

# WARNING:



**Pesticides are  
Dangerous to your Health!**

*CPAK: Community Pesticide Action Kits  
Taking action locally!*



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*Dedicated to the memory of Bernardo Calibo - employed for intermittent periods between 1967 to 1988 at IRRI and handled chemicals. In 1987, he was diagnosed with Parkinson's disease and terminated from work the year after. He succumbed to his illness and died in the first week of September 1999.*

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## PREFACE

The Community Pesticide Action Kit or CPAK has been prepared to help rural communities in Asia think about the problems that pesticides cause. It also encourages them to act collectively to address some of the issues. CPAK is produced by an ASEAN team of citizens' groups and peoples organisations:-

- Pesticide Action Network Asia and the Pacific, based in Malaysia
- Gita Pertiwi, Indonesia
- Pesticide Action Network Philippines, The Philippines
- Tenaganita, Malaysia

Nine modules will address various aspects of concern:

**Warning! Pesticides are a Danger to your Health**  
**Breaking the Silence: Pesticides in Plantations**  
**Profiting from Poisons: The Pesticides Industry**  
**Pesticides Destroy our World**  
**Women and Pesticides**  
**Drop Pesticides: An introduction to Sustainable Agriculture**  
**Keeping Watch: Pesticides Laws**  
**How to say NO! to Pesticides: Community Organising**  
**Seeking out the Poisons: A guide to Community Monitoring**

However, more modules are expected in future. The modules are not complete in themselves. Many additional materials in local languages will be needed. You may wish to supplement the modules with:

Cartoons	Puppets
Drama	Radio scripts
Games	Slides
Pictures	Stickers
Posters	Videos

Check around to find suitable materials. Many of these can actually be made by the community. You may always contact Pesticide Action Network Asia and the Pacific (PAN AP) for guidance.

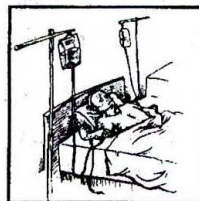
PAN AP would be very happy to receive any feedback on the kit and how you have used it. Lets work together to rid the world of toxic pesticides.



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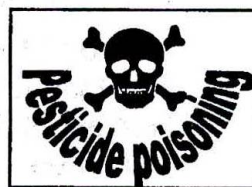
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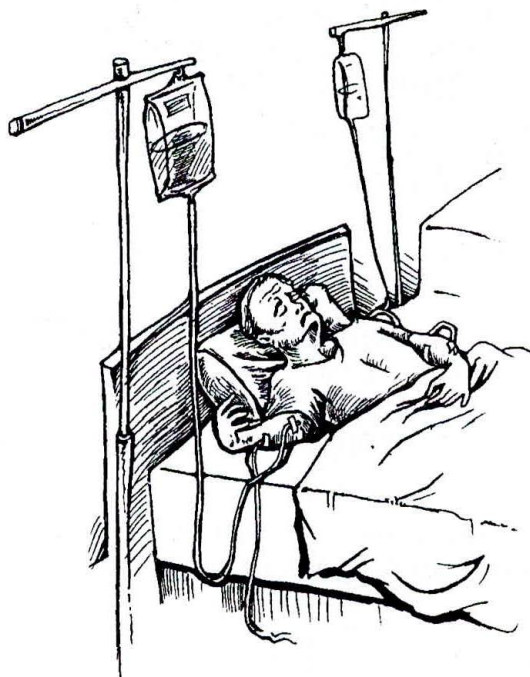
## **The Health Effects of Pesticides**

On the early morning of December 9, 1996, workers in Malita, Davao del Sur, Philippines, tried out a new pesticide in their cacao plantation. Pests in the area were becoming resistant to the other pesticides, they said. They thought it was time to try out stronger chemicals.

Twenty-two workers started spraying at 7:00 in the morning, not knowing that they were dealing with a very dangerous nerve gas type of pesticide. An hour later, one was unconscious. After three hours, the rest experienced nausea, vomiting, dizziness, blurring of vision. Several more lost consciousness. They were all brought to a hospital.

A second group of workers started at 10:00 in the morning of the same day, not knowing what had happened to the others. Within hours, they too were experiencing the same symptoms. Volunteer rescuers went to the area to help them but they too, were poisoned.

In all, 52 persons were admitted to hospitals for pesticide poisoning that day, 35 of them, severely affected.



# Pesticides Affect Everyone

**Your health. Your family's health. Your community's health.**

For farmers and families throughout the world who use (or live close to others who use) pesticides, their *number one concern* is how these might affect their health.

It's not just the farmer or labourer spraying pesticides who needs to be concerned. It's also families and neighbours who live close to where pesticides are used. It's pregnant women concerned about their unborn children. It's livestock and fish and birds. And it's whole communities whose water or food may be contaminated!



**Bad information can be murder!**

Pesticide companies often talk about the "*safe use of pesticides*" or advertise "*environmentally friendly*" pesticides.

Both of these statements are false. Pesticides are poisons – they can *never* be safe to use!

Pesticides kill living organisms and remain to contaminate land and water – they can *never* be friendly to the environment!



**Many people do not realize they are being poisoned by pesticides!**

Because many symptoms of pesticide poisoning are similar to other health problems – for example, skin rashes and dizziness – often people don't realize they are already being poisoned.

Because many problems don't show up immediately, such as nervous disorders or cancer, people don't realize that these illnesses may be caused by pesticides.

Many doctors are not trained to recognize pesticide-related illnesses or might even be discouraged by farm management from diagnosing them.

If you don't feel well after being exposed to pesticides, it is possible you have been poisoned. If you continue to be exposed, you could become seriously ill.

Don't let anyone else – a farm manager, a husband or a health worker – tell you that there's nothing wrong, that it's only the sun or bad food or something commonplace.

Learn to trust the messages from your body!

**Remember, you are the one who knows your body best!**

## • Farmers and Workers are Regularly Exposed to Pesticides

Bilkis, a woman farmer who is three months pregnant, picks cotton while her husband sprays pesticides. She is barefoot and uses no protective clothing. After working in the fields she feeds the animals, changes and hangs up her used clothes for use during the following day's work. Next day she continues work in her farm. When she is giddy she takes a fifteen-minute break and then continues working. She says, "when we enter the fields for the first picking, it is extremely suffocating. In fact, the whole village stinks with the smell of pesticides."



Carlos is a field worker with an international research centre from 1977 to 1990. He was exposed to a range of pesticides during those years. He was diagnosed with leukemia and his sickness was certified as work-related. He died on 23 January 1997 at the age of 38, leaving a wife and two children.



**Every year about 25 million workers  
suffer pesticide poisoning**



## • Children are also exposed

**“We had No Idea What to Do”, said a sobbing village women.**

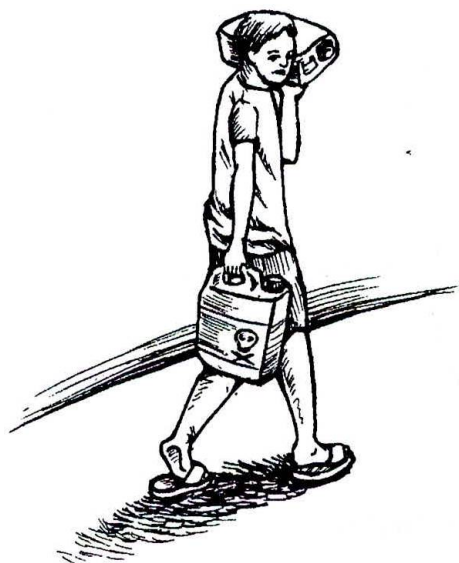
On 22 October 1999, 60 students sat down for breakfast in a village in Peru. Half an hour later, some of the children started retching with stomach cramps and collapsed around the school. They were screaming, vomiting and grabbing their bellies. Some were dead, while others lay writhing on the grass and in the school building. They were rushed to a hospital. Twenty-four children, some as young as four died. Doctors were fighting to save another 21 children who collapsed after consuming milk and cereals in school.

Local police and doctors found traces of an insecticide in the victim's stomach. It was later found that one of the bags of milk donated for the school breakfast was mixed with parathion, an insecticide and used to kill dogs and rodents. This was left lying in front of one farmer's house. The school children walking to school saw the bag and thinking that it was for their breakfast took it to school and prepared breakfast with it.



**“I help my Ma”, said Premanathan, a ten year old boy.**

Premanathan lives with his parents and five brothers and sisters. His is a farming family and his parents grow vegetables for the market. He helps in the farm after school and is often given money to go to the nearest retail shop to buy pesticides for the farm. He carries the containers on his shoulder and walks home. The used containers are thrown in the garden and his six-year old brother and his seven-year old sister often play with them. Once after playing with the used pesticide containers, his sister fainted and was rushed to the clinic for treatment. She came home after a day.



## How do these Pesticides Poison People?

### Through the skin

This can happen through spills on clothing or directly on the skin, when a farmer touches crops which have just been sprayed, when pesticide spray settles on skin or soaks clothing, when a farmer mixes pesticides with bare hands, or when a family member washes pesticide-contaminated clothes.

