Date: May 13, 2016

From: WHO Collaborating Center for Research, Training and Eradication of Dracunculiasis, CDC

Subject: GUINEA WORM WRAP-UP #240

To: Addressees

Detect and Contain Every Guinea Worm Infection Immediately!!!

CHAD REPORTS 2 CASES AND 286 INFECTED DOGS IN JANUARY-APRIL 2016

Chad has reported 2 cases of Guinea worm disease in humans (laboratory confirmation of case #2 is pending) and 286 dogs infected with Guinea worms in January-April 2016. Both cases in humans (males, ages 12 and 5) and 80% of infected dogs were contained. During the same period of 2015 Chad’s Guinea Worm Eradication Program reported 4 cases in humans, of which none were contained, and 111 infected dogs (Figure 1).

CHAD GUINEA WORM ERADICATION PROGRAM
FREQUENCY OF DRACUNCULIASIS AMONG HUMANS AND DOGS BY MONTH DURING 2012^-2016*

*Provisional

^ 27 dog infections with GWs, in 20 villages, during April - December 2012 (the month of detection of 3 dogs was not reported and not plotted here). 10 human cases of GWD.

54 dogs with GWs in 37 villages in 2013. 14 human cases of GWD.

113 dogs with GWs in 54 villages in 2014; 45 (40%) contained. 13 human cases of GWD.

503 dogs with GWs in 168 villages during 2015; 336 (67%) contained. 9 human cases of GWD.

286 dogs with GWs in 113 villages during Jan-April 2016*; 80% of infected dogs and 84% of 504 GWs contained. 2 human cases.

Figure 1.
### Table 1

**CHAD GUINEA WORM ERADICATION PROGRAM**

**LINE LISTING OF CASES OF GWD DURING 2016***

<table>
<thead>
<tr>
<th>Case #</th>
<th>Village or Locality of detection</th>
<th>District</th>
<th>Region</th>
<th>Age</th>
<th>Sex</th>
<th>Date GW emerged (D/M/Y)</th>
<th>1 = imported or indigenous</th>
<th>Case Contained?</th>
<th>If no, date of Abate Rx</th>
<th>Home Village or Locality</th>
<th>Presumed Source of infection identified?</th>
<th>Presumed Source of infection is a known VAS?</th>
<th>Actions/Comments?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Sarh (quartier Kassai)</td>
<td>3</td>
<td>Sarh</td>
<td>12</td>
<td>M</td>
<td>28-Feb-16</td>
<td>Yes</td>
<td>-</td>
<td>2</td>
<td>Sarh (quartier Kassai)</td>
<td>3</td>
<td>No</td>
<td>Patient visits the health center during the day and returns to the house each evening with his grandmother.</td>
</tr>
<tr>
<td>1.2</td>
<td>Sarh</td>
<td>1</td>
<td>Sarh</td>
<td>1</td>
<td>M</td>
<td>1-Mar-16</td>
<td>Yes</td>
<td>-</td>
<td>2</td>
<td></td>
<td>1</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>1.3</td>
<td>Sarh</td>
<td>2</td>
<td>Sarh</td>
<td>29</td>
<td>M</td>
<td>29-Mar-16</td>
<td>Yes</td>
<td>-</td>
<td>2</td>
<td></td>
<td>1</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>2.1</td>
<td>Ngara (quartier Mani)</td>
<td>1</td>
<td>Baili</td>
<td>29</td>
<td>M</td>
<td>29-Apr-16</td>
<td>Yes</td>
<td>-</td>
<td>2</td>
<td>Ngara</td>
<td>1</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

*Provisional

VAS = village under active surveillance in level 1 or 2 areas

VNAS = village not under active surveillance, level 3 areas
### Table 2

**Number of Reported Cases of Guinea Worm Disease Contained and Number Reported by Month during 2015**

(Countries arranged in descending order of cases in 2014)

<table>
<thead>
<tr>
<th>COUNTRIES WITH ENDEMIC TRANSMISSION</th>
<th>JANUARY</th>
<th>FEBRUARY</th>
<th>MARCH</th>
<th>APRIL</th>
<th>MAY</th>
<th>JUNE</th>
<th>JULY</th>
<th>AUGUST</th>
<th>SEPTEMBER</th>
<th>OCTOBER</th>
<th>NOVEMBER</th>
<th>DECEMBER</th>
<th>TOTAL*</th>
<th>% CONT.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHAD</td>
<td>0/0</td>
<td>1/1</td>
<td>0/0</td>
<td>0/0</td>
<td>1/1</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>2/2</td>
<td>100%</td>
</tr>
<tr>
<td>MALI §</td>
<td>0/0</td>
<td>0/0</td>
<td>0/0</td>
<td>0/0</td>
<td>0/0</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>0/0</td>
<td>0%</td>
</tr>
<tr>
<td>SOUTH SUDAN</td>
<td>0/0</td>
<td>0/0</td>
<td>0/0</td>
<td>0/0</td>
<td>0/0</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>0/0</td>
<td>0%</td>
</tr>
<tr>
<td>ETHIOPIA</td>
<td>0/0</td>
<td>0/0</td>
<td>0/0</td>
<td>0/0</td>
<td>0/0</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>0/0</td>
<td>0%</td>
</tr>
<tr>
<td>TOTAL*</td>
<td>0/0</td>
<td>1/1</td>
<td>0/0</td>
<td>1/1</td>
<td>0/0</td>
<td>0/0</td>
<td>0/0</td>
<td>0/0</td>
<td>0/0</td>
<td>0/0</td>
<td>0/0</td>
<td>0/0</td>
<td>2/2</td>
<td>100%</td>
</tr>
</tbody>
</table>

