ROTTERDAM CONVENTION

Results template for SHPF pilot projects under the Rotterdam Convention.

Benefits of monitoring the health effects of pesticides

Pesticides can cause severe health impacts among their users and the wider community. In addition to the human tragedy that can result, there are significant economic implications resulting from loss of labour and the cost of treatment. 99 percent of the estimated three million people poisoned by pesticides each year are in countries with developing economies and the most serious and persistent problems associated with environmental contamination from pesticides are also in the developing world.

Pesticide poisoning often results from a lack of protective equipment or other precautions during mixing and spraying. Health surveillance can be used to detect significant problems among pesticide users and communities. The Rotterdam Convention provides a route through which such information can be shared with other countries likely to be experiencing similar problems.

Background

Article 6 of the Rotterdam Convention provides developing countries and those with economies in transition with the opportunity to inform the Secretariat of the problems caused by Severely Hazardous Pesticides Formulation (SHPF) under their national conditions of use.

In the Convention the phrase “severely hazardous pesticide formulation” means a chemical formulated for use as a pesticide that produces severe health or environmental effects observable within a short period of time after single or multiple exposures.

The Rotterdam Convention is interested in receiving information concerning ***any*** pesticide that causes severe health or environmental effects under common conditions of use, regardless of its hazard classification.
In the 10 years since the text of the Rotterdam Convention was adopted only a single proposal for listing a SHPF has been submitted to the Secretariat. This is in spite of widespread anecdotal evidence that a number of pesticides cause significant harm to health under the conditions of use in many developing countries.

Purpose of the results template

As a response to the lack of reports of severe health impacts by pesticides, the Secretariat of the Rotterdam Convention has sought ways to support countries to identify serious impacts on health caused by pesticides through a series of pilot projects. The purpose of such projects is not only to build capacity in the recipient country, but also to explore methodologies and approaches that can be shared with other countries. The results template presented here is designed to capture important lessons learned from these pilot projects in order to encourage and facilitate other countries to initiate their own surveillance programmes. It requests summary information in a standardised format for easy comparison. It is not intended to limit the feedback received; we ask that a full narrative and financial report is submitted along with the completed template.

We would like to improve the design of the template to make it easier to fill in and more effective as a communications tool. Your feedback is warmly welcomed at pic@fao.org.

Report template

Note that a completed template, with dummy data, is available at the end of the blank template. Please do refer to it as you complete this form.

Title of project:

Country:

Start date: **End date:**

Total cost of project:

Financial contribution by RC:

Implementing agency/agencies:

Contact details:

e-mail: **tel:**

Other information available on this project (e.g. reports, publications, website link):

1. **Target population:**

Location	Why location selected	How the target population is defined	Why the target population was chosen	Size of target population	Sample size

2. Project Implementation

Please provide a summary of the key steps to implementation and their duration

Please attach your work plan.

Please give your feedback on what worked well and what you would change with respect to the order / duration / nature of the tasks you planned.

3. Data Collection

Source(s) of data	Type of data	When was data collected?	If the data was retrospective, what was the timeframe from which data are drawn?	Data collection tool(s) used and their source

Did your project modify or develop your data collection tools? Yes / no

If yes, who were your data collection tools developed / modified by? How?

Please provide details of the methodology you used

Please provide feedback on how the tools/methodology worked in practice. Any changes you would make next time?

Please attach a copy of your data collection tools (surveys, forms etc)

4. **Resources and preparation**

Was any training required to implement the project?

Please give details (subject of training; duration; number of participants)

Would you modify the training in any way another time?

Please outline the structure of your team and their background

What other resources did you need?

5. **Data**

How many cases of health impacts of pesticides did you find?

Was all the data available that you required?

If no, which data were missing / hard to get hold of?

Do you judge that the data was reliable?

(Please describe any biases or problems that you came across.)

Is there anything that could be done to improve the reliability of the data?

Were you able to verify the data?

How many cases were suitable for reporting to PIC?

How many cases have been reported to PIC?

6. **Lessons learned**

Please describe anything that worked particularly well or badly, and how you would utilise your experience to advise someone who is developing a pilot surveillance project for the first time.

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Report template - Example

This template contains dummy data and explanatory notes to help you complete the empty form (above) correctly.

