

Memorandum



Date: August 24, 2020
From: WHO Collaborating Center for Dracunculiasis Eradication, CDC
Subject: GUINEA WORM WRAP-UP #270
To: Addressees

Detect and Contain Every Guinea Worm!

19 HUMAN CASES IN JANUARY-JULY 2020 VS. 40 CASES SAME TIME IN 2019

Angola, Chad, Ethiopia, Mali and South Sudan have together reported 19 indigenous human cases of Guinea worm disease in January-July 2020. This is a global reduction in human cases of 51% compared to 41 cases reported by Angola, Cameroon, Chad and South Sudan during the same period of 2019 (Ethiopia and Mali reported no human cases in 2019). The cases reported in those two years include a waterborne outbreak in Chad early in 2019 and another waterborne outbreak in Ethiopia in April 2020 (see articles below). Animal Guinea worm infections have been reduced by 25% overall

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Mali

South Sudan Distribution of 19 Indigenous Cases of Dracunculiasis Reported during 2020^



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CHAD: 27% FEWER DOG INFECTIONS



Chad's Guinea Worm Eradication Program (CGWEP) continues to record impressive progress against dog infections. It has reported a provisional total of 1,143 infected dogs in January-July 2020, compared to 1,563 dog infections in January-July 2019, for a year-to-date reduction of 27% (Figure 2). Beginning in March 2020, the rate of reduction has steadily increased monthly to -24%, -33%, -42%, -40%, and -45%, compared to the same month of 2019. (The GWEP in Chad remains fully operational despite precautions taken to ensure safety of program staff and community members in response to COVID-19. Chad began these adjustments before its first COVID-19 cases were reported in early April. Ninety-nine percent of Chad's 2,226 villages under active surveillance reported in May.) Eighty-eight percent (88%) (1,037/1,181) of the animal infections (1,143 dogs, 38 cats) in January-July 2020 were contained, compared to 76% (1,514/1,982) of animal infections (1,935 dogs, 47 cats) contained in January-December 2019.

Chad also reported 9 human cases (4 contained) in January-July 2020, compared to 38 cases in the same period of 2019. One of the cases in May 2020 is an 8 year old girl at Bogam village in Aboudeia district of Salamat Region who also was infected (case #29) in the waterborne outbreak there in 2019 (Table 1).

Chad appointed a new Minister of Health on July 14, the Honorable Dr. ABDOULAYE Sabre Fadoul. Trained in public law, Dr. Abdoulaye is a former director of President Deby's cabinet office and also formerly served successively as minister of justice, minister of telecommunications, and minister of finance. On July 21 the National Program Coordinator of Chad's GWEP, Dr. TCHINDEBET Ouakou, Carter Center Country Representative Dr. Hubert Zirimwabagabo, and WHO/Chad GW Focal Point Dr. Ibrahim Djeomboro briefed the High Council of Traditional Leaders in Chad on the status of the Guinea Worm Eradication Program and the program's new initiative for proactive tethering of dogs, at the *Palais du 15 Janvier* in N'Djamena. The leaders appreciated the briefing and promised their support. The event was covered by national television and two local radio stations. With Carter Center support the CGWEP also is exploring new interventions to improve management of aquatic animal waste (e.g., fish guts) at the community level.

