media Environments

- To determine target audiences information needs and expectations, it is also important to consider:
  - Historical context
  - Diverging
    - political opinions
    - scientific opinions,
    - opinions of advocacy groups or other NGOs
  - The type, tone, and/or amount of media coverage



### Historical, Political and Media Environments –some examples

- **Historical context**
  - E.g. if a company has **recurring food safety issues** that affect its products, existing levels of public trust in that company are likely to be low
  - When that company has another food safety problem, risk communicators will not only have to communicate about the food safety risk itself, but will also need to address **public trust** and explain
    - **why** the same problem has happened again
    - **what** is being done to prevent it from happening in the future
- **Diverging opinions**
  - **Sustained communication** is often required and risk communicators will need to **address and respond to the diverging opinions** of other stakeholders who are communicating about the risk.
- **Media coverage**
  - How food safety issues are being **portrayed in the media** will likely influence
    - what people know about the risk
    - how they think about it
    - determine which concerns and topics need to be addressed in the communication

### Understanding the Needs of Target Audiences

#### Conversation with and feedback from stakeholder groups

- e.g. consumer organisations, special interest groups (e.g. allergy sufferers, religious groups), trade associations

#### Consumer research

- What consumers **know**, and do not know,
- Their specific **concerns** and **perceptions** about the risk,
- Information about **trust** and **preferred use** of information sources
- Usually used to understand for **ongoing food safety** issues
- Can be employed for larger scale, **complex crisis response** if and when needed

#### Qualitative research

- Focus group research with representatives from target audiences
- Interview " " " " " " " "

#### Quantitative research

- Surveys (internet, pencil and paper etc.)

### Understanding the Needs of Target Audiences

#### Media monitoring

- What news and information is already reaching the public
- If possible, how the public appears to be reacting

#### Most recent census

- Demographics
- Ethnic and religious backgrounds that can impact on food consumption habits

#### Nutrition and dietary surveys

- Consumption patterns
- Information about possible substitutions

#### Market research surveys

- Shopping and storage habits

#### Websites and social networks

- Identification of online communities and their use of language related to food safety
  - Mothers
  - Specific age groups
  - Ethnic minority channels

### Understanding Target Audiences

- It may be helpful to convene an interdisciplinary team of stakeholders to fully assess the concerns and priorities of the different target audiences

e.g. A sustained  
"aflatoxin awareness"  
campaign.....



Photo by the International Institute of Tropical Agriculture

### A sustained "aflatoxin awareness" campaign

- The campaign was run in Benin, Ghana and Togo
- Many **different stakeholders** were involved in the development of the messages and promotional materials:
  - **A public opinion survey**
    - To provide insights on people's knowledge about aflatoxins, the risks they pose, and of practices to **limit grain contamination** by aflatoxins
    - The results helped identify **perceptions and information needs** and guided the development of the campaign **theme, messages and approach**
  - **A stakeholder workshop**
    - To develop key messages, a stakeholder workshop was conducted with representatives of target audiences, media houses, scientists, regulatory authorities, farmers, industry, exporters, civil society, and other relevant government institutions and development partners



### Wrapping up

- **Understanding target audiences is essential for successful food safety risk communication.**
  - Knowledge gaps, concerns and perceptions.
  - Cultural and socio-economic backgrounds.
  - Which **information sources** are trusted, frequently used and accessible, and which **communication channels** are used and accessible.
- Food safety risks must be discussed within the particular **historical, political and media environment** in which they occur.







## Putting Food Safety Risk Communication into Action (1)

FAO/WHO Regional Workshop "Enhancing Risk Communication Capacity in Food Safety"  
03-06 June 2014, Budapest, Hungary

### Presentation Outline Overview

- Coordinating Risk Communication and Working with Stakeholders
- Developing Risk Messages
  - Determining communication objectives
  - Developing key messages
  - Identify and prevent unintended consequences of the communication
- Exercise 5: Developing Risk Messages for Different Audiences



### Training objectives

To provide practical guidelines for **coordination risk communication and collaborating with relevant stakeholders in the development and delivery of food safety risk messages.**

To provide practical guidelines for **developing food safety risk messages.**

This includes

- practical approaches on **how to develop communication objectives** for each target audience
- Develop key messages**
- Identify and prevent unintended consequences** of the communication


### Coordinating Risk Communication

- Most risk communication issues that involve food safety directly involve and have implications for different governmental departments and groups within society
  - Public health departments
  - Agriculture departments
  - Individual businesses and industry groups,
  - Consumer organisations
  - Individuals
- Coordination of communication** efforts among these stakeholder groups is just as important as the coordination of other response efforts and is an essential, integral part of the response plan.
- Particularly important and challenging during **emergency situations**, when messages often need to be;
  - changed frequently,
  - developed in a very short time frame,
  - in consultation with a wider range of agencies than in normal situations.

