



# Food safety risk communication and training need of stakeholders and consumers regarding pork value chain in Vietnam

*Pham Duc Phuc, Jenny-Ann Toribio, Ngo Hoang Tuan Hai, Dang Xuan Sinh, Nguyen Thanh Luong, Shonara Jayde Langley, Jordan Gibson Dunham, Dinh Thanh Thuy, Dang Vu Hoa, Nguyen Viet Hung, Delia Randolph and Fred Unger*

## Introduction

Food safety is an important concern not only in developing countries such as Vietnam, but also in developed countries. Every year, 33 million healthy life years are lost due to foodborne illnesses with an estimate of 420,000 deaths (WHO 2015). In Vietnam, food safety has become the second biggest concern nationwide next to employment (USAID 2015). Recent studies reported that microbial pathogens were responsible for the majority of foodborne diseases (Grace 2017), but the general public are more concerned about chemical rather than microbial hazard (Ha et al. 2019; Tran et al. 2017). That contradiction indicates that the public is not properly informed on this subject.

Risk analysis includes three components—risk communication risk assessment and risk management. Risk communication is an important part that promotes interactive exchange of information about risks among risk assessors, managers, media, interested groups and the public in general. It plays a crucial role in the exchange of information and knowledge on risks amongst scientists, managers or policymakers and the community or consumers. It also helps to improve the knowledge on

food safety, the belief and trust in food chains, the food management system and the quality of food for people.

Effectiveness of risk communication depends very much on competency of trainers to address gaps in consumer risk perception. While some information about the presence of food safety hazards exists, there is limited knowledge about related risks due to gaps in effective food safety communication in Vietnam. This brief aims to provide insights on the current situation of risk communication and identifies training needs for selected stakeholders in Vietnam.

## Methodology

A cross-sectional survey was conducted targeting groups from government institutions, academia and journalists related to the agriculture and food safety field. Consumers of animal source foods (ASF) in communities were also selected to take part in the survey. Both online (for government institutions and other organizations, and academia) and paper-based (for journalists and consumers) surveys were used to assess the situation of food safety risk communication.

Risk communicators from different agencies, institutions, and universities in Vietnam participated. Different communication agencies were represented by journalists located in Hanoi. A total of 75 participants from government institutions and academia were chosen based on an existing email contact list of the Vietnam One Health University Network (VOHUN) and SafePORK partners. Journalists that work on food safety were invited to join the survey during a food safety risk communication workshop organized by Vietnam Journalism Association, CropLife and ILRI. A total of 225 consumers consisting of three groups from rural traditional (Da Bac, Hoa Binh, n=75), urban traditional (n=75) and urban modern retail (Cau Giay, Hanoi, n=75) were randomly invited for interviews.

## Results

### Knowledge about food safety hazards among stakeholders

Slightly more than half of the risk communicators (51.4%) and communication agencies (54.3%) shared the same idea that chemical hazards are the most important factor that makes pork unsafe. In contrast, a higher proportion of consumers (63.4%) think that microbial contamination in pork is the main cause to make them sick (Figure 1).

Among a list of issues related to food safety, consumers usually heard about animal disease (47.6%) and chemical contamination (36.1%), followed by the unknown origin of food, poor quality of food and the occurrence of food poisoning. Only about one in ten consumers mentioned that they had heard information about microbial contamination (11.5%) and food safety law and regulations (3.5%). Good practices to produce safe food (2.2%) was only mentioned sporadically (Figure 2).

Figure 1. Knowledge of hazards to pork safety in Vietnam (\*Multi-choice question)

