COMMUNITY OF PRACTICE ON
HIGHLY HAZARDOUS PESTICIDES
Organized by the SAICM Secretariat and the University of Cape Town

- **Topic**: Examples and case studies on strategies for identifying and addressing HHPs from an IGO, NGO and Industry perspective
- **Date**: 16 September 2020
- **Time**: 10H00 AM – 11H30 AM SAST (GMT + 2.00)
- **Presenter**: IGOs: Richard Brown (WHO) and Halshka Graczyk (ILO). Industry: Christoph Neumann and Andy Ward (CropLife). NGOs: Keith Tyrell (PAN – UK)
- **Facilitator**: Prof Andrea Rother, University of Cape Town
- **Chair**: Ms Tatum Louw, MPH student, University of Cape Town

Introduce yourself (name, job title, organization and country) in the chat section.
Only the presenter and facilitator will speak. Any comments or questions from attendees should be typed in the chat section.
Please kindly keep you microphone muted and cameras off during the discussion

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This activity is supported by the Global Environment Facility (GEF) project ID: 9771 on Global Best Practices on Emerging Chemical Policy Issues of Concern under the Strategic Approach to International Chemicals Management (SAICM).
Examples and case studies on strategies for identifying and addressing HHPs from an IGO, NGO and Industry perspective

Richard Brown, Halshka Graczyk

Christoph Neumann, Keith Tyrell

& Andy Ward

Highly Hazardous Pesticides Community of Practice

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Introduction to Question 1 (WHO)

WHO – Providing the tools to identify HHPs, supporting vector control
8 criteria from FAO/WHO JMPM to identify HHPs

WHO Recommended Classification of Pesticides by Hazard -

http://www.who.int/publications/i/item/9789240005662

2. IDENTIFICATION
2.1 Definition
The FAO/WHO International Code of Conduct on Pesticide Management (2013) defines Highly Hazardous Pesticides as:

Pesticides that are acknowledged to present particularly high levels of acute or chronic hazards to health or environment according to internationally accepted classification systems such as the World Health Organization (WHO) or the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) or their listing in relevant finding international agreements or conventions. In addition, pesticides that appear to cause severe or irreversible harm to health or the environment under conditions of use in a country may be considered to be and treated as highly hazardous.

2.2 Criteria
The FAO/WHO Joint Meeting on Pesticide Management [2008] recommended that highly hazardous pesticides should be defined as having one or more of the following characteristics:

- Criterion 1: Pesticide formulations that meet the criteria of classes 1A or 1B of the WHO Recommended Classification of Pesticides by Hazard, or
- Criterion 2: Pesticide active ingredients and their formulations that meet the criteria of carcinogenicity Categories 1A and 1B of the Globally Harmonized System of Classification and Labelling of Chemicals (GHS), or
- Criterion 3: Pesticide active ingredients and their formulations that meet the criteria of mutagenicity Categories 1A and 1H of the Globally Harmonized System of Classification and Labelling of Chemicals (GHS), or
- Criterion 4: Pesticide active ingredients and their formulations that meet the criteria of reproductive toxicity Categories 1A and 1H of the Globally Harmonized System of Classification and Labelling of Chemicals (GHS), or
- Criterion 5: Pesticide active ingredients listed by the Stockholm Convention in its Annexes A and B, and those meeting all the criteria in paragraph 1 of Annex D of the Convention, or
- Criterion 6: Pesticide active ingredients and formulations listed by the Rotterdam Convention in its Annex III, or
- Criterion 7: Pesticides listed under the Montreal Protocol, or
- Criterion 8: Pesticide active ingredients and formulations that have shown a high incidence of severe or irreversible adverse effects on human health or the environment.
Pesticides in vector control – risk/benefit considerations

• DDT / Clothianidin (neonicotinoid)
  • HHPs criteria are met, but overriding need for vector control to prevent vector-borne diseases (e.g. malaria)

• Limited alternative products available for vector control
  • Limited market compared to agriculture

• Risk mitigation
  • Controlled use through vector control programmes
    • Indoor use only (IRS – Indoor Residual Spraying)
Introduction to Question 1 (ILO)

Highly Hazardous Pesticides (HHPs) in the World of Work

Halshka Graczyk
LABADMIN/OSH
ILO Geneva

16 September 2020
ILO’s work on Chemicals and HHPs

- ILO Governance Structure
  - Tripartite Governance
    - Governments
    - Workers’ organisations
    - Employers’ organisations