Title of project: Community health monitoring of tomato growers

Country: XXXia

Start date: DD.MM.YY **End date:** DD.MM.YY

Total cost of project: $XX,000

Financial contribution by RC: $YY,000

Implementing agency/agencies: Department of Public Health, Ministry of Health and Pesticides Regulatory Department, Ministry of Agriculture

Contact details:

Mrs XX YY, Project Manager, Room XXX, Department of ZZZ, Capital City, XXXia.

e-mail: XXYY@x.com **tel:** 88 (0)123 223344

Other information available on this project (e.g. reports, publications, website link):

Project proposal: available at http://www.xyz.co.xz/???

Publication: Health and pesticides in XXXia. J. Public Health X(Y) pp.XXX-YYY

1. Target population:

Location	Why location selected	Inclusion criteria	Why the target population was chosen	Size of target population	Sample size
District of X in Northern Zone	An area of high pesticide use. Anecdotal reports of health impacts from an NGO and primary healthcare services in the area	- adult (age 18+) - females or males - grow tomatoes for sale at market - apply pesticides to their own tomato crop. Large scale, commercial producers (who have employees applying agrochemicals) are excluded, as are small-scale producers who produce only for domestic consumption	Anecdotal reports of health impacts of pesticides. High levels of residues found on tomatoes sampled at market	Approx. 1000	150

2. Project implementation

Please provide a summary of the key steps to implementation and their duration

I. Project team assembled & tasks assigned (1 month)
II. Key stakeholders consulted for additional information and mobilisation (3 weeks)
III. Data collection tools reviewed and modified (3 weeks)
IV. Data collection tools tested and further refined (3 weeks)
V. Enumerators trained (10 days plus 5 days on-the-job training)
VI. Target communities mobilised and plans refined through 1 participatory workshop and 5 in-depth interviews with key stakeholders at district level (1 week)
VII. Data collection & verification (1 year)
VIII. Supervisory field visits (every 8 weeks)
IX. Data analysis (2 months)
X. Community feedback (1 week)
XI. Finalisation and reporting (1 month)

Please attach your work plan.

Please give your feedback on what worked well and what you would change with respect to the order / duration / nature of the tasks.

In future I would have the management team in the field for longer (say 1 month), working alongside enumerators & mobilising the local community. I would also have more frequent supervisory field visits, particularly during the spraying season.

3. Data collection

Source(s) of data	Type of data	When was data collected?	If the data was retrospective, what was the timeframe from which data are drawn?	Data collection tool(s) used and their source
Target population	Community-based surveillance	22.05.08 – 22.05.09	n/a	Survey, report cards and semi-structured interviews, based on those developed by XXX, as published in [*reference*] (attached) Rotterdam Convention Severely Hazardous Pesticide Formulation Report Form (SHPF RF)
District X Health Centre	Clinical records	22.03.09 – 22.05.09	22.05.08 – 22.05.09	Data form, as used by XXX published in [*reference*] (attached)

Did your project modify or develop your data collection tools? Yes / ~~no~~

If yes, who were your data collection tools developed / modified by? How?

The wording of the survey was modified to make it specific to the circumstances of targeted tomato producers. It was then translated into the local language (xxx) and pilot-tested on 12 targeted farmers before rolling out to the full sample of 150 tomato producers. Copies in English and xlanguage attached.

The questions for the semi-structured interviews were also adapted and tested as above. Copies in English and xlanguage attached.

The person responsible for developing and adapting data collection tools was Dr XYZ, from the Department of Epidemiology and Public Health, University of Maintown. E-mail: drxyz@main.co.mz

Please provide details of the methodology you used

Community mobilisation was achieved through participatory workshops and consultations with key stakeholders. These workshops were also used to provide background information and identify tomato growers.

Community health monitoring involved mobilising and training targeted individuals to complete pictoral self-report cards on a weekly basis. Field staff collected the cards and verified their contents, as far as possible.

Semi-structured interviews were also conducted with targeted householders

Clinical data was collected from the same time period as the community health monitoring and incidents that were reported to the health centre were cross-checked with community surveillance data.

Please provide feedback on how the tools/methodology worked in practice. Any changes you would make next time?