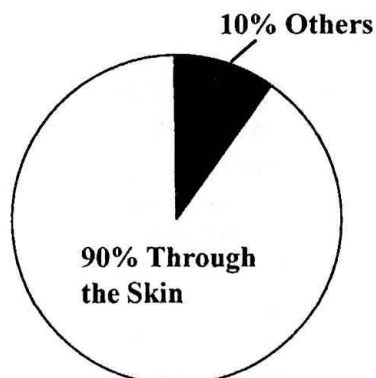
For farmers or workers in the fields, the major way that they are exposed to pesticides is through the skin.

### Through breathing

This is most common for farmers who spray pesticides, or for people nearby when spraying is done. It is important to remember that some poisonous pesticides have no smell.

### Through swallowing

This occurs when someone drinks pesticides accidentally or on purpose, when people eat food or drink water polluted with pesticides, or when people eat with their hands without carefully washing off pesticides which they had just handled.



**How pesticides get into the body**



# Acute Health Effects of Pesticides

All pesticides are potentially harmful to your health. There are two types of poisoning - immediate and long-term.

**Acute toxicity** occurs when the poisonous effects of the pesticide are felt right away. Another name for acute toxicity is acute poisoning.

**Chronic toxicity** occurs when the poisonous effects of pesticides on your health are delayed. That is, they take a long time to develop. These long-term effects may not occur until after months or years of exposure to the pesticide.

Some Acute Health Effects include:



- **What is the meaning of “local effects” of acute pesticide poisoning?**

Local acute effects are those that affect only the parts of the body the pesticide comes in direct contact with.

Local acute effects can be irritant effects such as dryness, burning, redness, and itching of the eyes, nose, throat and skin; watering of the eyes, and cough.

Or they can be skin problems, such as redness, itching, burning, rashes, blisters and discolouration. A common symptom of pesticide poisoning is when fingernails and toenails turn black or blue. In bad cases, the nails will even fall off.

- **What is the meaning of “systemic effects” of acute pesticide poisoning?**

Systemic effects of pesticide poisoning occur when the pesticide gets inside your body and affects your whole system.

Your blood carries the pesticide to all parts of your body and can affect your eyes, heart, lungs, stomach, intestines, liver, kidneys, muscles, brain and nerves.

The symptoms of systemic poisoning, and how quickly the pesticide poisons you depends on the type of chemical, and how long you are exposed to the pesticide, and how acutely toxic it is.





# Do pesticides have acute effects on the skin?

**YES!**

## • Which pesticides are known to cause skin problems among farm workers?

Fungicides as a group are more likely to cause skin diseases than other classes of pesticides. However, herbicides, insecticides and fumigants have also been reported to cause skin problems.

Pesticides are toxic substances which can be absorbed by the body through the skin. The skin is destroyed by the poisonous chemicals.

Sometimes, skin reactions come in the form of an allergy to the pesticide or another component in the formulation. The skin reacts strongly to the chemical even if the exposure is minimal.

Exposure to the sun can worsen some pesticide skin problems.

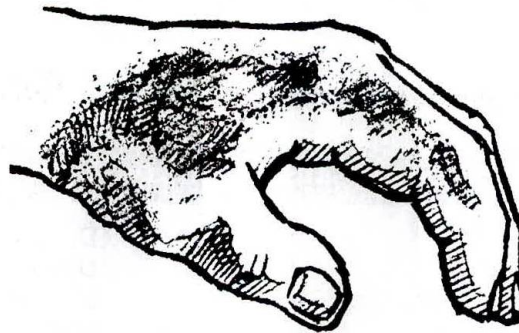
Fungicides	Herbicides	Insecticides	Fumigants
Benomyl	2,4-D	Arsenic	Dazomet
Captafol	Alachlor	Cryolite	Dichloropropene
Captan	Allidochlor	Dienochlor	Ethylene oxide
Chlorothalonil	Amitrole	Dinitrophenol	Metam sodium
Copper sulfate	Atrazine	Malathion	Methyl bromide
Dicloran (DCNA)	Barban	Naled	
Dinobuton	Diquat	Parathion	
Dinocap	Glyphosate	Pyrethrins	
Ditalimfos	MCPA		
Dithianon	Nitralin		
Dyrene	Paraquat		
Folpet	Phenmedipham		
HCB	Propachlor		
Maneb	Pyrazon		
Mancozeb			
Organotins			
PCNB	Just because a pesticide is not on this list does not mean that it is safe for your skin. Our bodies react differently to these chemicals. Some people are more prone to develop reactions than others.		
PCB			
Sulfur			
Thiophanate			
Thiram			
Triphenyltin			
Zineb			

## • How can you tell if a rash is caused by a pesticide?

Sometimes it may be difficult to tell which pesticide is causing a skin problem because workers are usually exposed to more than one pesticide.

Sometimes the skin problem is caused by things other than the pesticide: a reaction to the crop the worker is exposed to, insect bites, allergies to other substances, or skin infections.

Special tests, such as a patch test, can usually tell what is causing the rash. However, these types of tests are rarely available to farmers or workers. Generally, if a skin rash is noted after exposure to a pesticide, and if it disappears after exposure is stopped, then it is likely that the pesticide is causing the rash.



*Rashes*



## Do pesticides have chronic effects on .....

### the nervous system?

Many pesticides used in agriculture are very harmful to the brain and nerves.

Chemicals which harm the nervous system are called **neurotoxins**.

Some of the symptoms of organic brain disease caused by pesticides are severe memory problems, difficulty concentrating, changes in personality, paralysis, seizures, unconsciousness and coma.

### ...the liver?

Because the body uses the liver to break down toxic chemicals into less harmful substances, the liver itself is often harmed by pesticides. This can lead to toxic hepatitis.

### ...the stomach?

Vomiting, stomach aches and diarrhea are common symptoms of pesticide poisoning. Chronic exposure can also lead to more serious stomach problems. Many people who have worked with pesticides for years have a difficult time eating even regular foods.

For people who swallow pesticides - either accidentally or on purpose - the damage to the stomach is terrible. The pesticides eat right through the walls of the stomach.



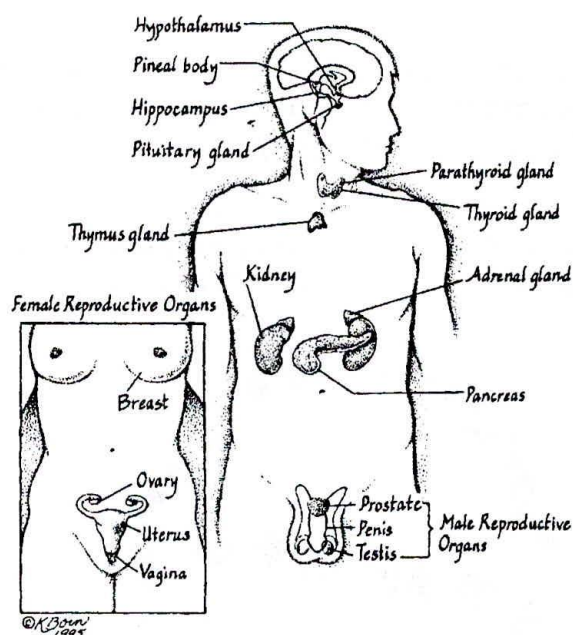
## ...the immune system?

Allergic reactions are disturbances in the body's immune system. It is a body's reaction to a foreign substance. Pesticides vary in their capacity to produce allergic reactions, and different people react in different degrees to pesticides.

Some pesticides have been found to disturb the body's immune system in a more dangerous way. Some pesticides can weaken the body's capacity to resist and fight infections. This means that it is easier to get infections. Or, if there is an infection already present, the illness becomes more complicated and difficult to cure.

## ...the balance of hormones in the body?

Studies on animals have shown that pesticides affect the body's hormone production. Hormones are chemicals produced by organs such as the brain, thyroid, parathyroid, kidneys, adrenals, testes and ovaries, to control important bodily functions. Some pesticides affect reproductive hormones causing decreased sperm production in the male or abnormal egg development in the female. Some pesticides can cause thyroid enlargement which could lead to thyroid cancer.



Some important glands, organs, and tissues sending or receiving hormonal messages in the human body.

Illustration from 'Our Stolen Future: Are we threatening our fertility, intelligence and survival? - A scientific detective story', by Theo Colborn, Dianne Dumanoski, and John Peterson Myers; Dutton, 1996.



### • Can pesticide exposure cause a miscarriage?

Many pesticides commonly used in agriculture are known or suspected to cause miscarriages in laboratory animals and so it is very possible they do the same to human beings.

Pesticides which cause miscarriages are called **embryotoxins**.

Some studies show that a mother's exposure to pesticides during the first months of pregnancy can cause a miscarriage.

It is also possible that parents' exposure to pesticides before a baby is conceived can cause miscarriages.



