

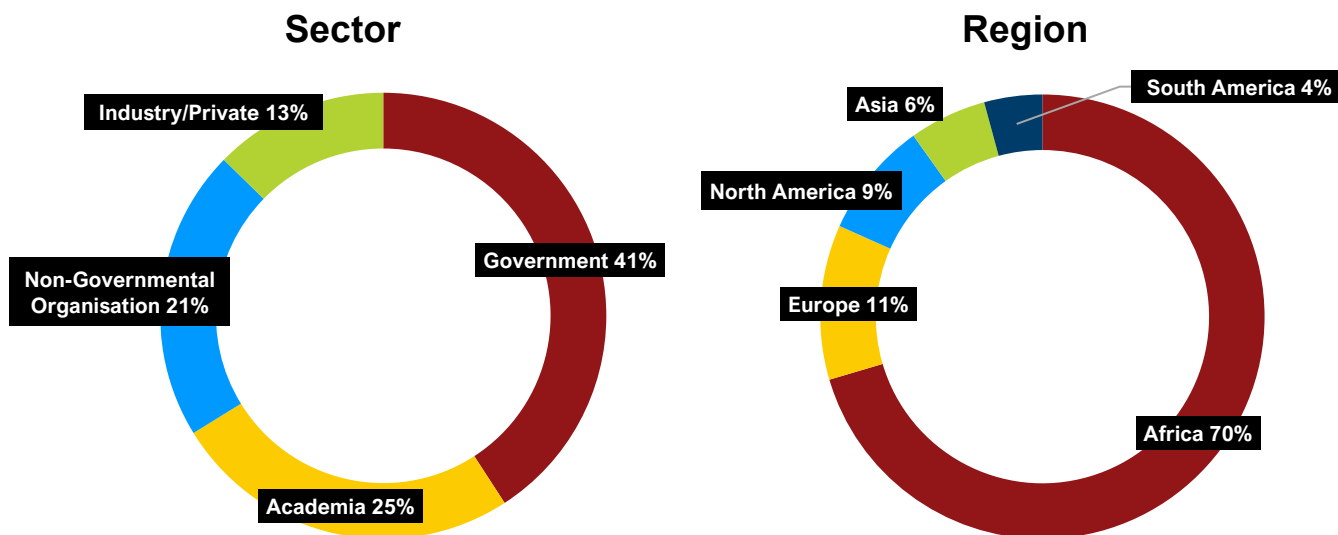
DISCUSSION DIGEST

Issue: 5 of 2024
Date: 14 Nov 2024

Finding Sustainable Approaches to Communicating Chemical Risks

The [UCT Chemical Network](#) (CN) held a discussion on the 14th of November 2024, titled 'Finding Sustainable Approaches to Communicating Chemical Risks'. This was presented by **Prof Hanna-Andrea Rother** (University of Cape Town), **Dr Nosiku Sipilanyambe Munyinda** (University of Zambia, JMPM), and **Ellie Roger** (University of Edinburgh, Centre for Pesticide Suicide Prevention). Click to view: the [PowerPoint presentation](#), [discussion recording](#), and [newsletter](#).

ATTENDANCE BREAKDOWN



Total number of live participants = 71

ABOUT THE PRESENTERS

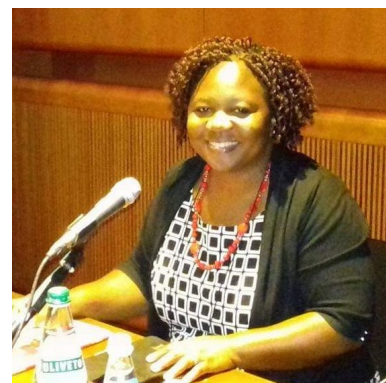


Andrea Rother is a professor and head of the Division of Environmental Health in the School of Public Health at the University of Cape Town, and an honorary professor in the Department of Public Health, Environments and Society, Faculty of Public Health and Policy (PHP), at the London School of Hygiene and Tropical Medicine. She has over 30 years of experience in research, teaching and building capacity, particularly in Africa, on pesticides, risk communication and risk management. She has published widely on the topic and served for twelve years as a World Health Organization (WHO) expert panel advisor on the Food and Agriculture (FAO)/WHO Joint Meeting on Pesticide Management (JMPM). She is also currently an international

board member of the European Partnership for the Assessment of Chemicals.