The use of self-reporting cards for participating farmers worked well. The illustrations were clearly understood by recipients and they were well-motivated to complete them. However, participants required significant support in the early weeks to understand our requirements and to gain confidence in completing report cards. In future I would plan for more frequent visits by enumerators (x often in the first x weeks, reducing to xx after x weeks) in order to better support participating farmers.

In future, I would limit this type of surveillance to the spraying seasons for tomatoes (April – June and October – November), when farmers can remember the details of incidents and the product containers are at hand.

Unlabelled, illegal products were relatively common. New funds are being sought to analyse samples of unlabelled product.

The clinical data frequently lacked information on the product related to a health incident, just stating '*pesticide*' in the relevant box under '*cause*'. A repeat of the current survey at a later date would be helpful, as the clinical staff are now aware of the need for more details of the product, when available (as are the local community).

Please attach a copy of your data collection tools used (surveys, forms etc)

4. Resources and preparation

Was any training required to implement the project? Yes

Please give details (subject of training; duration; number of participants)

12 extension agents received intensive training for two weeks in community health monitoring, followed by one week of on-the-job support. The training covered the following:

- Types of pesticides
- Symptoms of pesticide poisoning
- Selecting participants
- Introducing the project to potential participants
- Interview technique
- Confidentiality
- Completing forms correctly
- XXX

3 nursing staff from the District X Health Centre were also given specialist training on the diagnosis and treatment of pesticide poisoning and on the reporting of such incidents.

Would you modify the training in any way another time? Yes, I would train more field staff to allow for a greater rate of staff turnover during the project. I would provide top-up training mid-project.

Please outline the structure of your team and their background

Project Manager – Epidemiologist, Department of Public Health, Ministry of Health
Communications Officer – Communications and Extension Officer, XX Non-Governmental Organisation
Field Manager – Head of Extension Services, District X, Ministry of Agriculture
Enumerators (12) – District Extension Officers
Finance Officer – seconded from Finance Dept, Ministry of Agriculture

What other resources did you need?

Office space and administrative support was provided by MoH
1 vehicle was provided by Ministry of X on an as-needed basis
1 statistician was seconded from Ministry of Health for 3 months to advise on data collection (3 weeks) and for data analysis (9 weeks)

5. Data

How many cases of health impacts of pesticides did you find? 20

Was all the data available that you required? No

If no, which data were missing / hard to get hold of? In 13 cases it was not possible to determine the pesticide involved. In 8 of those cases an unlabelled, black market product was used. In 5 cases the container had been lost and the farmer could not remember details of the product.

The clinical staff had not recorded all the details identifying the product implicated in reported cases of poisoning.

Do you judge that the data was reliable?
Whilst some of the feedback from self-surveillance was rejected in months 1-3 on the basis that the respondents had mis-understood some aspect of reporting, the team are confident that the remaining data is robust. Where cross-checking was possible, it confirmed the information given in all cases.

Some of the enumerators tended to ask leading questions or to provide responses for the interviewee. Careful training and follow-up helped to resolve this problem.

The clinical data was less robust because staff lacked training in recognition of the symptoms of pesticide poisoning. Also, feedback from tomato growers indicates that the vast majority of poisoning cases go untreated and unreported.

(Please describe any biases or problems that you came across.)

Is there anything that could be done to improve the reliability of the data?

Farmers had some colloquial names for pesticide products, which were sometimes used for more than one product. It was important to spend time understanding the local names for products and which products they referred to. Carrying product containers during surveillance also helped to resolve this.

Now that clinical staff have received sensitisation and training in pesticide poisoning and reporting the data they generate in the future should be more complete and robust.

Were you able to verify the data?
Nine farmers were able to provide the pesticide containers relating to incidents of poisoning, which helped verify product data.

Clinical data was harder to verify. Some verification was provided by cross-checking data from tomato growers with clinical data, although only in a minority of cases.

How many cases were suitable for reporting to PIC?

3 cases were complete and verifiable and the clinical effects were severe. They all related to the same product and are suitable for submission together.

How many cases have been reported to PIC?

The results are currently being consolidated into the incident report form so that they can be sent to the Rotterdam Convention by the DNA.

6. Lessons learned

Please describe anything that worked particularly well or badly, and how you would utilise your experience to advise someone who is developing a pilot surveillance project for the first time.