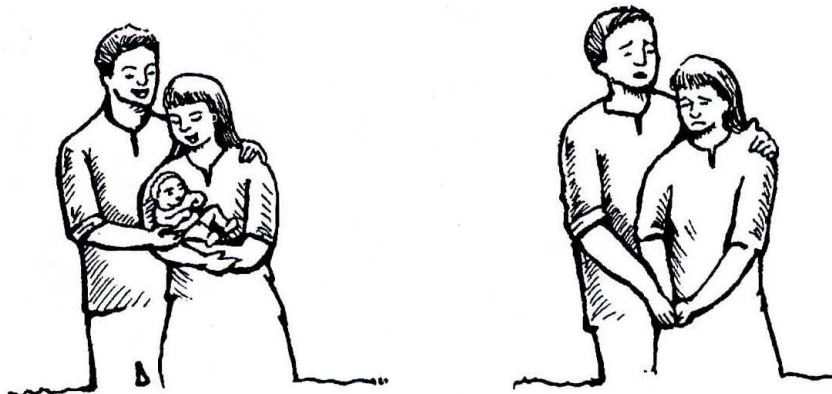
### • Can pesticides cause stillbirth?

Many pesticides commonly used in agriculture are known or suspected to cause stillbirth in laboratory animals. That is, their offsprings are born dead.

Pesticides which cause still birth are called **fetotoxins**.

Some studies suggest that the mother's exposure to pesticides during pregnancy can be related to the occurrence of stillbirths.

It is also possible that parents' exposure to pesticides before a baby is conceived can cause a stillbirth.



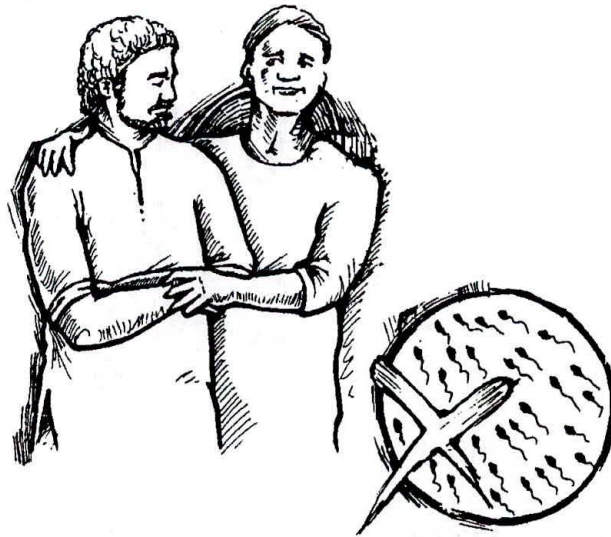
- **Can pesticides cause sterility in men?**

**Yes!**

Some pesticides are known to cause sterility and infertility in men. There are men who found they could no longer have children after exposure to these pesticides.

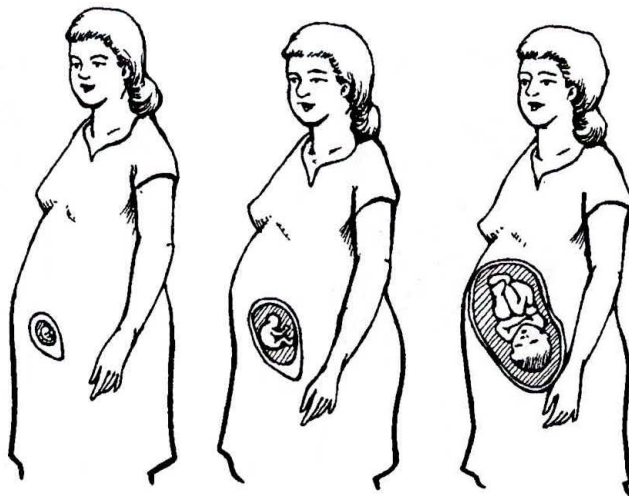
Some pesticides used in agriculture are known to cause infertility and sterility in animals. Pesticides can be very harmful to sperm cells, killing or deforming them.

Pesticides that harm sperm cells are called **spermatotoxins** or reproductive toxins.



- **Can a husband working with pesticides affect his pregnant wife who is otherwise not exposed?**

Research into these chemicals suggest that it is possible for an unborn child to be damaged even if the mother is not working with pesticides. Damage can come from contact with a husband involved in spraying.





## • Are babies exposed to pesticides when they breastfeed?

Yes, if the mother is exposed. However, breastfeeding is still very important for the wellbeing and nutrition of the baby. There are a great many protective substances in breastmilk which the baby cannot get from artificial feeding.

When pesticides enter the mother's body, they go to various organs such as the liver or kidneys and are only excreted through urine, faeces or sweat. Pesticides also go to the fatty parts of the body where they accumulate. One place is the woman's breasts. Breastmilk is often used to measure pesticide contamination because it is easy to get samples. Much easier than taking painful biopsies to measure other fatty tissue. Remember that other organs and all fatty parts of everyone's body would be contaminated. Rather than stopping breastfeeding we should stop pesticide use.



Breastmilk is Best for Babies

## • Do pesticides cause birth defects?

**Yes!**

Many pesticides which pass through the skin can also pass through the placenta and affect the developing child. There are studies which suggest a link between a mother's exposure to pesticides and birth defects. This is particularly the case for exposure during the first three months of pregnancy because this is when the baby's organs are being formed.

Because you are exposed to pesticides which can cause birth defects does not mean that your baby will develop birth defects. It simply means that your baby's chance of having birth defects is higher.

We do not know yet whether parents' exposure to pesticides *before* a baby is conceived can cause birth defects.



- **What pesticides are known or suspected to cause birth defects?**

Chemicals which cause birth defects are called **teratogens**.

Many chemicals used in manufacturing pesticides are known or suspected to cause birth defects in laboratory animals. As laboratory animals are mammals whose bodies are vulnerable to poisoning or disease just like people, there is a reasonable chance that these chemicals might similarly affect people.

The U.S. Environmental Protection Agency has a list of the following common pesticides which are known or suspected to cause birth defects (*see the box below*).

Herbicides	Fungicides	Insecticides
Acrolein	Benomyl	Avermectin
Bentazone	Captafol	Chlordimeform
Cyanazine	Folpet	Endosulfan
Bromoxynil	HCB	Ethion
2,4-D	Mancozeb	Phosmet
Dinocap	Maneb	Methyl parathion
Dinoseb	Tributyltin oxide	Mirex
Diquat	Tributyltin fluoride	Trichlorfon
Nitrofen	Triphenyltin acetate	
Picloram		
2,4,5-T		



## • Do pesticides cause cancer?

### Yes!

There are studies which show a relationship between exposure to pesticides and cancer in humans. This does not mean that if you are exposed to pesticides that can cause cancer, you will develop cancer. It means that your chances of getting cancer are greater than if you had not been exposed.

Another way of saying this is that you have a greater risk of getting cancer.

Chemicals which cause cancer are called **carcinogens**.

## • Which pesticides are known or suspected to cause cancer?

According to the U.S. Environmental Protection Agency, (EPA) the pesticides listed in the box below are known or suspected to cause cancer.

This is just the beginning: the California Environmental Protection Agency has a list more than three times as long.

Insecticides	Fungicides	Herbicides	Fumigants
Arsenic	Captafol	Acetochlor	DBCP
Cadmium	Captan	Acifluorfen	EDB
Chlordane	Chlorothalonil	Alachor	Dichloropropane
Chlordimeform	Folpet	Amitrole	Dichloropropene
DDT	HCB	Oxadiazon	
Dichlorvos	Maneb		
Dieldrin	Mancozeb		
Heptachlor			



## Nerve Gas Type Pesticides

### What types of pesticides are most acutely toxic or poisonous?

The most acutely toxic or poisonous pesticides are the ones similar to nerve gas – the organophosphates and methyl carbamates.

These pesticides are very dangerous because they attack cholinesterase, a substance that our nervous system needs to function properly. Nerve gas pesticides decrease the level of cholinesterase and that is what causes the symptoms of poisoning.

Nerve gas pesticides cause the most number of pesticide-related deaths throughout the world.

Some of the most poisonous nerve gas type pesticides are listed in the table below.

Organophosphates	Methylcarbamates
Azinophosmethyl	Aldicarb
Demeton methyl	Carbofuran
Dichlorvos / DDVP	Fomentanate
Disulfoton	Methomyl
Ethion	Oxamyl
Ethyl parathion / Parathion	Propoxur
Fenamiphos	
Fensulfothion	
Methamidophos	
Methidathion	
Methyl parathion	
Mevinphos	
Phorate	
Sulfotepp	
Terbufos	

## How long does it take to develop symptoms of poisoning from nerve gas type pesticides?

Acute poisoning can occur soon after exposure, usually within hours. The amount of time it takes for symptoms to develop depends on the following factors:

- ☒ how poisonous the pesticide is
- ☒ how concentrated the pesticide is and what it is mixed with
- ☒ how you are exposed – was it spilled directly onto your skin or was it ingested
- ☒ how long you have been working with the pesticide
- ☒ what protective clothing/equipment you are using
- ☒ what other pesticides you are using
- ☒ what the weather is like – is it hot or humid



**Nerve Gas Type Pesticides**



## • Symptoms of MILD poisoning by nerve gas type pesticides

A person who is poisoned may have some or all of these symptoms, depending on the pesticide and how quickly it poisoned them.

