

# Conducting a school deworming day

A manual for teachers



World Health Organization

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## **What are intestinal worm infections?**

Intestinal worms are parasites that live in the human intestines or in the veins around the bladder. These worms are transmitted by eggs excreted in human faeces or urine, which contaminate the soil or water sources in areas that lack adequate sanitation. The worms consume part of the nutrients and vitamins that children ingest.

## **Why do children need deworming?**

Children are most vulnerable to worm infections, as their immune system is not yet fully developed. Untreated worm infections prevent children's healthy growth, cause poor nutrition and reduce their capacity to concentrate and learn.

The treatment is simple, safe, effective and free of charge. A single dose of deworming treatment drastically reduces the number of worms in each child.

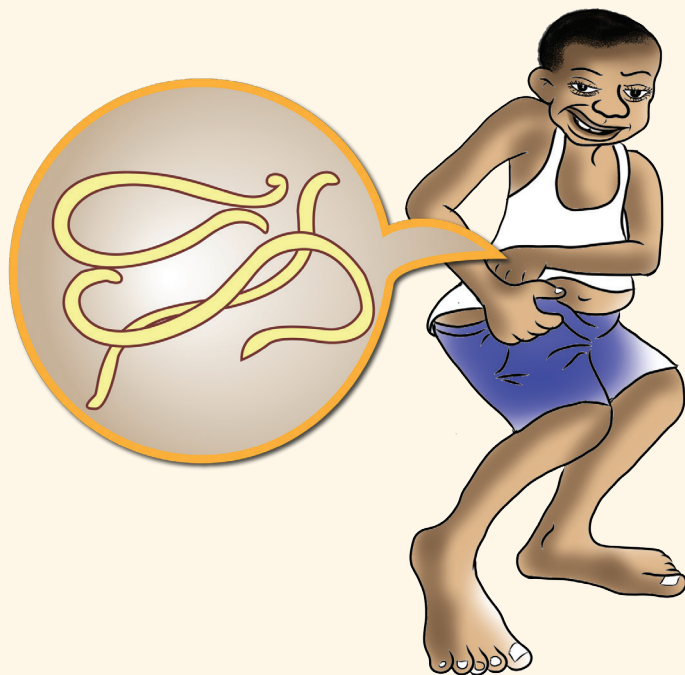
Regular treatment contributes to good health and nutrition for children of school age, which in turn leads to increased enrolment and attendance, reduced class repetition and better educational attainment.

Children need these deworming medicines to grow healthier and learn better in school.

As a teacher, you can play an important role in ensuring that every child in your class takes the appropriate dosage of medicine.







## Teach children how to prevent infections:

- ▶ Always use a toilet or latrine. This will prevent faeces from contaminating the soil.
- ▶ Always wash hands with soap after using the latrine, and keep hands clean.
- ▶ Wash fruits and vegetables with clean water.
- ▶ Always wear shoes, and avoid walking barefoot in rivers, dams or rice fields.
- ▶ Take deworming tablets at least once a year.

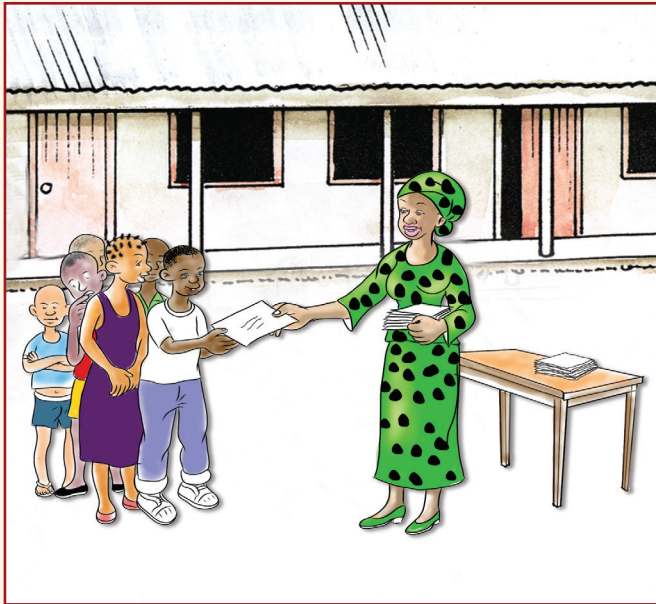
If you would like to learn more about the diseases:

[www.who.int/neglected\\_diseases/diseases/en/](http://www.who.int/neglected_diseases/diseases/en/)

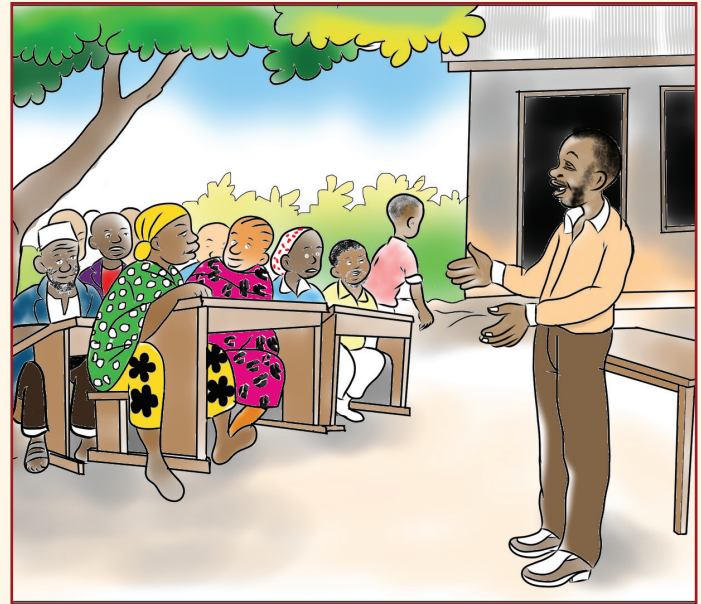
## **Before deworming day**

1. All children without other illness should be treated during a school deworming day.
2. Therefore, it is important to mobilize parents and the community to ensure that children attend school and participate on that day.
3. Teachers must inform parents of the importance of deworming so that parental consent to treat their children is obtained before the deworming day.
4. The best way to inform parents is to organize a group meeting. When this is not possible, you should ask pupils to hand a notification letter to their parents. In some communities, parental agreement is required before a child is given any deworming treatment.
5. Two examples of notifications are given in Annex I. Choose one of the two examples and modify the text as appropriate for distribution.
6. Remember that the purpose of a school deworming day is to ensure that all school-age children are treated. You can therefore tell the children in your class to bring siblings and friends of school age with them, even if they are not enrolled in school.

Send a notification letter home with children



Organize a group meeting with parents



# Materials needed for a school deworming day

To treat children against intestinal worms you need:

- ▶ Albendazole or mebendazole: the two medicines have the same effect. You should distribute either albendazole or mebendazole, not both.
- ▶ Praziquantel with a 'dose pole' to define the dose of praziquantel per child: each child must be given the correct number of tablets according to his or her height.
- ▶ Drinking-water and cups.
- ▶ Distribution form to register the children who are treated (Annex 2).
- ▶ Reactions should be recorded on the form in Annex 3.



AND



OR



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**Annex 3: Severe Adverse Events Reporting Form (filled as Example)**

**Incident Report Date:** 04 March 2014

**Treatment, dose and site:** Praziquantel 600 mg tablets, 1 tablet, orally

**Date of birth:** 15/03/2014

**Address:** 123 Main Street, London, UK

**Manufacturer name:** ABC Pharma

**Batch or lot number:** 123456

**Medicine name:** Praziquantel 600 mg tablets

**Medicine dose:** 600 mg

**Medicine route:** Oral

**Information on factors – please tick boxes for all that apply:**

☒ Patient factors: ☒ Allergic reaction

☒ Medication factors: ☒ Drug-drug interaction

☒ Administration factors: ☒ Incorrect dose

☒ Other factors: ☒ Patient non-compliance

**Tick appropriate boxes to describe other adverse events:**

☒ Anaphylaxis ☒ Severe skin reaction (Rash, blisters, swelling)

☒ Hypotension ☒ Seizures

☒ Arrhythmia ☒ Other serious adverse events such as chocking:

☒ Death

**Other serious adverse events such as chocking:**

**Actions taken to ease the side effects of this medicine:**

**Investigator's name:** Dr. Jane Smith

**Investigator's title:** Principal Investigator

**Investigator's address:** 123 Main Street, London, UK

**Investigator's phone:** 01234 567890

**Investigator's email:** jane.smith@abcpharma.co.uk

**Investigator's signature:** [Signature]

**Investigator's date:** 04 March 2014

**Investigator's stamp:** [Stamp]

**Investigator's notes:** Patient recovered fully after 24 hours of treatment. No further action required.

### **Step 1. Place all the materials needed on your desk**

- ▶ Before you start, place all the materials needed on your desk, and cross-check against a checklist that everything is there.
- ▶ Make sure that you know what to do.
- ▶ Deworming should be done at the start of a school day in order to keep the children under observation for a few hours after treatment.
- ▶ Praziquantel tablets should be swallowed whole with a little liquid, preferably during or after meals.
- ▶ All absences should be entered in the class register. Absent children should be treated on the day they return to school.
- ▶ Children who are ill on the treatment day should not take deworming medicines. These children can be given the medicines later, after they have recovered.
- ▶ In no circumstance should a child be forced to swallow medicine, as this can obstruct the airways, resulting in severe respiratory distress.



## School deworming day

### Checklist

Materials needed	Why are the materials needed?	Check (✓)
Albendazole 400 mg or Mebendazole 500 mg	To give 1 tablet only to each child	✓
Praziquantel 600 mg and tablet pole	To measure the height of each child first and give the correct number of tablets according to the dose pole	✓
Drinking-water and cups	To give one glass of drinking-water to each child when he or she swallows the medicine	✓
Distribution form	To register the number of children treated	✓
Adverse event reporting form	To report any adverse events that occur in the children treated	✓

## **Step 2. Hang the tablet pole to determine the number of praziquantel tablets to be given to each child**

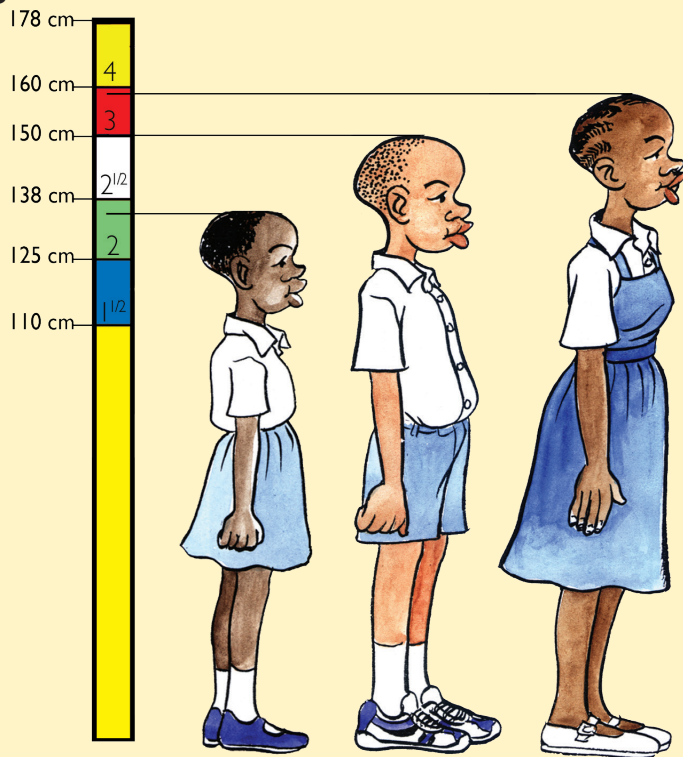
A tablet pole is provided with bottles of praziquantel to each class.

You should correctly measure the height of each child in order to determine the recommended number of praziquantel tablets.

### **How to use the tablet pole:**

1. Hang the tablet pole against the wall.
2. Place a ruler on the child's head.
3. Press the child's hair down so that the ruler is flat against the wall.
4. Place the ruler at an angle of  $90^\circ$  against the dose pole to measure the height of the child accurately.
5. Observe the height and the recommended number of tablets of praziquantel.

**Use the tablet pole to determine the number of praziquantel tablets to be given to each child**



### Step 3. Distribute the medicines to each child

Ask all the children to stand in a queue or remain in their seats in the classroom. The names of children who are absent should be clearly noted.