- Numerous departments, field offices and projects working on chemicals and HHPs
  - LABADMIN/OSH
    - General work on chemicals, health and safety
  - SECTOR
    - Agriculture
  - FUNDAMENTALS
    - Child labour in agriculture

Date: Monday / 01 / October / 2019

Advancing social justice, promoting decent work
ILO Baseline Survey: Workers’ Exposures to HHPs

• HHPs are used in agriculture, horticulture, gardening, home and public parks and pest control +
  • Over 1 billion workers are exposed to HHPs in the agriculture industry, plantations, rural sectors and chemical industries
  • Workers are exposed during extraction, production, distribution and waste management
  • Hazards: poisoning, cancers, neurotoxicity and endocrine disruption +

• Mortality and Morbidity
  • 3,000,000 hospitalized acute poisonings
  • 300,000 deaths from poisoning
ILO Instruments on Chemicals - relevant to HHPs

- **Chemicals Convention, 1990** (No. 170) and Recommendation, 1990 (No. 177)
- **Major Industrial Accidents Convention, 1993** (No. 174) and Recommendation, 1993 (No. 181)
- **Occupational Safety and Health Convention, 1981** (No. 155) and Recommendation, 1981 (No. 164)
- **List of Occupational Diseases Recommendation, 2002** (No. 194)
- **Occupational Cancer Convention, 1974** (No. 139) and Recommendation, 1974 (No. 147)
- **Working environment (air pollution, noise and vibration) convention, 1977** (No. 148) and recommendation, 1977 (No. 156)
- **Safety and health in agriculture convention, 2001** (No. 184) and recommendation, 2001 (No. 192)
Safety and Health in Agriculture Convention, 2001 (No. 184) and Recommendation (No. 192)

- Adopted in 2001 addressing numerous aspects of occupational safety and health in agriculture and forestry
  
  - Addresses the sound management of chemicals used in agriculture
    
    - Suitable system for the import, classification, packaging and labelling of chemicals
    - Safe collection, recycling and disposal of chemical waste
    - Importers, producers or other providers of chemicals must comply with safety standards and must inform users and the authorities of risks
    - Preventative and protective measures for the use of chemicals and the handling of chemical waste at the level of the undertaking, covering the preparation, handling, application, storage and transportation, maintenance, cleaning and disposal
Code of Practice on Occupational Safety and Health in Agriculture

• ILO Code of Practice on Occupational Safety and Health in Agriculture
  • Section on the safe handling of pesticides
    • Detailed guidelines on hazard descriptions, control strategies, exposure mitigation, medical surveillance and other issues
    • Transport, storage and disposal of pesticides
    • Exposure during pesticide handling, re-entry, aerial spraying, etc.
    • Administrative controls
    • Medical and health surveillance of workers
    • Hazards to the environment
ILO training materials on pesticides

• Improving working and living conditions for agricultural families programme (WIND)

• Safety and health in the use of agrochemicals: a guide

• Health, Safety and Environment: A Series of Trade Union Education Manuals for Agricultural Workers
“It is essential to prevent or reduce the incidence of chemically induced illnesses and injuries at work.”

Preamble of the ILO Chemicals Convention No.170
Question 1

• **Question 1:** Are you aware of the work that WHO and ILO are currently engaged in to assist with the identification and addressing of HHPs in vector control and in different work settings? What is needed to bring more attention to and to support this work in your country?

This question will be discussed for 30 minutes. Please use chat only, mute your microphone, and turn your video off. Thank you!

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HHPs – a Reminder of the Scale of the Problem

3% of agricultural workers (c25million) poisoned each year

1 million hospitalised

>220,000 deaths annually

>168,000 suicides annually – 17 million deaths since 1960s

84% of pesticide poisonings occur in LMICs

Many national authorities now recognise that HHPs are a significant cause of the health and environmental harm from pesticides and are taking action
The Code of Conduct encourages all entities including civil society to provide information on pesticides and their *uses, risks* and *alternatives*