It is unusual to have only one symptom. It is possible to be mildly poisoned and not notice any of these symptoms especially if these develop gradually.

If you have any of these symptoms while working with pesticides, ***you should leave the work site immediately. You should not wait for more symptoms to develop or for these to get worse.***



Abdominal pains



Blurry vision



Chest pain



Diarrhoea



Dizziness



Excessive sweating



Headache



Muscle pains and cramps



Nausea and vomiting



Increased secretions from the eyes, nose and mouth

## • Symptoms of MODERATE poisoning

The symptoms of moderate poisoning by nerve gas type pesticides are the ones already listed for mild poisoning plus the following:



Confusion



Difficulty walking



Difficulty concentrating



General weakness



Muscle twitching



Small pupils (miosis)

If the poisoning occurred gradually over a few days or more, there may also be:



Difficulty in sleeping



Nightmares



Restlessness

If exposure continues, severe poisoning can result.

A worker who is moderately poisoned may have some or all of these symptoms, depending on the pesticide and the duration of exposure.

## • Symptoms of SEVERE poisoning

The symptoms of severe poisoning by nerve gas type pesticides are in addition to the ones already listed plus the following:

- ☒ Unconsciousness
- ☒ Involuntary urination and defecation
- ☒ Coma
- ☒ Very small pupils (marked miosis)
- ☒ Blue color of lips and nailbeds (cyanosis)
- ☒ Difficulty breathing
- ☒ Convulsions
- ☒ Death

If severe poisoning is not recognized and treated promptly and correctly, the victim may die.

---

**For Action!**    **Check the labels of the pesticides you are using.**



**Are any of these nerve gas type pesticides?**

**How often are you exposed to these pesticides?**

**Through which routes do these pesticides enter your body?**

**Have you experienced any of the above symptoms while you were using these pesticides?**

---



## • What is a cholinesterase test?

Cholinesterase is an enzyme in the blood needed to make nerves function properly. When someone is poisoned by organophosphate or carbamate pesticides, the level of cholinesterase goes down.

There are two types of cholinesterase in your blood one in your red blood cells and one in your plasma and there are two types of cholinesterase tests.

Because the tests examine different things, it is best if both types are done. If you can only get one type of test, however, it is best to get the level of cholinesterase in the red blood cells because it can tell the doctor more about what type of treatment would be effective.

## • Will a doctor know from a cholinesterase test if I have been poisoned?

If you have been severely poisoned, yes, because your cholinesterase level will clearly be very low.

Sometimes, however, it is difficult to tell from one test if someone has been mildly or moderately poisoned. This is because everybody's cholinesterase level is different. Because of this, you will need another test - done when you have not been exposed to pesticides - as a comparison.

A doctor may tell you your cholinesterase level is normal, but do not feel secure until you have done a comparison test!

Persons who have been exposed for long periods should have their levels checked regularly.

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### For Action!



**Do you work with nerve gas type pesticides?**

**If so, does your company have a programme for regular monitoring of cholinesterase levels?**

**Are there trained personnel who can interpret the results?**

**If these services are not available, what steps can you take to lobby for better health care?**

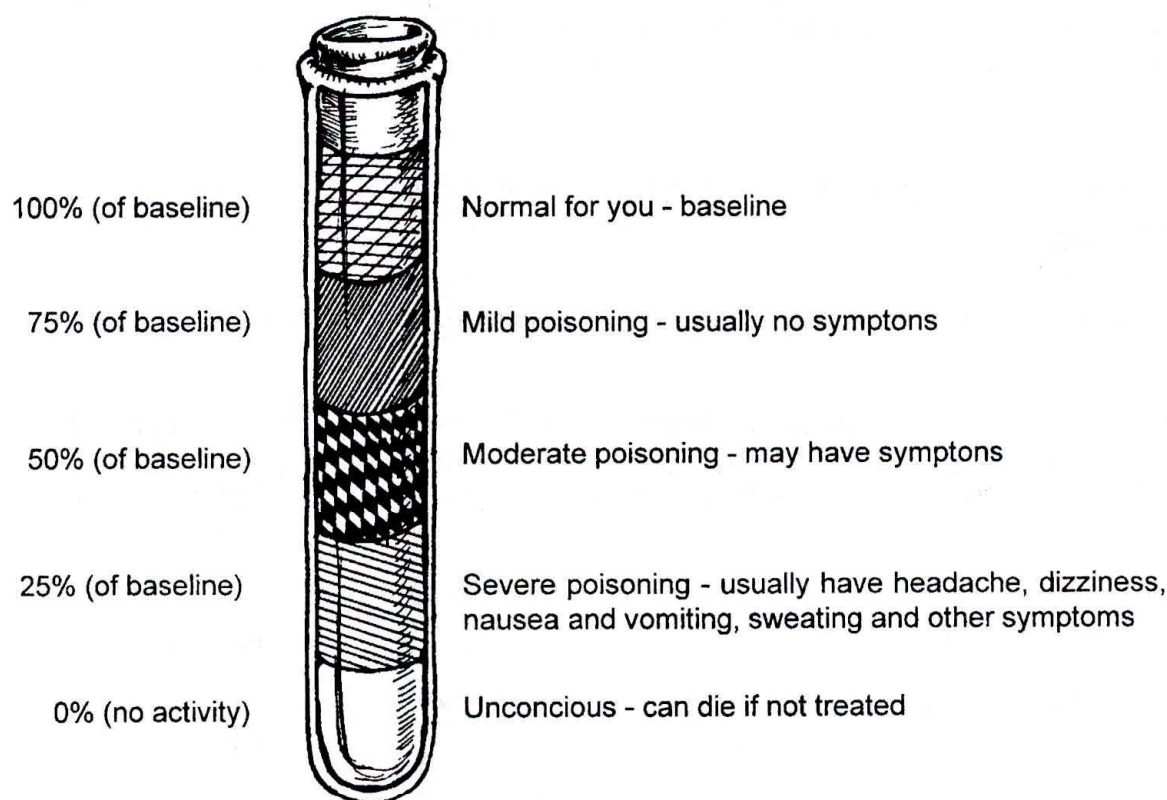
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• **If I have been poisoned, how long will it take my cholinesterase level to go back to normal?**

It depends on the type and severity of the pesticide poisoning. It can take as short as two days or longer than a month before your cholinesterase level goes back to normal levels.

Until your cholinesterase level is high enough, it is not safe for you to go back to work! If your levels are persistently low, it is dangerous for you to be exposed again.



---

**For Action!**



**If you find out that your cholinesterase level is dangerously low, what will you do?**

**Will it be possible for you to find other work?**

---

- **Are there drugs that can be used to treat poisoning with nerve gas type pesticides?**

The treatment for poisoning by organophosphate and methyl carbamate pesticides is a drug called *atropine*. Atropine is an *antidote*, a drug that counteracts the effects of a poison.

Another drug that is recommended as an antidote for some types of organophosphate poisoning is *pralidoxime* (2-PAM). It is effective only if given soon after the poisoning occurs.

There are prescribed ways of giving these drugs - when, how much, how often and for how long. Antidotes are also toxic substances and they can poison you if these are not properly used.

- **Are there drugs to counteract poisoning with other kinds of pesticides?**

**No!**

There is no antidote for most cases of pesticide poisoning.





## Some Pesticides and their Symptoms

### What are the symptoms of paraquat poisoning?

Paraquat is a powerful irritant that can cause severe injury to the eyes, skin, nose and throat.

It can cause skin and throat ulcers and severe nose bleeds.

Paraquat damages the fingernails, which can even fall out.

It can cause liver and kidney failure.

It can cause scarring of the lungs causing death from suffocation.

### • Is there an antidote to paraquat poisoning?

**No!**

It takes only a small amount of paraquat concentrate to cause death, especially when this is swallowed.

Workers have died from paraquat absorbed through the skin.

Paraquat has caused many deaths around the world.

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**For Action!**



**Are you exposed to paraquat?**

**How often?**

**Through which routes does it enter your body?**

**Have you experienced any of the above symptoms while you were using this pesticide?**

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## What are the symptoms of methyl bromide poisoning?

- |   |  |
|---|--|
| <input checked="" type="checkbox"/> Headache  | <input checked="" type="checkbox"/> Shakiness          |
| <input checked="" type="checkbox"/> Dizziness | <input checked="" type="checkbox"/> Difficulty walking |
| <input checked="" type="checkbox"/> Nausea    | <input checked="" type="checkbox"/> Convulsions        |
| <input checked="" type="checkbox"/> Vomiting  |  |

Methyl bromide is a gas that has no colour and at low concentrations, no odour. For this reason, the tear gas chloropicrin is sometimes added to formulations of methyl bromide so it can be detected more easily.