Children who are not feeling well and children whose parents have not given their consent should be excluded from the treatment.

Explain the purpose of the activity to the children, and call one child at a time to step forward.

Measure the height of the child against the dose pole to determine the number of tablets of praziquantel you should give.

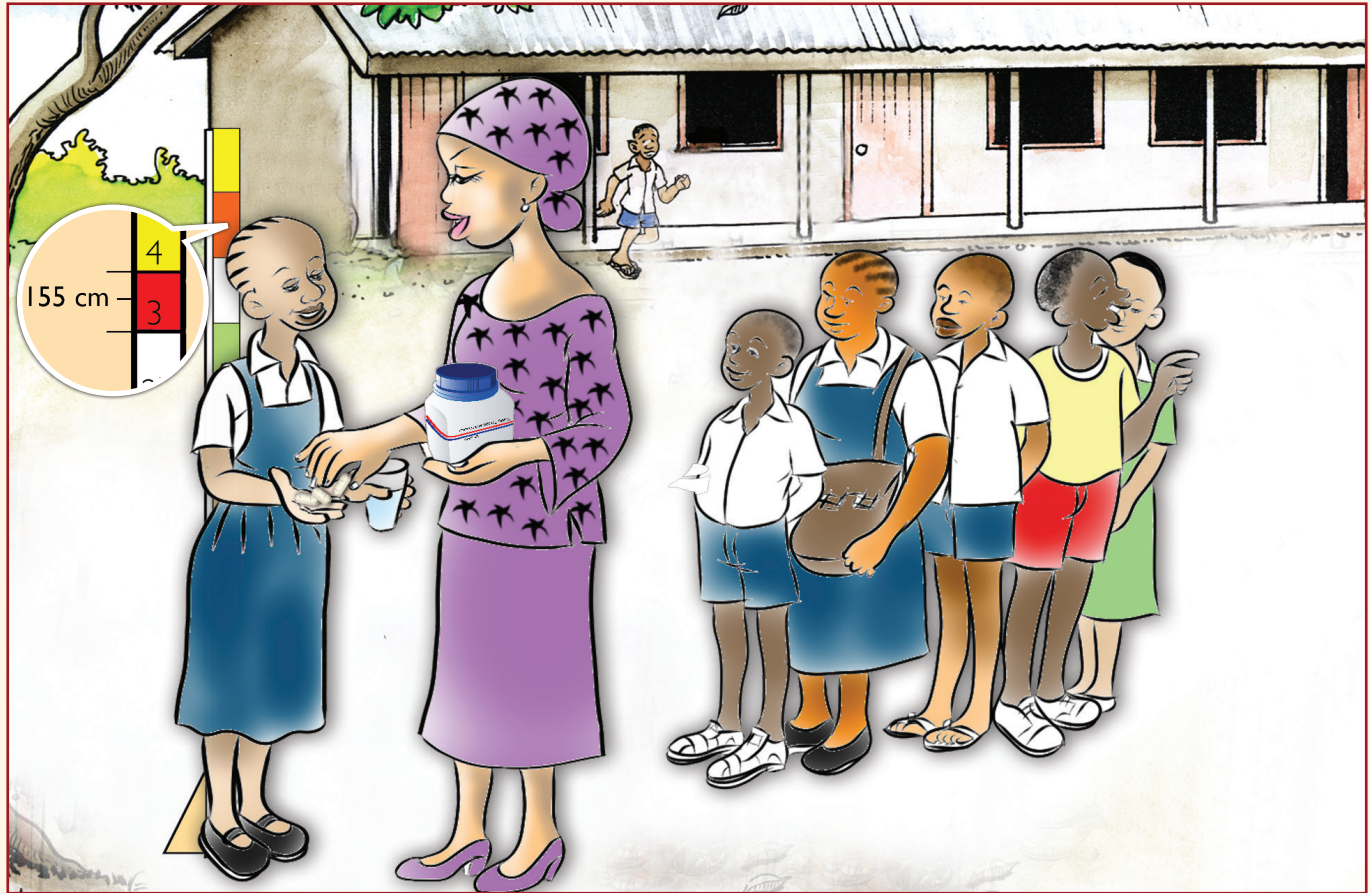
Each child must receive and swallow:

- ▶ 1 tablet of albendazole or mebendazole (do **NOT GIVE BOTH** at any time) and
- ▶ Praziquantel tablets should be swallowed whole with a little liquid, preferably during or after meals.