Nosiku Munyinda. Dr Nosiku Sipilanyambe Munyinda is a lecturer and researcher at the Department of Environmental Health – School of Public Health at the University of Zambia. She is also an honorary senior lecturer at the Division of Environmental Health – School of Public Health at the University of Cape Town. She holds a BSc in environmental and natural resources management, an MSc in environmental engineering and sustainable infrastructure and a PhD in environmental health. Her research interests include environmental pollution and health effects, and climate change science, mitigation and adaptation. Dr Munyinda has a robust interface with policymakers, seeing her represent the University of Zambia on various national and international technical and project steering committees. She is a member of the Stockholm Convention Persistent Organic Pollutant Review Committee (POP-RC) and the Joint Meeting on Pesticide Management (JMPPM).



Ellie Roger is the Communication and Development Officer at the Centre for Pesticide Suicide Prevention (CPSP), based at the University of Edinburgh. With over 10 years of experience in the not-for-profit sector, she brings expertise in communications, events, and engagement. Since joining CPSP in January 2022, she has supported the centre’s efforts to raise awareness of pesticide self-poisoning as a global health issue and to maximise the impact of CPSP’s work. Previously, Ellie worked as a communications and engagement officer for a medical research centre and has extensive experience in stakeholder engagement and events management.

CONTRIBUTIONS FROM PARTICIPANTS

Disclaimer: The information in this digest represents the opinions of members participating from different stakeholder groups expressed during the discussion. The views expressed in this document do not necessarily represent the opinion or the stated policy of the Swedish Chemicals Agency (KemI) or DEH UCT, nor does citing trade names or commercial processes constitute an endorsement

The key discussion points raised by participants are presented under each question. Throughout the discussion, informal polls were conducted to help encourage discussion among the participants. They do not provide any representative data but rather provide a snapshot of participants’ views.

SECTION 1 Andrea Rother

KEY MESSAGES

- Often, once-off risk communication (RC) campaigns are conducted, **but risk communication needs to be long-term and sustainable**
- The role or purpose of RC is often to **inform or educate a particular population** (awareness-raising); for **behaviour or perception change**; during a **crisis**; and to encourage **conflict resolution/problem-solving**
- Historically, RC has been linear/one-way authoritarian communication, but there has been a realisation that it **needs to be a two-way engagement**. Those being exposed can inform what types of RC media are being used, which can build trust and facilitate decision-making
- There is **no singular medium appropriate for all target audiences**. It is important to know the target audience, select the appropriate messengers, use the right/clear message, and use the appropriate media/channels
- **Risk perception differs between people** and is influenced by various factors, such as the information we get, which impacts how we understand or interpret the RC medium. Poor RC can have adverse consequences. It is important to know how people have responded to or interpreted your RC



POLL RESPONSES

Poll 1. Who is responsible for communicating chemical health risk messages to 1. farmers, 2. workers, and 3. the public? Indicate target group in response

- Government
- Industry/manufacturers/producers
- Neutral, unbiased persons
- Regulators
- Non-Governmental Organisations (NGOs)
- Suppliers/sellers
- 1-3. government; employers; media, industry
- 1. Industry and government
- 2. Industry, government and employers
- 3. Industry, government and retailers
- Farmers: Ministry of Agriculture, agriculture extensionists, farmer group leaders
- Workers: ministry of local government, industries
- Government (all 3), farmer associations (1), unions (2)
- Researchers and experts
- Manufacturers (labels & safety data sheets), distributors (labels & safety data sheets), government (awareness-raising)
- 1. Ministry of Health and Agriculture, people tend to follow the government
- 2. Occupational health and safety management teams
- 3. Ministry of Health
- Industry, government, regulators, community stewards

Poll 2. Which picture best illustrates potential chronic health effects to low literate populations?