### • Methyl bromide can be a killer!

Methyl bromide is very irritating to the lungs and can cause difficulty in breathing, pneumonia, and accumulation of fluid in the lungs. These may not develop until a few hours after exposure.

If methyl bromide gets on your skin it can cause itching, blisters, or even severe burns.

Some survivors of methyl bromide poisoning may have permanent damage to the nervous system resulting in personality changes, memory loss, anxiety, difficulty concentrating and other mental problems.

---

**For Action! Are you exposed to methyl bromide?**



**How often?**

**Through which routes does it enter your body?**

**Have you experienced any of the above symptoms while you were using this pesticide?**

---



## What are the symptoms of organochlorine poisoning?

### • Symptoms of ACUTE poisoning include:

- |   |   |
|---|---|
| <input checked="" type="checkbox"/> Nausea    | <input checked="" type="checkbox"/> Agitation/Confusion |
| <input checked="" type="checkbox"/> Vomiting  | <input checked="" type="checkbox"/> Muscle spasms       |
| <input checked="" type="checkbox"/> Headache  | <input checked="" type="checkbox"/> Muscle weakness     |
| <input checked="" type="checkbox"/> Dizziness | <input checked="" type="checkbox"/> Convulsions         |

### • Symptoms of CHRONIC poisoning include the above symptoms plus the following:

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> Pallor       | <input checked="" type="checkbox"/> Heart problems        |
| <input checked="" type="checkbox"/> Skin lesions | <input checked="" type="checkbox"/> Liver problems        |
| <input checked="" type="checkbox"/> Sterility    | <input checked="" type="checkbox"/> Loss of consciousness |

### • Examples of organochlorines:

- |   |  |
|---|--|
| <input checked="" type="checkbox"/> Aldrin    | <input checked="" type="checkbox"/> Endosulfan |
| <input checked="" type="checkbox"/> Chlordane | <input checked="" type="checkbox"/> Endrin     |
| <input checked="" type="checkbox"/> DDT       | <input checked="" type="checkbox"/> Heptachlor |
| <input checked="" type="checkbox"/> Dieldrin  | <input checked="" type="checkbox"/> Lindane    |

---

**For Action!** Are you exposed to organochlorine pesticides?  
How often?



Through which routes do they enter your body?

Have you experienced any of the above symptoms while you were using these pesticides?

---



## Listen to your Body!

### • What to do in case of poisoning?

Most of the symptoms of pesticide poisoning are “non-specific.” This means other illnesses and conditions can cause the same symptoms. An example of a non-specific symptom is headache, which may be due to many other causes.

If you are mildly or moderately poisoned, it may be hard to tell whether your symptoms are from the flu, an upset stomach or other medical condition.

But if you were not sick when you got to your workplace and soon after you begin working with pesticides you feel sick, then suspect pesticides as the cause of your illness.

If other workers using the chemicals are also feeling the same symptoms, then chances are, the problem is pesticide poisoning.

If you are not certain about what is causing your symptoms, it is better to presume that these are due to pesticides. You don't want to risk severe poisoning!



## • What should I do if I feel like I am being poisoned by pesticides?

First and most important, stop working with the pesticides immediately. Leave the work site!

If you think you were poisoned by absorbing the pesticide on your skin, change your clothes and wash off the chemicals with soap and water.

Notify others – a family member, co-worker or supervisor – about your symptoms and ask them to help you seek medical care.

If you are suffering from acute pesticide poisoning, you will need emergency medical treatment.

Even if you are not certain that what you are feeling is due to pesticide poisoning, play safe, get out!



**If you have access to a health worker, ask the following questions:**

- Is it possible that my present illness is related to pesticide use?
- What tests can be done to determine whether my illness is caused by pesticides?
- Should I stop working with pesticides? For how long?
- Are there any medications which I should take?
- Will pesticide exposure affect my pregnancy?

### **Don't forget to bring the bottle or container!**

Remember to take the bottle or label of the pesticide with you so the health worker will know the probable cause for your symptoms.

## How does a health worker find out whether my symptoms are from pesticide poisoning?

The health worker will need to know the following:

- ☒ The name of the pesticides you worked with.
- ☒ How much was taken up.
- ☒ The circumstances surrounding your exposure. Mention the route of exposure (through the skin, lungs, stomach or a combination of these) and the reason for poisoning (intentional, accident, misuse or overexposure).
- ☒ Time of exposure and how soon after exposure your symptoms started.
- ☒ What your symptoms are. It will be more helpful if you could describe your symptoms according to the order in which they first occurred.
- ☒ Whether other co-workers have been experiencing similar problems.
- ☒ If you have been using a nerve gas type of pesticide (carbamate or organophosphate), your doctor will want to know your cholinesterase level.

Because many health workers are not trained to recognize the signs and symptoms of pesticide poisoning, sometimes they may give a different diagnosis or ignore your concerns entirely.

Do not hesitate to ask for another opinion.





## **What should I do if my supervisor does not believe I am having a problem with pesticides?**

This is a common problem, and one for which there is no easy answer. Sometimes your job and income are more important than disagreeing with your supervisor. Sometimes, supervisors are not aware of the toxic effects of pesticides or are more concerned with the profits derived from your work than the health of the workers.

Just remember, you are the one who knows your body best.

Pesticides are poisons and prolonged exposure can kill!



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### **For Action!**



**Find out about occupational health and safety regulations in your country which relate to pesticide exposure among agricultural workers.**

**Find out about compensation for occupational illnesses.**

---

## What should I do if I splash pesticides in my eyes?

Many farmers or farm workers have been blinded by pesticides splashed in their eyes. Common symptoms of pesticide poisoning in the eyes include burning sensation, watering of the eyes and blurred vision. Very small pupils can be a sign of severe poisoning.

**If you accidentally get pesticides in your eyes, do the following:**

- ☒ Open eyelids with your fingers and rinse your eyes immediately with running water for at least 30 minutes. If only one eye was affected, make sure washing does not cause contamination of the other eye.
- ☒ Never use eye drops! They are not antidotes to the poison and since they are used in small amounts, they cannot wash the poison from your eyes.
- ☒ Go and see a health worker as soon as possible.
- ☒ Bring the pesticide container with you when you consult a health worker.



## What should I do if I spill pesticides on my skin?

- ☒ Immediately wash the pesticide off with soap and lots of water.
- ☒ Remove contaminated clothing and jewelry.
- ☒ Take a bath as soon as possible.
- ☒ If you feel any symptoms of poisoning, see a health worker.
- ☒ Bring the pesticide container with you when you consult a health worker.





## What should I do if someone swallows a pesticide?

People sometimes swallow pesticides to commit suicide. Even if it is a horrible way to die, they use pesticides because they know these are poisonous and because these are readily available.

Sometimes pesticides are swallowed by mistake, particularly if they have been placed in a different container such as a beverage bottle. Sometimes curious, unsupervised children get hold of a pesticide bottle and taste its contents.

If you see or suspect poisoning from swallowed pesticides, you can do the following to help:

- ☒ Lay down the person with the head lower than the body and turned to one side to prevent aspiration in case he or she vomits.
- ☒ Clean the mouth of the patient with cloth or paper. Remove dentures and secretions. Make sure your hands are not contaminated in the process. If possible, wear rubber gloves.
- ☒ Remove all contaminated clothing and bathe the patient with soap and water. If the eyes are contaminated, rinse them with running water for 30 minutes.
- ☒ Help the person to vomit by tickling the back of the person's throat. This should be done especially if you know that the type of pesticide swallowed is very toxic and if professional medical help is not readily available. To keep the person from biting your fingers, use your other hand to force the cheek between the teeth. **NEVER** induce vomiting in an unconscious or convulsing patient, or in a patient with a known heart disease. Inducing vomiting in a woman in her late pregnancy is dangerous because this may put the foetus at risk.
- ☒ if you are near a health care facility, it is better not to give any fluids and instead allow medical professionals to give the patient fluids intravenously. However, if you think it will take many hours before medical assistance will be available, and if the patient is cooperative and conscious, let the patient drink plenty of water - several litres in the course of hours. This will make the patient urinate more, thereby eliminating the poison faster from his or her body. **DO NOT** give food. **DO NOT** give milk or alcohol. **NEVER** force an unconscious or convulsing patient to drink.
- ☒ Get medical help as soon as possible.
- ☒ Bring the pesticide container or label with you.



## If someone shows symptoms of pesticide poisoning, is there anything I can do?

Treatment for pesticide poisoning is best done by health professionals. However, there are some things you can do while waiting for medical help.

☒ Remove the person from the site. Be careful that you do not get the pesticides on your own body. Wear rubber gloves if possible.

☒ If there has been a spill, take off contaminated clothing and rinse the skin with soap and water.

☒ If the patient's skin feels very warm, sponge with cool water. If the patient is very cold, wrap him or her in a blanket.

☒ If the patient is having a convulsion, you may put cloth between his or her teeth to prevent tongue biting. Be careful in restraining the patient's body. Do this only to *prevent* injury not *cause* it. Holding down the limbs of a violently seizing person can cause bone fractures.