Also treat any friends and siblings of school-age among pupils who come to school, and register the total number of pills delivered and the names of the children treated on the distribution form.

Make sure the children swallow the medicine with drinking-water. The tablets can be chewed, but praziquantel tastes bitter when chewed.

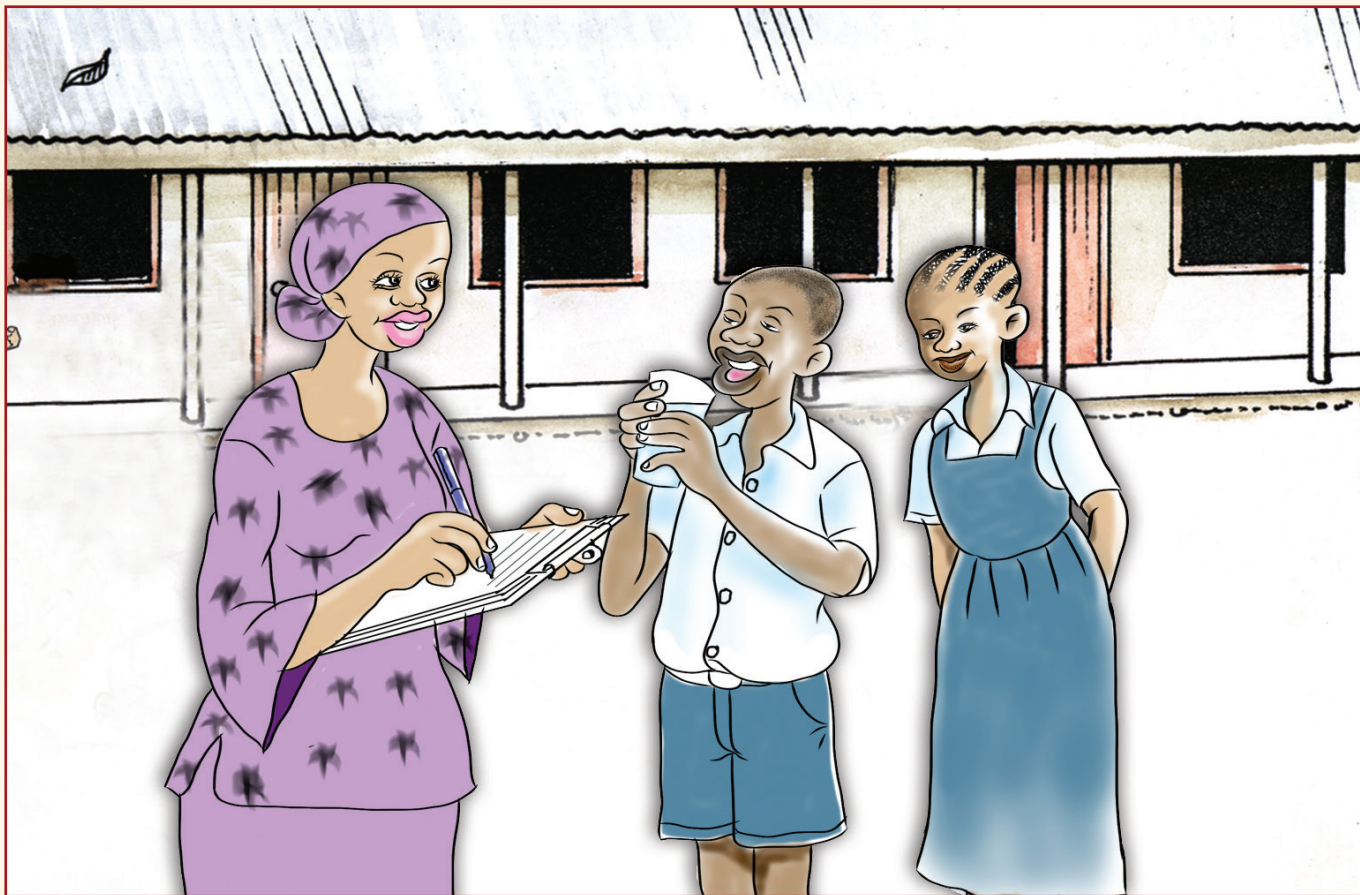
Do not force a child to swallow any medicine, as this may cause choking.