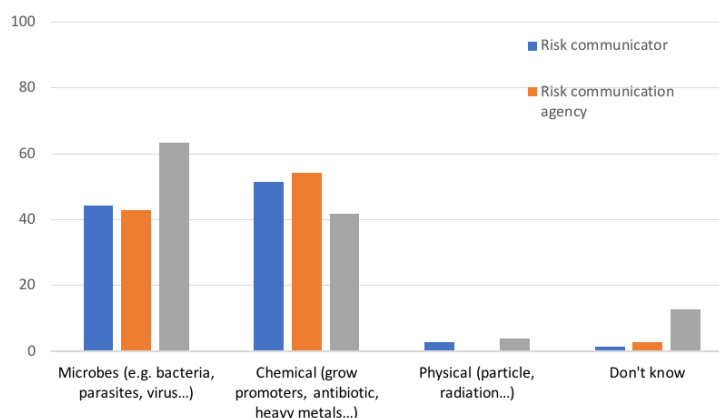
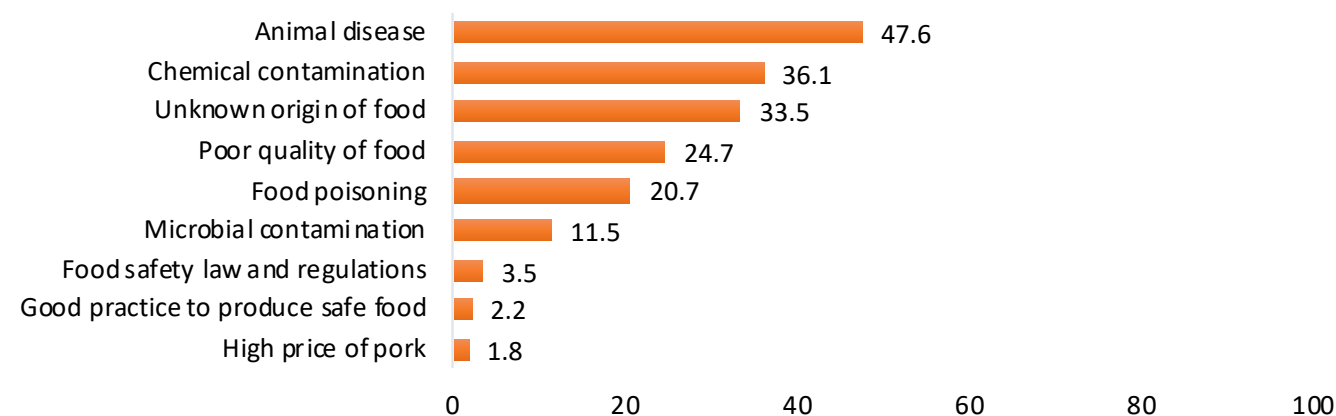


Figure 2. Food safety information that consumer usually heard about

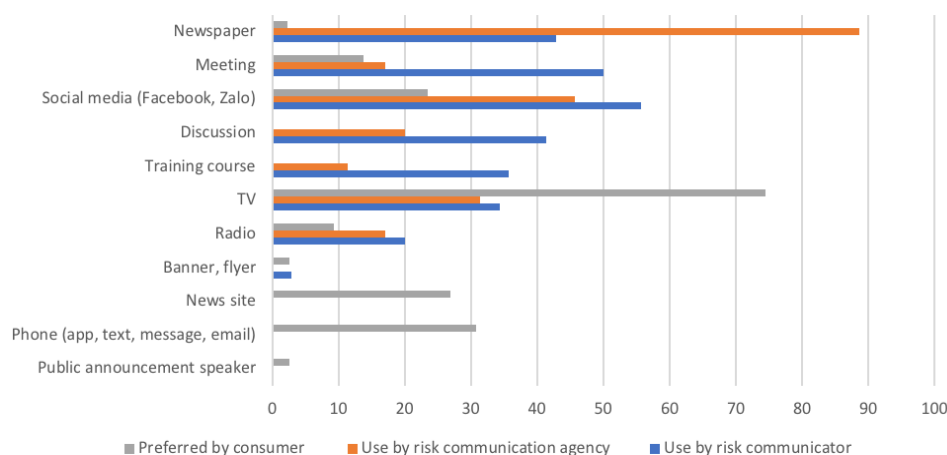


### Risk communication channels used by different groups

Risk communication channels used by different groups are presented in Figure 3. The two main channels for risk communication agencies are newspapers (88.6%) and social media (45.7%). On the other hand, risk communicators frequently use (in order) social media, meetings (more formal, e.g. within the community), discussions (less formal, e.g. among small groups of people) and newspapers (41.4–55.7%) to disseminate food safety information to their audiences. For the consumer groups, their preferred channels or sources to get the information about food

safety are television (74%) followed by phone and other news sites. Public announcement speakers, banners and flyers were not used frequently by all interviewed groups. Interestingly, newspapers were the least preferable risk communication channel for consumers (2.2%). TV seemed to be the most promising channel for risk communication activities with the highest acceptance among consumers (both in terms of preference and trust) but only one-third of communication agencies and communicators used it to communicate about food safety. Another tool that should be considered to reach consumers is the phone, which is widely available among the community.

Figure 3. Preference of communication tools and channels by different groups



### Understanding the concept of risk communication and its use

A substantial amount of risk communicators (74.3%) and risk communication agencies (77.1%) said they've heard about risk communication (Table 1). The frequency of using risk communication skills among communicators was low since almost three quarters only use them once a year or never used them at all. This was different for agencies with half of them often using risk communication skills at least once a week or month. Both groups mostly self-reported an average confidence level in overall understanding about risk communication skills.