☒ If the person is not breathing, do cardio-pulmonary resuscitation if you are knowledgeable. Before doing mouth-to-mouth respiration, make sure there are no traces of pesticides in the mouth by wiping it with a clean cloth. You may also place a handkerchief between the mouth of the patient and the mouth of the person giving first aid.

☒ Ask about exposure. Know the chemicals used. Remember to bring the bottle of the pesticide with you so you can show this to the health worker later.

☒ Stay calm and reassure the patient – they can become very agitated.

☒ Seek medical help as quickly as possible.



## **The best cure for pesticide poisoning is prevention**

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### **For Action!**



**Go to your company clinic, the office of the nearest health worker, or your community clinic.**

**Are there people who are trained to handle cases of pesticide poisoning?**

**Are drugs and equipment available for emergency care?**

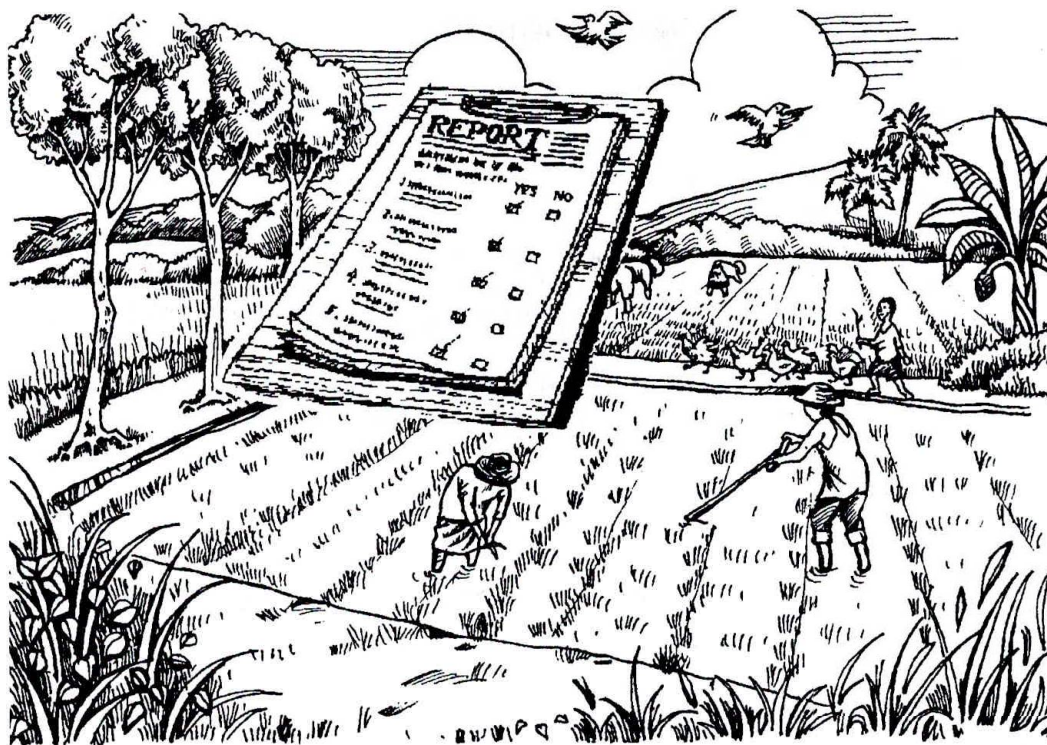
**If there have been previous cases of poisoning, what type of health care did the victims get?**

**If you are not satisfied with the quality of health care available, what can you do to improve the situation?**

**Learn about how to protect yourself from pesticide exposure at work.**

**Learn about alternatives to pesticide use.**

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## **KEEP AN EYE OUT**

### **What Is Community-based Pesticide Monitoring?**

Monitoring simply means regularly observing, looking at and recording the pesticide problems we face. It also means keeping track of what people, companies and governments are doing at the local level.

### **What Can Community Monitoring do?**

If people understand the harmful effects of pesticides, maybe they will seek to eliminate or reduce their use.

If you together with your community gather information about the damage to life and environment caused by pesticides, it will be possible to persuade your community to eliminate pesticide use and look for alternatives to pesticides.

With this information, it will also be possible to persuade the government to:

- change policies with encourage the use of pesticides and
- regulate the industry more effectively.



## How Can I Find Out If Pesticides Are Affecting My Community?

Community monitoring is one way to gather information on how pesticides are affecting your community. There are many ways to monitor. Monitoring can be specific and systematic gathering of detailed information or it could be a general and one-time information gathering to give an overview of the situation.

Some groups have started to use questionnaires, see Annex 1 and 2 to gather information on the pesticides used, spraying practices and health problems faced by the community.

In addition, one group has developed together with pesticide workers, daily health record sheets (see Annex 3). The pesticide workers who spray pesticides monitor their health by daily recording any symptoms of pesticide poisoning. These records are compiled and provide valuable information.

In the Philippines, a medical monitoring of pesticide workers was started and in Malaysia, a local group is undertaking testing of the levels of cholinesterase, an enzyme in the blood of plantation workers.

## What Can Communities Monitor?

- When pesticide users feel sick, and what are their symptoms
- How is the community exposed
- What concerns you and your community regarding pesticide use
- Have there been any pesticide poisoning incidents or deaths
- What are the pesticides used
- Are there any pesticides that are banned or not registered being used
- Are the pesticides properly packaged and labelled
- Who uses pesticides in the community and who makes the decision on what pesticides to buy and use
- How are pesticides sold, transported, mixed, and sprayed
- How are used containers disposed
- How does the pesticides industry promote and sell its products
- Are there successful alternatives to pesticides

## **Case Study: Health Impact of Pesticides on Women Pesticide Sprayers**

Women in the plantation sector in Malaysia spray pesticides almost daily. Concerned about the health impact of pesticides on women workers, Tenaganita decided to undertake a health monitoring project among women plantation workers in Malaysia. Developed in collaboration with Pesticide Action Network Asia and the Pacific and the National Poison Centre based at the University Science Malaysia, the study involved more than 100 workers. Tenaganita field workers visited plantations and over a few visits identified the workers involved in spraying pesticides. They then discussed with them the project. The workers were interviewed regarding their exposure to pesticides and any health symptoms (see annex 2). This survey was supplemented by sampling for blood cholinesterase levels. The Poison Centre compiled the results of the survey and did the blood analysis. Workers who showed severe cholinesterase depression were given follow-up examinations.

The survey was undertaken in plantations in two areas of peninsular Malaysia. Approximately 100 women pesticide sprayers are taking part in this survey. In a few cases, women were found to spray while pregnant. Preliminary results showed that the women had significant depression in their levels of cholinesterase. This level returned to normal in women who stopped spraying. Results of the survey are being shared with the sprayers.

The sprayers are now participating in a longer term self-monitoring of health symptoms where they are recording each day what pesticide they sprayed and to indicate if they experience any of a set of symptoms (see annex 3). This will help provide better data on the correlation between pesticide spraying and health impacts. Tenaganita is constantly organising training workshop for the workers to discuss impact of pesticide on their health, their rights as workers and discussion of their problems as women workers. Tenaganita shared the result of the study with the workers and together drafted the recommendations that will form part of the report.

Getting overt support from the plantation management for this survey was not possible. In several cases, some workers lost their jobs because of their involvement in the survey. Potential loss of job was also a hindrance to agreeing to have their blood samples taken.

One of the major achievements of the project is the increased self-worth of the plantation sprayers. For many of them, this is the first time that others are showing a serious concern over their health and well being. This is providing them with the courage to improve their living and work situations.

The results of the monitoring will help provide information to the workers and is a strong basis for the need to regularly monitor the health of plantation workers. The results will also call for stronger regulations on pesticides and encourage government action to address the health impact of pesticide use in plantations.



## How Can We Start Monitoring?

Meet together.

Decide what things are most important to your community.

Decide what information your community feels they are able to gather. Usually this should always include dates, names and the pesticide or incident (example, someone poisoned by pesticides).

You may want to start by using a questionnaire to monitor the impact of pesticides on health, please look at Annex 1. This questionnaire was developed and used by PAN Philippines. Annex 2 is the questionnaire used by Tenaganita in Malaysia to gather information on the use of pesticides by plantation workers and the impact on the health.

These questionnaires will help guide you. However, you may want to use relevant parts from these questionnaires to formulate your own questionnaires. This may depend on the situation of your community's exposure to pesticides.

Daily records of health of the pesticide worker or applicator (see annex 2) is also useful. Remember – any relevant information for example, nausea – should be recorded on the day it happens.

Observations are also important. General information on the health of the community while pesticides are being used should be recorded. Any unusual cases of skin rashes, or fainting and even people suffering from cancers or women having abortions over a period of time should be recorded with name and date of that occurrence.





## What next?

First of all – analyse the information with your own group. See if any of it can be useful in your advocacy with the local or national government.

Then, send your information to the organisations listed at the back. They are gathering similar information from communities throughout the country and are working together with similar groups in other countries of Asia.