## **Step 4. Complete the distribution form and submit the record**

- ▶ You should record the total number of children treated and the total number of tablets distributed.
- ▶ Ask for a form to report the distribution to your school or health district. If no such form exists, use the form in Annex 2, which also gives instructions on how to complete it.
- ▶ The total number of children treated should be recorded in the box on the form, with the total number of tablets received.
- ▶ The form should be forwarded to the head of the school, who will summarize the results and report them to the local health facility.





### **Step 5. Observe children after treatment**

Deworming should be conducted in the morning, with normal school activities after treatment.

Deworming tablets are extremely safe; several million children have already been treated. However, as with any other medicine, these tablets may cause reactions.

In the case of deworming medicines, side-effects are most likely to occur within the first 2 hours and are likely to disappear. Therefore, it is important to keep children in the school building for 2 hours after treatment and ask them to tell you about any reaction or side-effect they may experience.

#### **Reactions**

If the treatment results in any kind of reaction, it should be recorded on the form (see Annex 3) as shown in the table below.



## School deworming day

### Possible reactions after treatment and how to deal with them

Common reactions	What to do
<ul style="list-style-type: none"><li>▶ Nausea</li><li>▶ Vomiting</li><li>▶ Abdominal pain</li><li>▶ Headache</li><li>▶ Drowsiness</li><li>▶ Rash</li></ul>	<ul style="list-style-type: none"><li>▶ Reassure student and encourage rest</li><li>▶ Offer pain killers or antihistamines</li><li>▶ Observe patient carefully</li></ul>
Rare reactions, which must be reported	What to do
<ul style="list-style-type: none"><li>▶ Persistent malaise or long-lasting symptoms</li><li>▶ Seizure</li><li>▶ Unconsciousness (shock)</li><li>▶ Very sick child</li></ul>	<ul style="list-style-type: none"><li>▶ Report immediately to health personnel or a health facility</li></ul>

### **Undistributed tablets**

Any remaining tablets can be kept at school and distributed to untreated children or can be sent to your local health facility.

If you are asked to return the undistributed medicines, keep the number of deworming tablets needed for children who were unwell or absent on the treatment day and for those who are not enrolled.

### **Insufficient tablets**

If you did not have enough tablets to treat all the children in your class, you must mention this on the distribution form.

In order to treat as many children as possible, check with other teachers whether there are any undistributed tablets in the school.



## **All children must be treated to ensure a successful school deworming day.**

This section provides suggestions on how to inform parents before school deworming day and how to report coverage of treatment and adverse events.

Standard examples are given in the annexes below. If your school or government has other formats or forms, you should use them.

No matter which form you use, it is important to inform parents correctly before a school deworming day.

You should also register the number of children treated in your class and report any adverse events.





## Annex 1. Example of parent notification form

In some cases, the consent of parents is required. If this is applicable, you can send a form to the parents to obtain their consent for their child to participate in the deworming day.

Otherwise, every child at school will be treated.

Dear parent or guardian,

We are pleased to inform you that school deworming day will take place on *08 March 2013*. Each child will be given deworming medicine free of charge during the morning class.

- ▶ The medicines are safe and will help your child to grow healthier.
- ▶ If your child is unwell on school deworming day, please notify the teacher.
- ▶ Ensure that your child eats before going to school on school deworming day.
- ▶ The medicines have been certified and declared safe by national health authorities.
- ▶ However, if your child complains of any discomfort after taking the medicines, please report this to the teachers or health facility.

The school will also provide the medicines to children who are not enrolled in the school. Please feel free to send other children to your child's school on school deworming day.

For more information, contact your health service centre

*PHONE: 01462 0000/0011*

Please fill in this form and send it back to the school **only if** you do **not** wish your child to be given deworming tablets at school.

If you do not return the form, it will be understood that you are giving permission for the school to treat your child.

