Date: June 29, 2020

From: WHO Collaborating Center for Dracunculiasis Eradication, CDC

Subject: GUINEA WORM WRAP-UP #269

To: Addressees

Chad Guinea Worm Eradication Program: Dog Infections2016 – 2020*

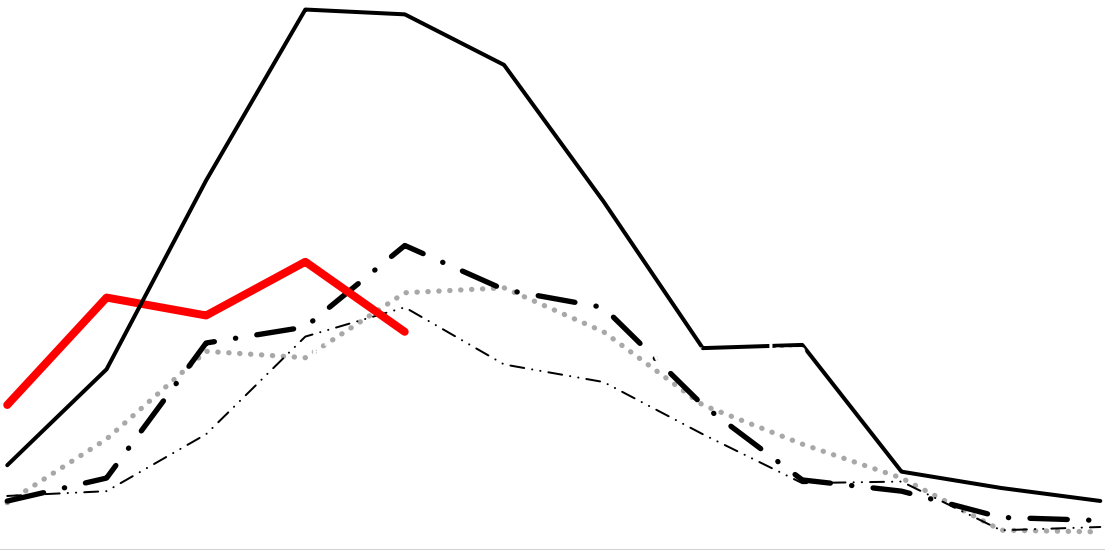

Table 1

In January-April 2020, the CGWEP treated an average of 73% of villages under active surveillance that were targeted to receive Abate treatments monthly, with a 144% increase in the number of water sources treated so far in 2020 compared to the same period of 2019. At the end of May the program had reached 111 (94%) of the 118 villages with 5+ infections that were targeted for proactive tethering of dogs during the peak transmission season (see *Guinea Worm Wrap-Up #267*). Proactive tethering is receiving good support from local authorities.

National Program Coordinator Dr. TCHINDEBET Ouakou supervised Guinea worm activities (focusing mainly on GW surveillance and response in settled and nomadic communities) in Aboudeia, Haraze and Amtiman districts of Salamat Region during April 10-30. Deputy NPC TCHONFIENET Moundai supervised Guinea worm activities (focusing on prolonged dog tethering and preventive Abate treatment) in Kyabe, Biobe and Korbol districts of Moyen Chari Region during April 10-30.

The drug Flubendazole arrived in Chad on June 15 and was taken to Sarh immediately for use in the third (final) round of treatment to determine if it can treat and/or prevent Guinea worm infections effectively in dogs. *Correction: Chad treated 92% (408/444) villages that had at least one Guinea worm infection in 2019 with Abate; not 68% as reported Figure 1 of Guinea Worm Wrap-Up #267.*

MALI: FOLLOW-UP OF HUMAN CASE

Mali's Guinea Worm Eradication Program (MGWEP) continues to investigate and implement control measures in follow up to the human case of Guinea worm disease whose worm emerged on March 23, 2020 after Mali had found no human case for four consecutive years. The MGWEP did however, detect 1, 11, 9, 18 and 8 infected dogs in 2015-2019, plus 1, 2, 1 infected cats in 2017-2019. The 15-year-old girl's worm emerged at her home in Konobougou town in Baraoueli district of Segou Region. Her only travel near the period when she most likely became infected was a visit to the village of Komara in Macina district of Segou Region from June to September 2019 (see map in *Guinea Worm Wrap-Up* #268). A timeline of investigations is:

-
- tamsconductd case ivestiton atgou.
-
-

the director of disease control and prevention at the ministry of health, the national program coordinator of the MGWEP, representatives of the Segou regional office of health, the Carter Center Country Representative, and others. The ceremony was covered on national television and by local radio stations.

Containment measures. This case was not contained, because the worm began emerging before she was hospitalized at the local health center, but she reportedly did not enter a source of water with the worm. All villages in Baraoueli district were placed under active surveillance soon after her first worm emerged. The program is distributing cloth and pipe filters in Komara and as of June 15 it began applying Abate in and around the village of Komara and nearby farms (Komara received the first rain around June 8). The technical director of the health center, the community health agent, and *relais communautaire* in Soumani health area and Komara village were trained in 2019. All the technical directors of health centers, community health agents, *relais*, and veterinary agents (about 325 persons in all) were trained on Guinea worm in Baraoueli district on June 1-8, 2020 in response to the Guinea worm case.