If you choose to share the data with these other groups that will not be the end of it. They will make sure your group is kept up to date on any useful findings and plans and activities.

Your group will become part of an international team!

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**For Action!**



**Get your group involved in pesticides monitoring!**

**JOIN THE ASIAN CAMPAIGN!**

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## Together we can make change

Your community is not alone

Groups of farmers, workers and women throughout your country and the entire Asia-Pacific region are working together to gather information about pesticides and farm practices.

This data is being gathered and organised for each country, as well as the entire region. If we have hundreds of reports, from different countries, with names and dates, about adverse health effects of a pesticide, even politicians will have to listen!





## **What Do We Hope to Accomplish?**

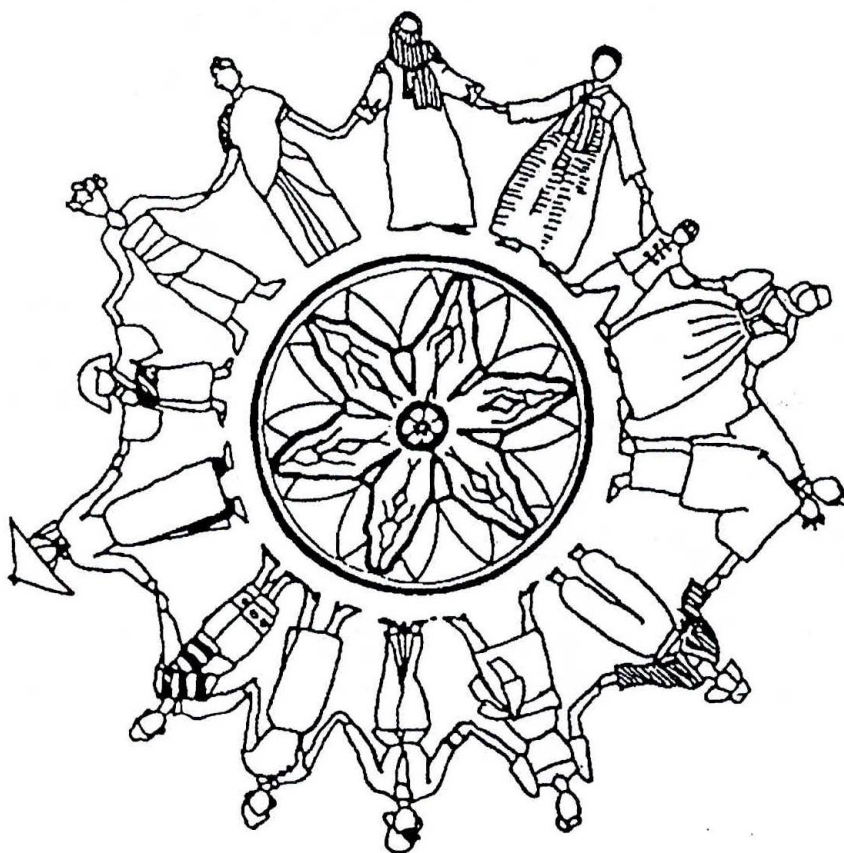
We hope to stop pesticide poisoning from occurring. We hope that community monitoring will contribute towards building stronger farmers groups and people's organisations. And we will work together to pressure for better regulations covering the manufacture, marketing and use of pesticides.

We want to build enough information of the deadly dangers of pesticides that will be impossible to deny, and governments will be forced to ban or restrict these poisons.

We want the pesticide industry to act responsibly by stopping the production and sales of pesticides that have poisoned farmers, workers, people and their environment. We will work together to ensure the industry is made accountable for its actions.

**Get your group involved in pesticides monitoring!**

**JOIN THE ASIAN CAMPAIGN!**





## Where You Can Go for Help in Indonesia

### **Gita Pertiwi**

Griyan Lama No.20 Rt.01/Rwl  
Solo 57171, Indonesia  
tel: (6271) 710465;  
fax: (6271) 718956  
email: gita@slo.mega.net.id

### **Yayasan Pengembangan Pedesaan**

(Rural Development Foundation)  
Tursari IV/25, Solo - 57197  
Central Java, Indonesia.  
tel: (0271) 711674

### **LSK - Bina Bakat**

(Institute for Social Study and Skill  
Development)  
Jalan Ki Mangunsarkoro No. 79  
Solo - 57136, Central Java, Indonesia  
tel: (0271) 718594  
fax: (0271) 719770 (Wartel Manahan)

### **Mitra Tani Association**

Jalan Nitikan Baru Nombor 95  
Yogyakarta - 55162  
tel/fax: (0274) 381101

### **Hari Pangan Sedunia**

(World Food Day)  
Tegalendu KG II Rt 50/Rw XI  
Yogyakarta  
tel/fax: (0274) 380776

### **Pusat Pendidikan Lingkungan Hidup**

(Environmental Education Training  
Centre)  
Seloliman Trawas, Mojokerto  
Propinsi Jawa Timur  
P.O. Box 03 Trawas Mojokerto -  
61375  
tel: (0343) 880884  
fax: (0321) 618752

## Where You Can Go for Help in Malaysia

### **Tenaganita (Women's Force)**

11th Floor, Wisma Yakin  
Jalan Masjid India  
50100 Kuala Lumpur  
tel: (603) 291-3681/291-3691  
fax: (603) 291-3681

### **Pusat Racun Negara**

National Poison Control Centre  
Universiti Sains Malaysia  
11800 Penang  
Malaysia  
tel/fax: (604) 6568417

### **People's Service Organization**

13, Taman Berjantai,  
Jalan Bukit Badong  
45600 Batang Berjantai, Selangor  
tel: (603) 8719125

## Where You Can Go for Help in Philippines

### **PAN Philippines**

Rm. 308 Department of Pharmacology  
U.P. College of Medicine,  
547 Pedro Gil St., Ermita, Manila  
tel: (632) 5264248 / 5218251  
fax: (632) 5218251  
email: romyq@manila-online.net

### **AMIHAN**

No. 61-B Evangelista Street, Project 4,  
Quezon City, Philippines  
tel: (632) 4372173  
fax: (632) 9139244

### **SIBAT**

#10 Alley 13, Project 6, Quezon City  
tel: (632) 9293220  
tel/fax: (632) 9291140  
email: sibat@info.com.ph

### **ANI Foundation**

Suerte Subdivision, Kidapawan City  
tel: (064-23) 81665

### **OFFERS Training Center**

Kisante, Makilala, North Cotabato  
tel: (064-23) 81453 (thru Rose  
Catedrilla)

### **Health Alliance for Democracy- Negros**

Riverside Hospital, Bacolod City  
tel: (034) 4337331 (thru Dr. Ethel  
Tangarorang, Silay City)  
tel: (034) 57185

### **Visayas Primary Health Care Program**

Rm. 203 Crestly Bldg., Osmena Blvd.,  
Cebu City,  
tel: (032) 2544663

## Where Else You Can Go for Help in Asia Pacific

### **Pesticide Action Network Asia and the Pacific (PAN AP)**

P.O. Box 1170, 10850, Penang, Malaysia  
tel: (604) 6570271/ 6560381  
fax: (604) 6577445  
email: panap@panap.po.my  
homepage: <http://www.poptel.org.uk/panap/>

## Annex: 1 Community Monitoring of Pesticide Health Effects

1. Name of person affected by pesticide \_\_\_\_\_
  2. Address \_\_\_\_\_
  3. Age \_\_\_\_\_ Male \_\_\_\_\_ Female \_\_\_\_\_ Pregnant \_\_\_\_\_
  4. Does the person affected own the farm he is tilling? ☐ Yes ☐ No
  5. Date when the adverse effect of the pesticide happened \_\_\_\_\_
  6. What was the adverse effect of the pesticide? (State precisely what happened, what signs and symptoms were experienced) \_\_\_\_\_
  7. What is the name of the pesticide? \_\_\_\_\_
  8. Was the person affected also the one who used the pesticide? ☐ Yes ☐ No
  9. Did the user wear gloves, masks or any protective clothing? ☐ Yes ☐ No
  10. How was the affected person exposed to the pesticide?
    - a) In spraying
    - b) In mixing the pesticide
    - c) In spreading pesticide
    - d) Ingestion of contaminated food
    - e) In wading through the water
    - f) Others
  11. What happened to the person affected by the pesticide?
    - a) Died
    - b) Seriously bedridden
    - c) Nothing serious happened
    - d) Brought to the hospital
    - e) Others
  12. How long after exposure before the adverse effect was felt or seen?
    - a) Immediately after
    - b) Few hours after
    - c) one day after
    - d) more than 1 day after
  13. How long did the adverse effect of the pesticide last?
    - a) Few minutes
    - b) Few hours
    - c) one day
    - d) more than 1 day
  14. How often was the person affected exposed to pesticide?
    - a) almost daily
    - b) weekly
    - c) monthly
    - d) less than once a month
    - e) rarely
  15. Did the person affected experience the same effects before? ☐ Yes ☐ No
  16. Did the person affected have any disease prior to the pesticide effect?
   