In support of this, PAN conducts

- *KAP (Knowledge Attitude Practice) surveys*
- *Health Monitoring*
- *Identification of HHPs*
- *Identification of agroecological, low risk alternatives to HHPs*
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<thead>
<tr>
<th>Year</th>
<th>Country</th>
<th>% APP</th>
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<tr>
<td>2011</td>
<td>Mali</td>
<td>25</td>
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<td>2010</td>
<td>Tanzania</td>
<td>56</td>
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<td>2015</td>
<td>Armenia</td>
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<td>2015</td>
<td>Belarus</td>
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<td>2015</td>
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<td>2015</td>
<td>Kyrgyzstan</td>
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<td>2015</td>
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<td>2016</td>
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<td>2016</td>
<td>Georgia</td>
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<td>2018</td>
<td>Benin</td>
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www.pan-uk.org/acute-pesticide-poisoning-among-smallholder-farmers
% ADULTS WHO HANDLE PESTICIDES REPORTING SIGNS AND SYMPTOMS OF PESTICIDE POISONING IN PREVIOUS YEAR

Armenia: 40% (mild: 10%, moderate: 30%, severe: 0%)
Georgia: 10% (mild: 0%, moderate: 10%, severe: 0%)
Kyrgyzstan: 50% (mild: 20%, moderate: 30%, severe: 10%)
Moldova: 5% (mild: 0%, moderate: 5%, severe: 0%)
Ukraine: 60% (mild: 20%, moderate: 40%, severe: 0%)
Poisoning is hidden

Symptoms reported vs medical help – Benin 2016

- Respondents reporting symptoms
- Respondents seeking medical help

- Banikoara: 88% symptoms reported, 7% seeking medical help
- Kandi: 75% symptoms reported, 19% seeking medical help
- Glazoué: 100% symptoms reported, 7% seeking medical help
- Savè: 97% symptoms reported, 3% seeking medical help
PPE is not used

% of people NOT using PPE while handling pesticides

- Armenia: 88%
- Belarus: 100%
- Georgia: 88%
- Kyrgyzstan: 52%
- Moldova: 84%
- Ukraine: 83%
Alternatives to HHPs

End users need information and access to safer, affordable and effective alternatives for their specific crop and local conditions. PAN conducts desk and field research with its partners to identify, test and adapt safer alternatives.

The use of broad spectrum pesticides can be a barrier to uptake of alternatives. PAN also delivers technical support to extension services and partners to help producers to transition to a suite of safer, compatible measures in order to reduce risks and sustain or improve net profits.

www.pan-uk.org/alternatives-to-pesticides/
Conditions of use – the reality

Velingera Senegal 2012

• 71% Store pesticides at home
• 38% Spray into the wind
• 95% No protective clothing
• 2% Use internationally recognised PPE

Sikasso Mali 2011

• 33% Spray into the wind
• 20% No protective clothing
• 6% Use internationally recognised PPE
• 67% Never received training on pesticides
Question 2

• Question 2 What are the barriers governments face to removing HHPs from use? How can civil society best help to address those barriers?

This question will be discussed for 30 minutes.
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Thank you!

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Introduction to Question 3

Risk Management of Highly Hazardous Pesticides – CropLife International’s Approach
Industry approach

CropLife International HHP activities include

- Portfolio Review (Continuous activity that followed on a CLI-co-ordinated voluntary review by all member companies of their entire portfolios against the 8 HHP criteria)
- Support to the FAO registration toolkit (technical input & promotion)
- Promotion of the Code (e-learning tool)
- GHS implementation (CLI joined the High ambition coalition for the post 2020 chemical framework)
- Responsible Use programs (e.g. improved application, PPE)

- Regulatory Capacity Building (support for simplified risk assessment)
- Establishing Spray Service Providers Programs
- Industry guide on adherence to the Code/HPPs
- Risk Mitigation workshops (with all HHP stakeholders)
- Promotion of IPM (e-learning tools, projects in partnership)
- Engagement with UN sectors on HHP policy (FAO/WHO JMPM, SAICM/UNE)
Stewardship
Risk Reduction

• Responsible Use Farmer and Retailer Training
  • Scale: 23 million trained (2018)
  • Effectiveness: Working with behaviour change scientists

• PPE promotion in partnership
  • Technical – what PPE is effective
  • Supply chain to provide required PPE
  • Cost of PPE, challenge application of taxes

• Container Management
  • 51 programs worldwide
  • More than 900,000 tonnes of plastic managed since 2005