Source of infection. Where and how this patient became infected is not clear. There is a protected well in the compound where she stayed in Komara and her home town of Konobougou has a safe system of drinking water. The patient claims to carry safe drinking water when she goes to the field. Komara is a village of fishermen and rice cultivators in the inland delta of the Niger River. The patient says she eats cooked fish but no other aquatic animals.

Contact tracing. Program staff have conducted contact tracing in order to identify and monitor any person(s) who may have shared drinking water and/or food, especially aquatic animals, with the patient during the period when she likely became infected. So far this has included family members; it is being expanded to include peers, friends and other community members in Konobougou and Komara.

SOUTH SUDAN

The Government of South Sudan appointed a new Minister of Health, Hon. Elizabeth Acuei Yol, in March 2020. Her predecessor Dr. Riek Gai Kok, had been Minister of Health since 2013 and was a passionate supporter of South Sudan's extraordinary Guinea Worm Eradication Program. Welcome, Minister Acuei! Thank you Minister Kok! The SSGWEP also warmly welcomes the new Undersecretary of Health, Professor Mayen Machut Achiek, former Dean of the College of Medicine at the University of Juba. Welcome, Undersecretary Dr. Achiek!

As the program enters transmission season, it currently maintains active surveillance in 2,157 villages and cattle camps and it responded to 24,126 rumors from January to May. Of those rumors, 98.6% were investigated within 24 hours, and 37.6% of all rumors became suspects. From January to May, the program reported that 2,655,170 people were reached in 32 counties through cash reward activities.

Even beeloploplograoplmgate2(hoV2(c)I)13(D.34 0 Td (2Tj ET EMC -d ( )TjTd [(T)3(ha)4(nk 23 cl

posters to health facilities and villages while also providing 1,000 COVID-19 health worker flipcharts to workers in over 20 counties throughout the country. In addition, the SSGWEP developed a customized GW/COVID-19 brief for health workers conducting routine surveillance

Table 2

	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL*	
CHAD	1 / 1	0 / 1	0 / 2	0 / 1	1 / 1								2 / 6	33%
SOUTH SUDAN	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0								0 / 0	
ANGOLA^	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0								0 / 0	
ETHIOPIA	0 / 0	0 / 0	0 / 0	7 / 7	0 / 0								7 / 7	100%
MALI §	0 / 0	0 / 0	0 / 1	0 / 0	0 / 0								0 / 1	0%
TOTAL*	1 / 1	0 / 1	0 / 3	7 / 8	1 / 1								9 / 14	64%
% CONTAINED														

*Provisional

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

	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL*	
CHAD	0 / 2	1 / 1	1 / 3	2 / 3	11 / 17	4 / 6	4 / 6	2 / 7	1 / 2	0 / 1	0 / 1	0 / 0	26 / 49	53%
SOUTH SUDAN	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 1	1 / 1	1 / 2	0 / 0	0 / 0	0 / 0	2 / 4	50%
ANGOLA	0 / 1	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 1	0%
ETHIOPIA	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0%
MALI §	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0%
TOTAL*	0 / 3	1 / 1	1 / 3	2 / 3	11 / 17	4 / 6	4 / 7	3 / 8	2 / 4	0 / 1	0 / 1	0 / 0	28 / 54	52%

DONATION

The Carter Center is grateful for the support of Starr International Foundation, which recently granted $100,000 to the Guinea Worm Eradication Program through 2021. This support is matched by The Carter Center's Challenge Fund for Guinea Worm Eradication.

RECENT PUBLICATIONS

Cleveland CA, Garrett KB, Box EK, Eure Z, Majewska AA, Wilson JA, Yabsley MJ, 2020. Cooking copepods: The survival of cyclopoid copepods (Crustacea: Copepoda) in simulated provisioned water containers and implications for the Guinea Worm Eradication Program in Chad, Africa. Int J Infect Dis 95:216-220. doi: https://doi.org/10.1016/j.ijid.2020.03.016

Guagliardo SAJ, Roy SL, Ruiz-Tiben E, Zirimwabagabo H, Romero M, Chop E, Tchindebet PO, Hopkins DR, Weiss AJ, 2020. Guinea worm in domestic dogs in Chad: A description and analysis of surveillance data. PLoS Negl Trop Dis 14:e0008207.
doi: https://doi.org/10.1371/journal.pntd.0008207

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 Adam Weiss (adam.weiss@cartercenter.org), 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, Dr. Donald Hopkins and Adam Weiss of The Carter Center, Dr. Sharon Roy of CDC, and Dr. Dieudonne Sankara of WHO.

WHO Collaborating Center for Dracunculiasis Eradication, Center for Global Health, Centers for Disease Control and Prevention, Mailstop A-06, 1600 Clifton Road NE, Atlanta, GA 30329, 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
Back issues are also available on the Carter Center web site English and French are located at
http://www.cartercenter.org/news/publications/health/guinea_worm_wrapup_english.html.
http://www.cartercenter.org/news/publications/health/guinea_worm_wrapup_francais.html

CDC is the WHO Collaborating Center for Dracunculiasis Eradication