I (*write your full name*) request the school to exclude my child (*write your child's full name*) from deworming treatment because (*briefly explain the reason*)

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Date and signature \_\_\_\_\_

## Annex 2. Coverage reporting form (filled in as an example)

Distribution date: 08 MARCH 2013	Teacher name: Mrs Ivie Faleti
School name and address: Corona Primary School, Ikoyi, Lagos, Nigeria	Class number or name: CLASS 5 Total number of children in your class: 60
Deworming medicine distributed:	
<input checked="" type="checkbox"/> Praziquantel <input type="checkbox"/> Albendazole <input checked="" type="checkbox"/> Mebendazole	

Numbers of children treated by gender and age group

	Boys			Girls		
Age group (years)	1–4	5–14	≥15	1–4	5–14	≥15
Fill in or mark a circle for each pupil by gender and age who receives treatment	●●●●○	●●●●●	●●●●○	●●●●○	●●●●●	○●●●○
	○●●●○	●●●●●	○●●●○	○●●●○	●●●●●	○●●●○
	○●●●○	●●●●●	○●●●○	○●●●○	●●●●●	○●●●○
	○●●●○	●●●●●	○●●●○	○●●●○	●●●●○	○●●●○
	○●●●○	○●●●●	○●●●○	○●●●○	○●●●○	○●●●○
	○●●●○	○●●●○	○●●●○	○●●●○	○●●●○	○●●●○
	○●●●○	○●●●○	○●●●○	○●●●○	○●●●○	○●●●○

Number of children by age group (years)	3	23	2	4	18	0
Number of children by gender	Total number of boys treated: 28			Total number of girls treated: 22		
Total number of children treated	[Total boys + total girls] = 50					

## Medicine

Deworming tablet	Total number of tablets distributed	Number of tablets lost or wasted	Number of tablets remaining in the class and returned to the head
Praziquantel	148	24	50
Mebendazole	58	8	10

## Overall evaluation and comments (example of comments):

The campaign went very well. All except five absent students were treated. A few students brought their little brothers and sisters, who were given the deworming tablets as well.

### Annex 3. Adverse event reporting form (filled in as an example)

Date 08 MARCH 2013	Treatment date and site 08 March 2013, Corona Primary School, Ikoyi, Lagos, Nigeria	Reporter's name, position and contact Mrs Iyie Faleti, Teacher, Class 5 Phone: 01462 5000
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Patient's details	
Name: Michelle Idowu	Date of birth: 18 September 2003
Gender: <input type="checkbox"/> Male <input checked="" type="checkbox"/> Female	Address: 22 Kingsway Road, Ikoyi, Lagos, Nigeria

Information on tablet: Please find the bottles in your school, and check the manufacturer and batch.			
Medicine	Dose	Manufacturer's name (see bottle)	Batch or BN (see bottle)
Praziquantel	2.5 tablets	Merck	MB0939
Mebendazole	1 tablet	Can't locate the bottle	Can't locate the bottle



Describe any side-effects or adverse reactions:  <i>Nausea, vomiting, headache</i>	
Actions taken to ease the side-effects:  <i>I took her to the nursing room, where she rested in bed for 3 hours, until the end of school.</i>	Current status of the patient:  <input checked="" type="checkbox"/> Full recovery from all side-effects <input type="checkbox"/> Persistence of mild side-effects <input type="checkbox"/> Hospitalization

**Do not write below: This section must be filled in by the investigator's office.**

Date report received [dd/mm/yy]:	Name of the officer who first checked the report:
Investigation required?  <input type="checkbox"/> Yes  <input type="checkbox"/> No	To be filled in if there was an investigation:  Investigation period: Principal investigator: Possible causes: Degree of certainty:



## **Acknowledgement**

This manual was prepared and distributed by WHO with the generous financial support of the Ministry of Health and Welfare, Republic of Korea.

# ***Conducting a school deworming day: a manual for teachers***

**As a teacher, you play an important role in deworming day at your school.**

**This manual has been developed to provide you with important instructions.**

**Children are most vulnerable to worm infections.**

**Untreated worm infections prevent children's healthy growth, cause poor nutrition and reduce their capacity to concentrate and learn.**

**Children need these deworming medicines to grow healthier and learn better in school.**