% CONTAINED 0% 100% 0% 100%

*Provisional

Cells shaded in black denote months when zero indigenous cases were reported. Numbers indicate how many imported cases were contained and reported that month.

Cells shaded in yellow denote months when transmission of GWD from one or more cases was not contained.

§Reports include Kayes, Koulikoro, Segou, Sikasso, and Mopti, Tinbuktu, Gao, and Kidal Regions; reports from Kidal Region are contingent on security conditions during 2015 and times when the GWEP is able to deploy a technical advisor to Kidal Region to oversee the program there.

### Table 3

**Number of Reported Cases of Guinea Worm Disease Contained and Number Reported by Month during 2016**

(Countries arranged in descending order of cases in 2015)

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<th>JUNE</th>
<th>JULY</th>
<th>AUGUST</th>
<th>SEPTEMBER</th>
<th>OCTOBER</th>
<th>NOVEMBER</th>
<th>DECEMBER</th>
<th>TOTAL*</th>
<th>% CONT.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHAD</td>
<td>0/0</td>
<td>1/1</td>
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<td>0/0</td>
<td>1/1</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>2/2</td>
<td>100%</td>
</tr>
<tr>
<td>MALI §</td>
<td>0/0</td>
<td>0/0</td>
<td>0/0</td>
<td>0/0</td>
<td>0/0</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>0/0</td>
<td>0%</td>
</tr>
<tr>
<td>SOUTH SUDAN</td>
<td>0/0</td>
<td>0/0</td>
<td>0/0</td>
<td>0/0</td>
<td>0/0</td>
<td>/</td>
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<td>/</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td>0/0</td>
<td>0%</td>
</tr>
<tr>
<td>ETHIOPIA</td>
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<td>0/0</td>
<td>0/0</td>
<td>/</td>
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<td>/</td>
<td>/</td>
<td>/</td>
<td>0/0</td>
<td>0%</td>
</tr>
<tr>
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<td>0/0</td>
<td>1/1</td>
<td>0/0</td>
<td>1/1</td>
<td>0/0</td>
<td>0/0</td>
<td>0/0</td>
<td>0/0</td>
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<td>0/0</td>
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% CONTAINED 0% 100% 0% 100%

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This is a reduction of 50% in infected humans and an increase of 158% in the number of infected dogs. A line-listing of the cases is in Table 1. According to the most recent surveys, 81% of 676 fish vendors and 93% of 528 households in priority villages surveyed were reportedly practicing safe disposal of fish entrails. In areas under active surveillance 59% of 230 residents surveyed knew of the cash reward for reporting a case of Guinea worm disease and 89% of 64 residents knew of the reward for reporting/containing an infected dog.

The two cases reported in Chad are the only cases of Guinea worm disease reported worldwide in January-April 2016. Zero cases were reported worldwide in December 2015, January 2016 and March 2016 (Table 2).

**ETHIOPIA GUINEA WORM PROGRAM HOLDS FIRST PRESS CONFERENCE**

The Ethiopian Dracunculiasis Eradication Program (EDEP) held its first national press conference on April 18, 2016 at the Federal Ministry of Health in Addis Ababa for one hour. Panelists were Guinea Worm Ambassador Honorable Dr. Tebebe Yemane Berhane, Ethiopia Public Health Institute Director-General Dr. Amha Kebede, Carter Center Country Representative Dr. Zerihun Tadesse, EDEP National Program Coordinator Mr. Amanu Shifara, and WHO National Program Officer Dr. Zeyede Kebede. The panelists briefed 18 journalists from government and private media on the current status of Guinea worm eradication in Ethiopia and in the world. Drs. Amha and Zerihun also conducted interviews with members of the media after the press conference. News from the press conference was covered widely in Ethiopian newspapers and other mass media, including national television, in English and Amharic. Some of the news coverage may be viewed at [http://allAfrica.com/stories/201604201091.html](http://allAfrica.com/stories/201604201091.html)

With support from The Carter Center, the new building for the Secretariat of the EDEP on the premises of the Ethiopia Public Health Institute in Addis Ababa was officially inaugurated by the State Minister for Health Honorable Dr. Kebede Worku, on May 4, 2016.