### Coordinating Risk Communication

- Coordination of communication efforts among stakeholders reduces the likelihood of confusing and even contradictory public information, and prevents loss of organization's credibility and effectiveness.

During **emergency food safety risks**, it is often useful to **identify one governmental agency** to coordinate communication efforts, and to appoint one or more appropriate spokespersons on behalf of **multiple governmental agencies**, to ensure consistency of government messages and to avoid confusion



### Coordinating Risk Communication

- Coordinating communication and collaborating with relevant stakeholders also offers the chance to:
  - Better **understand the situation**
  - Obtain **feedback** about target audiences' concerns or confusions
  - Benefit from **communication capacity and credibility** of other organizations

### Coordinating Risk Communication – some examples

- During a product recall, food retailers can provide useful feedback about **public concerns** and **consumers confusion** about which products to avoid
  - This enables the modification of risk messages to provide clarifications and to address public concerns and perceptions
- **Governmental agencies** can benefit from the communication **capacity and credibility** of national and regional industry associations
  - Rapid communication about regular updates to fruit and vegetable growers, shippers, retailers, wholesalers, foodservice distributors and others

### Build and Maintain Relationships

- Effective coordination and collaboration requires strong relationships, which cannot be easily established while managing emergencies.
  - Identify, build and maintain working relationships with relevant stakeholders in advance
  - Consider developing, testing and exercising plans and protocols that guide how the organizations will work together during a food safety issue.



### Methods for establishing strong working relationships with relevant stakeholders

- Establish and maintain **contact lists** so information can be shared and stakeholders engaged quickly when needed.
- **Share information with stakeholders** on a regular basis to maintain relationships
  - Information about ongoing research
  - Explaining how food safety issues are managed
  - Outlining the organization's role in food safety risk management
  - .....ensures stakeholders are well informed and can communicate accurately when a food safety risk needs to be addressed.
- **Meet with stakeholders regularly** to
  - exchange information,
  - gain intelligence about target audiences
  - seek feedback on approaches
  - negotiate partnerships to improve communication
- Find **common ground and leverage opportunities** to develop, implement and test mutually agreed-upon communication plans and protocols
- Establish relationships with relevant stakeholders and make **them part of routine business** makes coordination and collaboration easier when a food safety risk needs to be addressed

### “Prioritising” stakeholders

It is important to identify the most relevant stakeholders with whom to engage when addressing a food safety issue.

- Prioritizing relevant stakeholders can help ensure the **most value for effort**
- Where possible, communicators should involve priority stakeholders to inform their **communication planning and message development**
- Through working with these stakeholders, risk communicators can get valuable information about
  - (Different) target audiences
  - How to get help distributing messages to those target audiences
- Collaboration helps mitigate the risk that **stakeholders might hinder the organization's communication objectives**

### Some stakeholders who need to be involved!

- Decision makers whose **decisions will reduce/increase** the risk (e.g. food processors)
- Those **most affected by the risk** and those organizations that represent them
- Those who have the **greatest influence** (trust and reach)
- Those who **could help/hinder the organization** meet its communication objectives



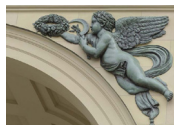
### Balance Collaboration and Independence

- Stakeholder views and expertise can help in the development and dissemination of effective messages but should **never exert undue influence on decision makers**
- Even the perception of **undue influence** can have negative repercussions on peoples' trust in an organization and its messages



## Developing Risk Messages

- Determine a Single Overarching Communications Outcome (SOCO):
  - “Why am I communicating?”
  - “What is the change I want to see as a result of my communication?”