• Destruction of obsolete stocks
  • 15,000 tonnes catalogued, safeguarded and destroyed.
HHP commitment & activities

Member specific approaches to HHP management

- Examples by Bayer, BASF & FMC* highlighting 3 directions how members approach the issue:
  - 1. Stewardship (BASF), 2. Risk Mitigation (Bayer), 3. Regulatory (FMC)

- CropLife Members are all aligned on the same principles in their approaches:
  - Science-based and evidence-led
  - Providing a transparent dialogue with stakeholders
  - Leading Industry improvements by example

(* the following four slides)
Example 1

BASF stewardship activities

Suraksha Hamesha Trainings in India
Responsible and Safe use for HHPs and Beyond

How does it work?
- Dedicated direct farmer training on the nine steps of responsible use of crop protection products and personal protection measures
- Along with the training, BASF offers the Sanrakshan Kit, an affordable set of personal protective equipment
- In collaboration with local governments

~3,000
Agriculture dept. Officials participated

~21,000
Students reached

~200
Schools covered

>1,800
Channel partners reached

>29,000
Spray men trained

~150,000
Farmers trained

Plus
>2,500,000
Digital outreach

BASF supports use of HHPs only with appropriate Product Stewardship measures

Helping Farmers Grow
Bayer’s commitment to safe pesticide solutions

Bayer’s commitment to product safety goes beyond just meeting the local regulatory requirements with our products. In the exceptional cases where our products meet FAO’s HHP criteria, we conduct assessments to identify any potential risks based on the locally registered uses. If any potential risks are identified, we implement mitigation measures such as developing new formulations, reviewing the labels and increasing training. If we believe it is necessary, we voluntarily withdraw products from the market.

1. **Local Risk assessments worldwide:** Bayer has developed specific models to assess the safety of operators when they are using our products. We take into account the newest scientific knowledge, the safety standards of reference regulators, of the FAO/WHO and OECD. We pay special attention to uses where farmers may be most exposed.

2. **Our commitment to transparency:** since 2017, we enable access to Bayer’s safety studies. Following this same path, we will make these assessment models transparent.
Example 2 cont.

Bayer’s commitment to safe pesticide solutions

3. As examples of risk management and mitigation, in 2019 Bayer trained more than one million farmers around the world for the safe use and handling of crop protection products.

4. As additional examples, in 2012, we stopped selling any WHO acute class 1 pesticides, one of the HHP FAO criteria. We have decided to phase out all carbendazim-based products.

5. Since 2016, we have committed to only sell products with active ingredients which have a registration for use in at least one OECD country, or for new active ingredients with a complete OECD safety data package.
Example 3

Status of FMC’s HHPs

- FMC is continuing to phase out Highly Hazardous Pesticides (HHPs) from our product portfolio.
- We evaluate HHPs using the criteria and process defined by the United Nations Food and Agriculture Organization (FAO) which is the globally accepted regulatory classification scheme.
- At the end of 2019 we ceased our sales of carbofuran in the few remaining countries where it was sold.
- We currently have five HHPs remaining in our portfolio and are identifying those to be phased out over the next two years.
- In 2020, these five HHPs account for less than 0.5 percent of projected global sales.
- Risk assessments and product stewardship programs for the remaining HHPs in the specific countries of sales continues so we are aware of any issues that may occur and can mitigate them immediately.
- Utilization of our Product Stewardship and Sustainability Assessment tool (consists of 35 questions) ensures that we screen out potential HHPs early in the development process of new products.

FMC has a public and steadfast commitment to not develop or sell any new HHPs (judged on science-based application of criteria)
• **Question 3** What experiences do you have in identifying and implementing HHP Risk Management (Assessment & Mitigation) activities? What are the hurdles and what are the opportunities?

This question will be discussed for 30 minutes.

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Thank you!

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THANK YOU
for attending the third
Highly Hazardous
Pesticides
CoP
Discussion

Please fill out the following survey to give feedback on today’s discussion:

https://forms.office.com/Pages/ResponsePage.aspx?id=NUNFkk5Wz0ywsCREW4wD92pVK-1gQzNHlYW4qnca1WNUNlUT1o2VjJRvTA1N0EwRkpFMzhVQTthTsyQlQCn0PWcu

SAVE THE DATE
DISCUSSION 4

Date: 21 October 2020
TIME: 10:00 AM - 11:30 AM (GMT +2)

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