Table 1. Understanding the concept of risk communication and its use

Content	Risk communicator		Risk communication agency	
	n	%	n	%
<b>Heard about risk communication</b>				
Yes	52	74.3	27	77.1
No	18	25.7	8	22.9
<b>Frequency to use risk communication skills</b>				
Every week	5	7.1	11	31.4
Every month	13	18.6	8	22.9
Every year	24	34.3	5	14.3
Never	28	40.0	11	31.4
<b>Confidence in implementing risk communication skills</b>				
High	2	2.9	4	11.4
Average	39	55.7	23	65.7
Low	15	21.4	6	17.1
Do not know	14	20.0	2	5.7
<b>Overall understanding level on risk communication</b>				
	5 ± 1.6		6.1 ± 1.5	
(1=lowest, 10= highest, Mean ± SD)				

### Food safety risk communication training needs

Only 32.9% of communicators and 17.1% of agencies had been trained on risk communication in food safety indicating an emergent risk communication training need for these groups as they contribute the most in communicating with the consumer (Table 2). This need was recognized by two groups since at least 90% of them thought food safety risk communication training was required or even highly required. Consumers want to get information on the origin of food and how to choose safe food.

Table 2. Food safety risk communication training need by risk communicators, agencies and information consumers want to know

Content	Risk communicator		Risk communication agency	
	n	%	n	%
<b>Have been trained about food safety risk communication</b>				
Yes	23	32.9	6	17.1
No	47	67.1	29	82.9
<b>Require training about food safety risk communication</b>				
Very necessary	17	24.3	14	40
Necessary	46	65.7	19	54.3
Unnecessary	2	2.9	-	-
Do not know	5	7.1	2	5.7
<b>FS information that consumers want to know</b>				
	Consumers			
	n	%		
How to choose safe food	93	41		
Origin of food	109	48		
The common foodborne diseases and symptoms	24	10.6		
How to prevent common foodborne diseases	27	11.9		
The hazards that cause foodborne diseases	20	8.8		

## Conclusion and recommendations

Knowledge and perception on food safety risk communication, as well as which channels to use, differed considerably between the three interviewed groups with gaps on actual risks and how to communicate them.

We found:

- Marked differences between the three groups on risk perception (chemical versus microbiological)
- Academia and journalists have to improve and diversify the communication tools they use in order to meet community needs
- Need for risk communication training among academia and journalists
- Only average confidence in risk communication skills (more critical for journalists as they frequently use such skills)
- Consumers expressed high information demand in particular about origin of food and how to choose safe food.

In order to enhance risk communication in food safety, we recommend the following strategies.

- Build the capacity of risk communication implementors to improve their skills and knowledge in risk communication.
- Create platform for provider and communicator

## Authors

Fred Unger, Dang Xuan Sinh and Hung-Nguyen Viet are researchers with the International Livestock Research Institute (ILRI); Pham Duc Phuc, Ngo Hoang Tuan Hai and Nguyen Thanh Luong work for the Hanoi University of Public Health (HUPH); Dinh Thanh Thuy and Dang Vu Hoa work for National Institute of Animal Sciences (NIAS); and Jenny-Ann Toribio, Shonara Jayde Langley and Jordan Gibson Dunham work for the University of Sydney.

to interact and exchange information by applying divergent and promising communication tools to approach the community. Some activities under this could be developing food safety programs on TV and providing information to consumers via phone/social network using credible sources.

The identified risk communication needs will be addressed in the SafePORK project over the coming 12 months. Activities will include training for all three groups, targeted research to better understand risks and development and distribution of communication materials.

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Page 1: ILRI/Steven Mann (right) and ILRI/Chi Nguyen (left)

## Contact

Fred Unger  
ILRI, Vietnam  
[f.unger@cgiar.org](mailto:f.unger@cgiar.org)



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Patron: Professor Peter C Doherty AC, FAA, FRS

Animal scientist, Nobel Prize Laureate for Physiology or Medicine—1996

Box 30709, Nairobi 00100 Kenya  
Phone +254 20 422 3000  
Fax +254 20 422 3001  
Email [ilri-kenya@cgiar.org](mailto:ilri-kenya@cgiar.org)

[ilri.org](http://ilri.org)  
better lives through livestock

ILRI is a CGIAR research centre

Box 5689, Addis Ababa, Ethiopia  
Phone +251 11 617 2000  
Fax +251 11 667 6923  
Email [ilri-ethiopia@cgiar.org](mailto:ilri-ethiopia@cgiar.org)

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