## How to Develop a SOCO

- Step 1: What is the food safety issue?
- Step 2: Why do you want to focus on this issue and why do you want to focus on it now?
- Step 3: Who needs to change their behaviour (audience)?
- Step 4: What is the change that you want to see in your audience as a result of your communication? This is the SOCO.

## Example

	SOCO
Step 1	What is the food safety issue? Exposure to aflatoxins in staple foods in Africa.
Step 2	Why focus on the issue, and why now? Aflatoxins pose serious <b>health risks</b> to humans and domestic animals in Africa, because they frequently contaminate agricultural commodities (maize, groundnuts). Aflatoxin contamination has a direct bearing on <b>food security</b> (major cause of pre- and post-harvest losses). <b>Loss of revenues and profit</b> from domestic, regional commerce and international trade. <b>Awareness</b> of the problem is <b>low</b> .

## Example continued

	SOCO
Step 3	Who needs to change their behaviour? Many audiences can help reduce the risks of aflatoxin contamination of agricultural commodities. For this example we focus on <b>farmers</b> .
Step 4	What is the change you want to see in your audience? (Your SOCO) <b>Farmers to implement practices that limit or prevent contamination.</b> For example: Pre-harvest: Good Agricultural Practices (GAP), which typically include use of insect resistant crops, good tillage and weeding practices, appropriate use of fertilizers, irrigation, and crop rotation. Post harvest: Thorough drying, prompt storage and transport using clean, dry containers.

## Characteristics of a Good SOCO

- A SOCO:
  - must be explicit about the change wanted.
  - must be realistic and achievable.
  - must, together with other interventions (programmatic, advocacy, etc.), contribute to a larger programme goal or objective.
  - It will be the fixed point on which communicators keep their mind when communicating.

## Characteristics of a Good SOCO

- The change I want to see is that my audience is:
 

✗ told...	+ changed...
✗ informed...	+ influenced...
✗ made aware...	+ donating funds...
+ reassured...	+ modifying
+ convinced...	behaviour...
+ prevented from...	+ changing or
+ confident...	accepting policy...

### Example:

Farmers to adopt Good Manufacturing Practices

## Developing Risk Messages

- Important questions to consider include:
  - What is the food safety issue?
  - What is the risk to the target audience(s)?
  - Which concerns and perceptions does the target audience(s) have about the risk?
  - What can the target audience(s) do about the risk to protect themselves?
  - What is not known or uncertain about the risk?
  - What is being done to reduce the uncertainty?
  - What is being done to manage the risk?
  - What other context is relevant to the target audience(s)?

## Developing Key Messages

- Identify specific concerns.
- Analyze the concerns to identify recurring themes and general concepts to be addressed.
- Develop key messages for those concerns (both general and specific) that need to be addressed.

## Developing Key Messages

- What are the 3 most important things the target audience...
  - needs to know?
  - would like to know?
  - is likely to get wrong?
- 3 key messages may emerge
  - Be prepared to deal with all three messages
- Develop 3 supporting statements for each

## Example: Chemical Contamination Drinking Water Reservoir

**Credible Threat Involving Chemical Contamination of a Reservoir Message Map 4**

**Audience/Stakeholder:** Public/Media  
**Spokesperson:** Public Health, City Manager, and/or Mayor  
**Stage of Crisis:** ... Possible **X Credible** ... Confirmed ... Remediation/Recovery

**Question:** Who are most at risk if they have been exposed to contaminated water?

**Children, the elderly, and others with weaker immune systems are most at-risk.**

- Children have less developed body defenses.
- The elderly and people with diseases such as HIV/AIDS or hepatitis may have weakened immune systems.
- Such individuals should take extra precautions.

**At-risk persons should avoid contact with tap water.**

- Parents should not prepare infant formula or cook food using the water.
- Children and the elderly should not drink beverages prepared with the water.
- Bottled water will be distributed at [insert locations and times].

**At-risk persons with symptoms should call 911 or go to the nearest emergency room.**

- Early symptoms include [insert symptoms].
- A child or elderly person who has been exposed should not be encouraged to vomit.
- A child or elderly person who has been exposed should not be given liquids.