☐ Yes ☐ No
  17. If yes, what was the disease \_\_\_\_\_
  18. Was the person affected taking medications prior to the pesticide effect?
   
☐ Yes ☐ No
  19. If yes, what were the medicines being taken? \_\_\_\_\_
  20. Was the person affected by the pesticide a smoker?
    - a) No
    - b) 1-10 sticks/day
    - c) more than 10 sticks/day
  21. Was he a drinker of alcoholic beverages?
    - a) No
    - b) almost everyday
    - c) a few times/week
    - d) a few times a month
  22. Did the person affected drink alcoholic beverage prior to the pesticide effect?
   
☐ Yes ☐ No
  23. Are there any other things/factors that might have caused the symptoms/signs, which were perceived to be pesticide effect?
   
☐ Yes ☐ No
  24. If Yes, what? \_\_\_\_\_
- Name of person who made this report: \_\_\_\_\_
- Address: \_\_\_\_\_
- Organisation: \_\_\_\_\_
- Date when report was made: \_\_\_\_\_



## **Annex : 2 WOMEN CONFRONTING THE CYCLE OF POISON**

### **Questionnaire On Pesticide Spraying In Plantations**

Name : \_\_\_\_\_

Location : \_\_\_\_\_

#### **Personal Particulars:**

Sex : \_\_\_\_\_ Age : \_\_\_\_\_ Race : \_\_\_\_\_

Marital Status : \_\_\_\_\_ Occupation of Spouse : \_\_\_\_\_

No. of children : \_\_\_\_\_ Nature of work/Occupation : \_\_\_\_\_

Length of Service : \_\_\_\_\_ Salary : \_\_\_\_\_

Are you a : Permanent worker ☐ contract worker ☐ migrant ☐

Working hours (no of hours of work): ☐ per day ☐ per week ☐ per month

Are you pregnant or breastfeeding : \_\_\_\_\_

#### **Pesticide Use**

Are you a pesticide sprayer ☐ Yes ☐ No

Date of last exposure to pesticide : \_\_\_\_\_

#### **1. What class of pesticide used in the field :**

Weedicide ☐ Insecticide ☐ Fungicides ☐

Others ☐

#### **2. What pesticide do you use :**

Common Name : \_\_\_\_\_ Brand Name : \_\_\_\_\_

What is it used for \_\_\_\_\_

How often in a year do you apply this

Do you spray throughout the year : ☐ Yes ☐ No

Is there a break given : ☐ Yes ☐ No

If there is a break for how long \_\_\_\_\_

What type of task are you assigned \_\_\_\_\_

How long after spraying are you assigned to another task \_\_\_\_\_

Frequency in a month \_\_\_\_\_

Number of hours per spray \_\_\_\_\_

**3. Equipment:**

Method of spray (equipment used) \_\_\_\_\_

What was the condition of the equipment \_\_\_\_\_

How is it stored \_\_\_\_\_

Was training provided on use \_\_\_\_\_

**4. Protective clothings:**

Was protective clothing/equipment supplied ☐ Yes ☐ No

If yes, what were they?

coveralls ☐ gloves ☐ eye and face protection- ☐

aprons and coats ☐ protective boots ☐ respiratory equipment ☐

Is protective clothing washed after it is used ☐ Yes ☐ No

**5. Mixing of Pesticide:**

Do you mix the pesticides before spraying ☐ Yes ☐ No

If not, who mixes \_\_\_\_\_

What is the pesticide mixed with \_\_\_\_\_

What are the quantities \_\_\_\_\_

Do you mix it with other pesticides ☐ Yes ☐ No

If yes what are they \_\_\_\_\_

What are the quantities \_\_\_\_\_

## 6. Effect of the Pesticide

After spraying do you suffer from:-

- |   |   |
|---|---|
| <input type="checkbox"/> nausea   | <input type="checkbox"/> tremours   |
| <input type="checkbox"/> giddiness  | <input type="checkbox"/> lower abdominal pains  |
| <input type="checkbox"/> headache   | <input type="checkbox"/> vaginal pains  |
| <input type="checkbox"/> vomiting   | <input type="checkbox"/> burning sensation during urination   |
| <input type="checkbox"/> difficulty in breathing  | <input type="checkbox"/> fatigue / tiredness  |
| <input type="checkbox"/> tight feeling of chest   | <input type="checkbox"/> back pains   |
| <input type="checkbox"/> itchiness / skin irritation /<br>white patches on skin / red spots<br>(where on the body?) | <input type="checkbox"/> swelling of the knee joints  |
| <input type="checkbox"/> bleeding through the nose  | <input type="checkbox"/> Discolouration of nails / inflammation and<br>irregular nails / nails dropping off |
| <input type="checkbox"/> vomiting   | <input type="checkbox"/> Others   |
| <input type="checkbox"/> blurred vision   |   |

Have you been exposed to pesticides / come in contact with pesticides

- |                          |                              |                             |
|--------------------------|------------------------------|-----------------------------|
| Through inhalation       | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| On the skin              | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Accidentally consumed it | <input type="checkbox"/> Yes | <input type="checkbox"/> No |

## 7. Medical

1. Who do you go to when you have any of the effects of poisoning ?
2. What treatment is given:  
medicines : type : ☐ cream      ☐ drug / tablets for consumption  
☐ liquid form
3. Do you go for regular medical check-ups ?
4. Where do you go for check-ups ?
5. Who conducts the medical examination ?
6. Is there a policy in the plantation on sending sprayers for regular check-ups ?



## ANNEX: 3

### சுகாதார குறிப்பு / REKOD KESIHATAN / HEALTH RECORD

Name:

பெயர்:

Nama:

வயது:

Umur/Age:











Identity Card No:












அடையாளக் காட்டு எண்:

No Kad Pengenalan:

தோட்டம்:

Tempat/place:

எண் No	Symptoms of poisoning நோய் அறிகுறிகள் Tanda - Tanda Penyakit	திகதி / Tarikh						
1	 குமட்டல் Rasa Mual Nausea							
2	 வாந்தி Muntah Vomitting							
3	 மயக்கம் Pening Kepala Dizziness							
4	 தலைவலி Sakit Kepala Headache							
5	 மூக்கில் ரத்தம் Hidung Berdarah Bleeding Nose							
6	 மூச்சுத் திணறல் Susah Bernafas Breathing Difficulties							
7	 நெஞ்சு இறுக்கம் Dada Ketat Chest Tightness							
8	 முதுகு வலி Sakit Belakang Backache							
9	 நடுக்கம் Menggigil Tremours							
10	 முட்டிக்கால் வீக்கம் Bengkak Lutut Swollen Knee							

எண் No	நோய் அறிகுறிகள் Tanda - Tanda Penyakit	திகதி / Tarikh					
11	 Fatigue சோர்வு / களைப்பு Penat						
12	 Lower Abdominal Pain அடிவயிற்று வலி Kesakitan Bawah Perut						
13	 Vaginal Pain பெண் குறியில் வலி Sakit Faraj						
14	 Pain while urinating சிறு நீர் கழிக்கையில் எரிச்சல் Pedih semasa kencing						
15	 Eye Itchiness கண் அரிப்பு Gatal Mata						
16	 Blured Vision மங்கலான பார்வை Kelihatan Kurang Terang						
17	 Discoloured Nails நகம் நிறமாறுதல் Ubahan Warna Kuku						
18	 Swollen Fingers விரல்கள் வீங்குதல் Bengkak Jari						
19	 Nails Dropping Off நகம் விழுதல் Kuku Tanggal						
20	 Rashes / Itchiness சொறி / அரிப்பு Kudis / Gatal						
21	 Pain in the Joints உடல் மூட்டு வலி Sakit Sendi Badan						

# **Community Monitoring - A Summary**

## **What is Community-Based Pesticides Monitoring?**

- community-based pesticides monitoring means: ordinary people involved in collecting information on how pesticides are used and the problems they cause.
- to do this, the people work together to observe and record data about pesticides and the danger they cause to people and the environment - as well as collecting data on alternatives to pesticides.

## **What Can Community-Based Pesticides Monitoring Do?**

- if people understand the harm that pesticides are doing to their health, their land and their community, maybe they will seek to eliminate or reduce the use of pesticides.
- if communities help gather information about the damages caused by pesticides use, it will be possible to persuade the government to change policies which encourage the use of pesticides and to regulate the industry more effectively.

## **What Can Communities Monitor?**

- when pesticide users feel sick and their symptoms.
- how the pesticides industry promotes and sells its products.
- what pesticides are doing to the land and environment.
- successful alternatives to the use of pesticides.
- what concerns you in your community regarding pesticide use.



C-PAK (Community-Pesticides Action Kit) is a "kit": a series of modules on the dangers of - and alternatives to - the use of pesticides. The kit also seeks to encourage communities to be involved in monitoring of the adverse effects of pesticides use and in developing awareness and to take action against pesticides.

### **Confront the cycle of poison!!**

C-PAK is produced by an ASEAN team of NGOs:

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**Confront the cycle of poison in your community!**

**Take action to better your community!**