Figure 2

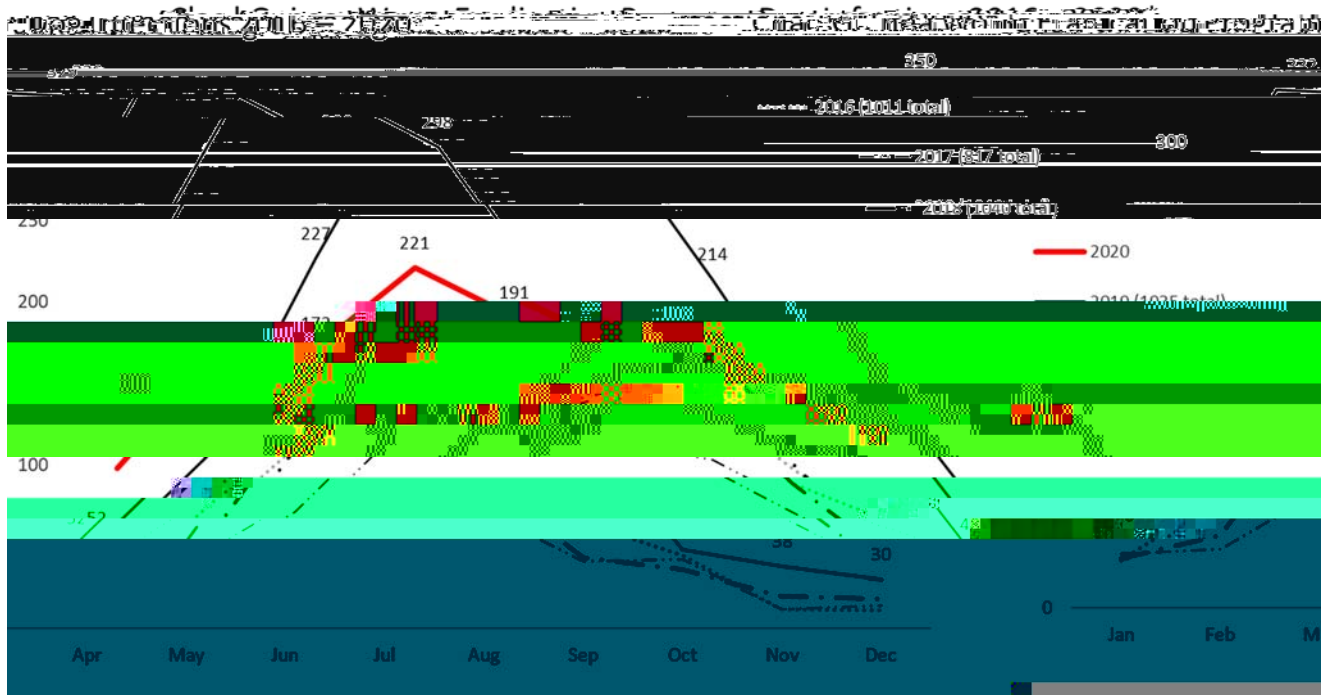


Table 1

Chad Guinea Worm Eradication Program: GWEP Line Listing of Confirmed Cases: Year 2020*

| Case # | Age | Sex | Ethnicity | Occupation | Village of Detection | Zone | District | Region | Date of Detection | Date of Emergence | Contained (yes / no) | Entered water |
|--------|-----|-----|--------------|------------|----------------------|----------|----------|----------------|-------------------|-------------------|----------------------|---------------|
| 1 | 32 | M | Marba | Farmer | Bouar Baguirmi | Gambarou | Mandelia | Chari Baguirmi | 3 Jan 20 | 3 Jan 20 | yes | No |
| 2 | 11 | F | Ure, alSaabe | Child | Kyabe | Kyabe | Kyabe | Moyen Chari | 16 Feb 20 | 16 Feb 20 | No | No |
| 31 | 10 | M | Daye | Child | Kemkian | Kemkian | Sarh | Moyen Chari | 1 Mar 20 | 1 Mar 20 | No | Yes |
| 32 | 10 | M | Daye | Child | Kemkian | Kemkian | Sarh | Moyen Chari | 1 Mar 20 | 1 Mar 20 | No | Yes |
| 41 | 10 | M | Hadjarai | Child | Marabodokouya I | Marabe | Kyabe | Moyen Chari | 9 Mar 20 | 9 Mar 20 | 9 | |

ETHIOPIA: ONE SUSPECT HUMAN CASE & EIGHT SUSPECT INFECTED ANIMALS

Ethiopia's Dracunculiasis Eradication Program (EDEP) is still following up the outbreak of seven confirmed human Guinea worm cases in April 2020 that resulted from exposure to a shared source of contaminated drinking water near Duli village in Gog district of Gambella Region (see *Guinea Worm Wrap-Up* #268). The infections in all seven patients were contained. Interrogation of the patients and other community members and associated investigations have led the program to believe the outbreak was caused by failure to use filters properly, using damaged filters, or not using filters at all during a single or a few instances by household members of case #3 (the village chief) and/or case #5 when they collected water from Lel Bonge pond (7.61246N, 34.43255E) in March 2019. Community members prefer collecting drinking water from Lel Bonge because the bottom is rocky and its water is clearer. The seven cases from six households have close familial and/or social relations and they shared drinking water collected by members of case #3 and case #5 households. Those two households were common hosts for social gatherings on multiple occasions. The EDEP identified and followed daily over 600 persons who also were in the Duli area for farming, hunting and other activities, some of whom also drank water from Lel Bonge, but found no other cases.

Rainfall data from the Department of Meteorology and interviews of community members suggest that the Lel Bonge pond received its first seasonal rain of 2019 in March and had water in between the scheduled Abate treatments on February 25 and March 23, 2019 which was a brief lapse that was missed by the Abate Captain. The pond was treated on April 11, 2019 and the community members were using untreated water from Lel Bonge up until then. Lel Bonge pond is shared by at least one local troop of olive baboons, including a slow-moving baboon with multiple worms that was killed on May 9, 2020 near the house of case #3 (see Figure 3). There was no known Guinea worm-infected human or dog in Duli in 2019, but a dead baboon with multiple Guinea worms was found there on June 2, 2019. The program deployed three hunter groups to assess baboon movements and search for unknown water sources in the area immediately after discovery of the first case in this 9 whi9

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Table 3

Line List of GWEP Confirmed and Pending Animal Infections 2020*

| Case # | Age (years) | Sex |
|--------|-------------|-----|
|--------|-------------|-----|

RECENT PUBLICATIONS

Boonham N, Tomlinson J, Ostoja-Starzewska S, McDonald RA, 2020. A pond-side test for Guinea worm: development of a loop-mediated isothermal amplification (LAMP) assay for detection of