## Methods for Supporting Key Messages

- Statistic facts, visual aids (e.g. diagrams, pictograms)
- True stories that illustrate the key message
- Recommendations from authoritative bodies
- The source of the evidence provided in the message



## STARC Messages

- Messages should be:
  - Simple (avoid jargon and technical language)
  - Timely (up-to-date information)
  - Accurate
  - Repeated (to facilitate remembering)
  - Consistent (among communicators and across various audiences)

### Example Template for Risk Messages

- Description of the risk
- The advice to consumers
- Quote (from reputable source, e.g. national authority official, independent expert) reiterating the advice to consumers
- What is being done to reduce the risk
- Additional relevant context

### Identifying and Preventing Unintended Consequences of Messages

- Validate messages with relevant stakeholders, and inform them of the communication activity before actually communicating.
- Test messages (including visual aids) with the participation of the target audience(s) to whom they are directed.
- Monitor and adjust risk messages as the food safety issue evolves.



### Wrapping up

- **Coordination of risk communication and collaborating with relevant stakeholders** is important for the **development and delivery** of effective risk messages
- **Stakeholder relations require continuous investment** and need to be carefully managed
  - Communicators need to **build and maintain good working relationships** with relevant stakeholders
- **Coordination of communication efforts** should be an integral part of the response plan
- Effective coordination of communication promotes **consistent messages** that foster clarity and avoid confusion among target audiences



### Wrapping up

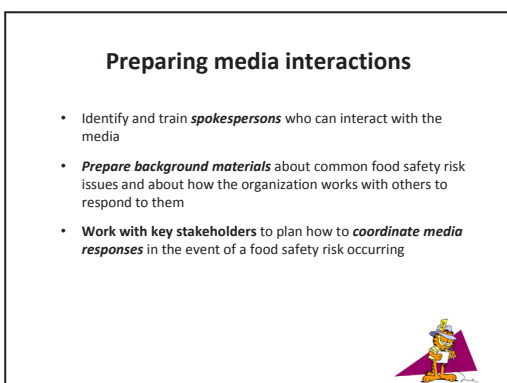
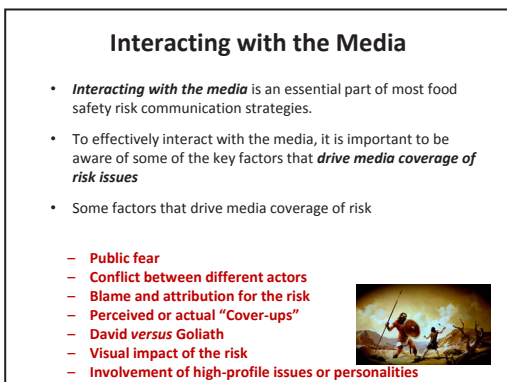
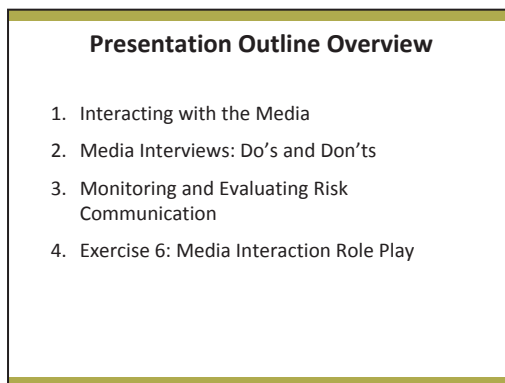
- When developing risk messages, communicators need to have a **clear understanding of their communication objective** (*the specific change they want to see in their target audience as a result of their risk communication*).
- **Key messages** summarize the issues that need to be communicated, facilitate consistency when speaking to multiple audiences, and that communicators don't forget any important information.



### Wrapping up

- Effective risk messages provide target audiences with **accurate** information **tailored to their needs**, **describe the risk** and provide information on **what is being done to reduce it**, and what **steps people can take to reduce their risk**.
- To develop effective risk messages, communicators need to always **inform** and whenever possible **engage in dialogue with stakeholders in the development of messages**, **pre-test messages** with target audiences, and **monitor and adjust messages** as the food safety issue evolves.