Option 1	15
Option 2	13
Option 3	1

Poll 3. Explain what you think is the chemical industry's responsibility in communicating chemical hazards and risks to the end users

- List all the potential health hazards in local languages
- Transparency and traceability of chemicals used and hazards-associated information on the product in local language
- Clearly and accessibly inform users about the hazards and risks of their products, how to reduce risks, monitor the effectiveness of communication, and repeat
- As they produce chemicals, they must inform people of their side effects
- Communication on the importance of the safe use of chemicals and side effects
- Disclose all physical, health and environmental hazards to the end user via hazard communication tools, training, awareness
- Proper labelling of products
- Transparency on the toxicity of the chemicals, and also during the registration process of the chemical
- Clear, well-labelled containers, use of simple language
- Hazards clearly explained, and a hotline
- Comply with the regulations on labelling
- Clear labelling of hazardous chemicals for easy identification in the communities for all users
- Warning labels, precautionary statements as per the Globally Harmonized System (GHS)
- Training on the label contents
- Make risks to health and life clear
- To state clearly the dangers and risks involved with a particular chemical. Explain clearly in local languages



- Inform the public about the composition of the chemicals, production processes involved, and the risks of the chemical, including mitigation measures to be used to manage the risk
- They need to provide information to the users through clear labels and instructions
- Communicate chemicals risk in mainstream media
- Effective enforcement of the law related to chemical management and mitigation of risks

SECTION 2 Nosiku Munyinda

KEY MESSAGES

- Chemicals go through a **life cycle**, from inception through development, manufacture and storage to use and disposal. Different ministries of government have different roles in communication and deal with different stages of a chemical's life, from toxicological analysis, importation, and registration to occupational safety, use in various applications, and waste management. RC can be costly, so the financial ministry also needs to be involved
- **Safety data sheets (SDS)** are the first point of contact that many governments have with the chemical, containing key information about the chemical. They are important in communicating a chemical's inherent hazards and risks to human health and the environment. SDSs are mostly used for workplace safety and emergency personnel. Consumers also must be considered- this is where product labelling plays a role
- **Globally Harmonized System (GHS) is a standardised classification and labelling system for chemicals.** Under the GHS, labels contain symbols (pictograms), signal words indicating severity of the hazard, a hazard statement, and precautions
- However, there remains an issue of **comprehensibility and interpretation, language barriers,** and other issues, such as labels falling off a container
- Governments can also use chemical registers and awareness-raising activities such as electronic media programmes, printed media, and market platforms

POLL RESPONSES

Poll 4. What are your expectations of governments' role in chemical risk communication?

- Regulations that are clear and non-ambiguous
- Enforce regulations for the safe handling of chemicals
- No fake news
- Transparency
- Give explanations on the local radio
- Coordinate risk communication, design legislative requirements, and enforce communication by the industry
- Provide accurate and timely information to the public about the risks of chemicals
- Ensure industry's compliance in chemicals risk communication
- Regulate chemical risk communication
- Designate a public entity that is responsible for communication
- Communicate using roadshows, plays on radio, and pamphlets
- Engage local community members, traditional leaders, and local bylaws
- Putting in place legislation with standardised symbols
- Reestablish extension services
- Train officials in supporting farmers
- Conducting comprehension testing
- Awareness-raising
- Develop structures of communication they expect from the manufacturers or the industry in general, nationally
- Make it mandatory for all key government departments involved to communicate
- Training for users



Poll 5. What elements should be included in government's chemical risk communication plan/programme?

- Information on how to understand a label, pictograms, colour codes, the order of chemical labels, etc.
- The hazards posed by the chemicals, safe handling of these chemicals
- GHS symbols of chemical toxicity
- Waste management: disposal of empty packages e.g. with waste-collecting entities
- Types of pesticides, classification, hazards, strength
- Avoid colour codes as it creates confusion
- Literacy levels of target audience
- Information: charts, movies, social media
- Layman's terms

Poll 6. What are the best ways for the government to communicate to a varied audience?

- Communicate through social media, print and broadcast media
- Community engagement e.g. meetings/gatherings
- Chemical risks communication courses for professionals like pharmacists, food engineers etc.
- In the places where the products are sold
- Introduce in school curricula
- Workshops and trainings
- Production of awareness materials
- Combine mass communication and local communication
- Roadshows and outreach programmes
- Focus groups
- Social media
- Billboards, television adverts, newspapers, outreach
- Training, media radio
- Public safety days
- Community communication outreach
- Distribution of leaflets, church service, public schools, and gathering
- Through a toll-free number for text and calls
- Websites
- Newspaper articles
- Advertisements addressing the dangers of hazardous chemicals

Poll 7. How do you think the public should be able to communicate to government officials about chemical risks?