Ethiopia has reported no cases of Guinea worm disease in humans and no infected animals in January-April 2016. Intermittent insecurity in parts of Gambella Region has constrained some activities of the EDEP there in March and April. According to reward awareness surveys conducted in February 2016, 91% of 159 persons surveyed in (endemic) Gog district of Gambella Region and 70% of 348 persons surveyed in (non-endemic) Surma, Jikaw, and Makuey districts of Gambella Region were aware of the cash reward for reporting a case of Guinea worm disease. Surveys conducted in March 2016 found that 70% of 410 persons interviewed in (formerly endemic) Nyangatom district of SNNPR, and 51% of 5,372 persons interviewed in (non-endemic) Jikaw, Makuey and Dimma districts of Gambella Region knew of the cash reward.

Led by Mr. Amanu Shifara, National Program Coordinator, the EDEP conducted its 3rd Regional Quarterly Review meeting on March 28-29, 2016 in Metu Town to assess progress made and activities performed since the national annual review meeting in Gambella during December 2015.

During April 10-16, 2016 a joint supportive supervisory team, which included the national EDEP coordinator, Mr. Amanu Shifara, the Gambella Regional Health Bureau Head, Dr. Luo Ubop, the Gambella Regional Health Bureau Public Health Emergency Management (PHEM) core process owner, Mr. Nena Okello, WHO National Program Officer, Dr. Zeyede Kebede, Carter Center Technical Advisor, Ms. Alpha Gebrie, and others, including WHO-Gambella Region field officers, conducted a visit to the endemic districts of Gog and Abobo, to other to non-endemic districts, i.e, Lare, Gambella Zuria, and Itang, and to the Terkidi Refugee camps.
IN BRIEF:

South Sudan. On April 19, 2016 South Sudan’s Ministry of Health announced that it was increasing the amount of the cash reward for reporting a case of Guinea worm disease to 5,000 South Sudanese pounds (currently about US$166), from 500 pounds (due to contraction of the value of the South Sudanese Pound).

Mali. On April 27, 2016 the Minister of Health of Mali Honorable Dr. Marie Madeleine Togo accepted a four wheel drive Land Cruiser and 68 motorcycles provided to Mali’s GWEP by The Carter Center, in a brief ceremony at the compound of the national GWEP in Bamako.

ICCDE HOLDS ITS 11TH MEETING AND WHO CONVENES SCIENTIFIC MEETING ON GUINEA WORM INFECTIONS IN DOGS

The International Commission for the Certification of Dracunculiasis Eradication (ICCDE) held its 11th Meeting at WHO headquarters in Geneva on 30-31 March 2016. Eight countries remain to be certified: “never-recently-endemic” Angola and DRC, “pre-certification” status Kenya and Sudan, and “still-endemic” Chad, Ethiopia, Mali and South Sudan. The meeting did not recommend any additional countries for certification, but discussed the challenge of Guinea worm infections in dogs. This ICCDE meeting was followed immediately by a scientific meeting on 31 March-1 April 2016 which discussed potential research topics related to Guinea worm infections in dogs. WHO has published a summary of both meetings in its Weekly Epidemiological Record (see Recent Publications).

MEETINGS

The annual Ministerial Meeting on Guinea Worm Eradication will be held in Geneva during the World Health Assembly on Wednesday, 25 May 2016 from 6 PM to 8 PM.

WHO will host a meeting on GWD surveillance in post-certified countries in Lome, Togo during June 1-3, 2016 to review the current adequacy of surveillance in post-certified countries and to call for continued vigilance, especially in countries at risk of external importations, until global certification is attained.

Representatives from Ethiopia, Kenya, South Sudan, and Uganda will meet in Hiawasa Town, Ethiopia during June 16-17, 2016 to discuss cross-border issues related to GWD eradication.
RECENT PUBLICATIONS


World Health Organization, 2016. 11th Meeting of the International Commission for the Certification of Dracunculiasis Eradication and scientific meeting to address Guinea worm disease infection in dogs. Wkly Epidemiol Rec 91:234-236.

GUINEA WORM DISEASE IN THE NEWS AND CYBERSPACE

A link to the video about Dr. Donald Hopkins on CNN is at http://www.cnn.com/2016/05/06/health/man-who-kills-disease/index.html

Inclusion of information in the Guinea Worm Wrap-Up does not constitute “publication” of that information.

In memory of BOB KAISER

Note to contributors:
Submit your contributions via email to Dr. Sharon Roy (gwwrapup@cdc.gov) or to Dr. Ernesto Ruiz-Tiben (eruizti@emory.edu), by the end of the month for publication in the following month’s issue. Contributors to this issue were: the national Guinea Worm Eradication Programs, Drs. Donald R. Hopkins and Ernesto Ruiz-Tiben of The Carter Center, Drs. Sharon Roy and Mark Eberhard of CDC and Dr. Dieudonné Sankara of WHO. WHO Collaborating Center for Research, Training, and Eradication of Dracunculiasis, Center for Global Health, Centers for Disease Control and Prevention, Mailstop C-09, 1600 Clifton Road NE, Atlanta, GA 30333, USA, email: gwwrapup@cdc.gov, fax: 404-728-8040. The GW Wrap-Up web location is http://www.cdc.gov/parasites/guineaworm/publications.html#gwwp


CDC is the WHO Collaborating Center for Research, Training, and Eradication of Dracunculiasis