### When a Food Safety Issue is Addressed

- Be proactive. **Leading voices** often influence the tone of coverage better than trailing ones.
- **Identify and target media outlets** that serve the target audiences, and tailor media materials for them.
- **Coordinate the media responses** with stakeholders whenever possible
- Consider various methods are available for reaching media stakeholders
  - Regular news conferences
  - Teleconferences
  - Webcasts
  - News releases online content
  - Social media channels, etc.
- **Detect and correct errors or misleading coverage** to ensure errors are not repeated.



### Evaluating Media Interactions

- **Review and analyse** the media coverage on the food safety issue to measure the effectiveness of the media approach.
  - Were the messages reflected **accurately**?
  - Were they covered in the **targeted media outlets**?
- Work with stakeholders to refine coordination **based on lessons learned**
- Consult with key journalists for **feedback on the approach**

### Media Interviews: Do's and Don'ts

#### The Role of a Spokesperson

- Communicate information that the public **wants** or **needs** to prevent and reduce illness, injury, or death.
- Build trust and credibility
- Build support for the public health response.



### Today's reporter

- Writes for **more than one media**
  - Print
  - Radio
  - TV
  - Web
- Is on **24/7** production cycle
- Is **bombarded** with releases, advisories, statements
  - & most contains little "news"

### What reporters want

- Numbers, numbers, numbers
  - "current" and "reliable"
- What's:
  - New
  - Unexpected
  - Surprising
  - Against "trend"
- Have calls answered promptly
- To talk to a spokesperson who "gets to the point"

### 10 Golden Rules

- Never lie
- Never say "no comment"
- There is no such thing as "off the record"
- Be short, to the point, and take account of the target audience
- Stay calm, confident and in charge
- Use simple language, avoid jargon
- Be human, and smile when appropriate
- It is Ok to say "I don't know but I will find out"
- Do not speculate



"You have zero control over what reporters (and editors) write, so get over it.

You have 100% control over what comes out of your mouth."

### The rules of a media interview are simple

- The medias' job → get a story
- Your job → tell YOUR story, YOUR way
  - You don't have to answer the question asked!
- To improve media skills you need to prepare, rehearse and listen to honest feedback.

### Remember:

Face to face communication:



**Interviews are NOT conversations!**

### Preparing for a Media Interview

- **Be clear about your audience**
  - The media are not your audience, but they need to understand your message and be motivated to convey it to your audience.
- **Determine the message you want to get across, rehearse and get feedback**
  - Ask yourself what is the purpose/goal of the interview.
  - Determine key messages and develop a storyline.

### Storyline

Summary of **3 key messages** to be used **repeatedly** in all types of interviews



Explain:

- "So what?"
- "Why is this so compelling?"
- "Why now?"
- Address the reasons or benefits.

### Example Story Line

- **The problem:** give a very short description of the problem, and how it has evolved to this point; address the question “so what”?
- **The solution:** describe what can be done about the problem – concrete, appealing, feasible actions.
- **The response:** what is your organization/agency doing about this, how is it contributing to the solution? And what can others do?

### Make your story alive

- A story
- Personal recollection/ experience
- Social math
- Use the language of the audience
- Explain concepts and jargon
- Explain the implications for individuals affected

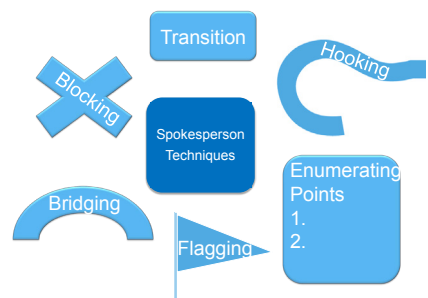
### Sound bites

Short, focused and clear quotes that are easy-to repeat and memorable (radio/TV interviews)

- Use plain language- no jargon
- Use positive active verbs
- Adhere to the **27/9/3 rule**:
  - 27 word
  - 9 second
  - 3 messages
- Speak to younger people
- Use action and emotion
- Do not use humour
- Contain an analogy or memorable example
- REHEARSE!