- Kenya has a toll-free line for alerting the government to non-compliance, exposures happening, etc.
- Website or online portals, SMS, government social media handles
- Whenever they come across mislabelling of chemicals
- Media and research groups, civil society
- There should be a government chemicals risk helpline
- Whistleblowing with open lines for easy reporting
- Social media
- Agriculture extension officers
- Toll-free lines
- Malawi has just introduced toll-free lines
- Public forums and town halls
- Partnerships with local health and environmental organisations
- Radio
- Through local leaders
- Through traditional leaders
- Community representative
- Lead farmers, farmer groups
- In South Africa, the public sends a complaint to the department through email, and we investigate
- Poison Information Centres



SECTION 3

Ellie Roger

KEY MESSAGES

- **Translating academic research** into information for the public can take on different forms
- **News articles are important** for relaying key information and messages, put in a different form for those who don't have the time or expertise to read a full journal article
- Blogs and opinion pieces can help keep things interesting
- **Choice of keywords and tags are important** to **enhance audience access**, especially to show up in web searches
- **Filmmaking and visual storytelling** are useful as **different people engage with different media**, and **people tend to relate more to stories than statistics**
- Part of information access includes engaging policymakers, using research to effectively motivate for/against a cause/ban
- Social media, e.g. LinkedIn, is very effective for reaching audiences
- **Safe messaging is important**, such as trigger warnings, helplines, and use of specific language around suicide and self-harm

POLL RESPONSES

Poll 8. What are the main ways you receive the latest research information about pesticide risks?

Newspapers	7
Opinion pieces/blogs	4
Social media	14
Journal articles	16
Events & conferences	9
Policy briefs	10
Newsletters	12

Poll 9. Is there anything we should or should not include when communicating pesticide risks?

- Not mention the name of the product used in a death in the media to prevent copycats
- Be aware that social media can sometimes, if not most of the time, over-sensationalise issues, which can cause panic
- Culture diversity
- Clear information
- False advertising – e.g. that a product is safe or natural
- Helplines
- We should exclude lethal levels
- Say what people can do and not always what they shouldn't do
- Some manufacturers can use social media to discredit their competition
- Just one message per campaign
- Potentially linking agriculture ministries with communities through apps/social media to highlight impacts and give information to farmers and communities

RESOURCES

1. Organisation for Economic Co-operation and Development (OECD). Guidance Document on Risk Communication for Chemical Risk Management. July 2002. https://www.oecd.org/en/publications/oecd-guidance-document-on-risk-communication-for-chemical-risk-management_6954d334-en.html
2. Centre for Pesticide Suicide Prevention (CPSP) website - <https://centrepsp.org/>
3. Latest news and blogs - <https://centrepsp.org/category/media/>



4. CPSP LinkedIn channel - <https://www.linkedin.com/company/34669239/>
5. CPSP YouTube channel - <https://www.youtube.com/@pesticidesuicideprevention>
6. Rother, H.A. December 2014. Communicating pesticide neurotoxicity research findings and risks to decision-makers and the public
<https://www.sciencedirect.com/science/article/pii/S0161813X14000345>

Chemical Network: The Chemical Network is a non-partisan online forum established by the Division of Environmental Health (DEH) at the University of Cape Town's (UCT) School of Public Health. It was established as part of a knowledge management and sharing project supported by the Swedish Chemicals Authority (KemI).

This forum has been produced with financial assistance from Sweden, through the Swedish International Development Cooperation Agency (SIDA), which has been arranged by the Swedish Chemicals Agency (KemI). The views herein shall not be taken to reflect the official opinion of SIDA or the Swedish Chemicals Agency.

If you have any questions or require clarification on this initiative, please contact UCT at chemicallistserver@gmail.com. If you are not already a member, join the Chemical Network at: <http://eepurl.com/hf9nwf>