### Preparing for a Media Interview

- **Anticipate questions**, draft answers and identify key points of your answer.
- Be aware and prepare for **reporters’ tactics**
- Conduct **quick online research** about the journalist (or outlet) and recent stories



### Transition techniques

Allow you to bridge back to safety

1. Acknowledge the reporter's question appropriately
2. Use a bridging phrase, then transition the answer to the safety of your key messages

### Clarifying some misconceptions

Questions	Responses
"What could happen if...?"	I wouldn't want to speculate on that. The facts are...
"How do you think this happened?"	It's too early to tell. We will have a full evaluation and find out what happened
"Can you offer a guess as to how...?"	It is important that we deal with the facts as we know them, and they are....

#### Hearsay Questions

Questions	Responses
"Dr X from the Health Education Bureau told us that..."	I can't speak for Dr. XYZ, but what I can address...
"A source from within MoH has told us..."	This is the information I have.../ This is what I know...
"Our sources tell us..."	I'd like to stick to the facts and they are...
"How do you respond to the WHO country director who said that...?"	The facts are...

#### Negative Repeat Questions

Don't repeat the negative comment/word, correct the inaccuracy

Questions	Responses
"Tell us about the E-coli outbreak that happened here today? Could this have been another disaster?"	The truth is...
"Tell us about the..."	Let me give you the facts as I have them...
"Why is WHO's surveillance substandard?"	Once again, let me share with you exactly what happened...

#### Presupposition Questions

Reporter gives you false information to put you on the defensive

Tactic/ Question	Responses
Isn't it true that MoH didn't provide enough training to local health workers because the money was used for a new building in headquarters	Let me give you the correct information... The truth is... Actually this is what happened... Don't repeat the negative comment or word!!

#### Putting Words in Your Mouth

Tactic/ Question	Response
"So, your morale issue is affecting public health, isn't it?"	"Let's see what's at issue here if I may," ... Then make your positive point. Recognize that they are trying to get you to use words you would not say Don't argue!

### False facts and Incorrect Information

Questions	Responses
"So you have awarded 75% of your grants budget to study TB to one organization?"	"Perhaps I could clarify that for your (viewers, listeners, readers), [reporter's name]"
If a reporter provides incorrect information, it is ok to correct them with ...	That is not true... the facts are that... Correct graciously and go to your positive point

### Feeding the Mike

Tactic/ Questions	Responses
You've given a good answer to a controversial issue...the reporter pauses and the camera continues to roll...	Stay on your agenda Be aware of non-verbal cues
Note: When the camera stops rolling, the reporter is still recording	It's the reporter's job to fill the air-time

### I Don't Know

- When you don't know the answer to a question, cannot answer, or you are not the best source for the answer
  - Repeat the question
  - Say "I wish I could answer" or "My ability to answer is limited"
  - Say why you cannot answer
  - Give a follow up with a deadline
  - Bridge to what you can say

### Example "I Don't Know"

- You've asked me about ....
- I wish I could answer
- We're still looking into it
- I expect to be able to tell you more by ....
- What I can tell you is ....

### Monitoring and Evaluating Risk Communication Efforts

- Monitoring and evaluating risk communication efforts, both during and after implementation, is essential, to make risk communication activities as effective as possible.
  - Allows for meaningful adjustments to be made while the food safety issue is being addressed.
  - Allows for valuable lessons to be learned for addressing food safety risks in the future.

### Methods for Monitoring and Evaluating...

- Social media monitoring:
  - Are there any emerging questions and concerns that you need to respond to?
- Media monitoring and analysis:
  - Are messages reflected accurately?
  - Are stakeholders communicating about the risk, are there significant differences in the information communicated?

### ...Methods ...

- Web analysis:
  - How are the organization's materials used online (e.g. numbers of viewed, downloaded, etc.)?
  - What are the comments received from users?



### ...Methods ...

- Targeted surveys:
  - Who and how many target audiences received the messages? Why are target audiences not receiving the messages?
  - Are target audiences responding to the messages as intended (e.g. behaviour change)? If not, why?



### ...Methods for Monitoring and Evaluation

- Stakeholder dialogue:
  - What works, what doesn't, and why?
- Update risk assessment:
  - Tracking for instance the actual health risk, number of illnesses and levels of contamination, to determine if the risk is increasing or decreasing and therefore whether communication efforts are having an effect.

### Wrapping up

- To improve media skills it is important to prepare, rehearse and get honest feedback.
- Monitoring and evaluating the effectiveness of risk communication can be valuable for informing both current and future food safety risk communication.







