DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service
Centers for Disease Control
And Prevention (CDC)

Memorandum

Date: October 26, 2022

From: WHO Collaborating Center for Dracunculiasis Eradication, CDC

Subject: GUINEA WORM WRAP-UP #293

To: Addressees

Human Guinea worm cases are down 25% in January-September 2022.
Animal Guinea worm infections are down 25% in January-September 2022.

Claim no easy victories.
Amilcar Cabral

Figure 1

MALI: 30 CONFIRMED ANIMAL INFECTIONS IN JANUARY-SEPTEMBER, 0 HUMAN CASES

Mali's Guinea Worm Eradication Program (MGWEP) has reported 30 confirmed animal infections (28 dogs, 2 cats) in January-September 2022 (Table 1), compared to 13 animal infections in the same period of 2021, which is an increase of 131%. This increase is probably due to proactive tethering of dogs in Kolongo Bozo village and the adjacent hamlet in Macina district/Segou Region, and Djennetown in Djenne district/Mopti Region which began this year in June and includes increased aggressiveness in searching for Guinea worm infections by field teams practicing controlled immersion in all dogs with the slightest lesion. Both localities are in the Inland Delta of the Niger River (Figure 1). Kolongo Bozo and Djenne reported Mali's highest number of Guinea worm infections in 2021. Seventeen (57%) of the 30 infections were contained. Most of the uncontained infections were in six new endemic villages (Ke Bozo, Kayo Bozo, Lelegre, Ablobougou (Kolongo village), Kerere, and Yonga Bozo).

Mali has not reported a human case of Guinea worm disease in January-September 2022. For the same period of 2021, Mali reported two cases, in Sansanding village of Markala district/Segou Region.

Table 2 summarizes the presumed source and apparent exposure to Guinea worm for Mali's 30 infected animals so far in 2022, in Macina (20), Tominian (3), and Markala (2) districts of Segou Region and adjacent Djenne district (5) of Mopti Region, in eleven villages. Seventy percent (21/30) of these confirmed animal infections were *indigenous to the location where the animal lived*, 2 were imported, and the presumed source of 7 animals' infections are unknown. Nine animals were known to be *exposed by eating raw fish or fish entrails*, 18 *roamed freely during their period of infection* a year earlier and the apparent exposure of 3 animals is unclear. Dogs that roam freely can eat discarded fish entrails, thus putting themselves at risk for Guinea worm infection, while some villagers fatten dogs for market by feeding them fish entrails. MGWEP reports that some fish merchants dry fish entrails and sell them as food for chickens. Local MGWEP members surveyed management of fish entrails in Macina district in August 2022 and found that only 33% (18/55) of households and 36% (9/25) of fish sellers surveyed disposed of fish entrails safely. Local MGWEP staff visited Kolongo Bozo 25 times in July and 20 times in August.

Table 1

MALI GWEP LISTING OF CONFIRMED ANIMAL INFECTIONS: January - September 2022*															
#	Region	District	Health Zone	Village	Ethnicity	Profession	Host	Probable origin	Date of detection	Date of emergence	Entered water?	Abate Applied? (Y/N)	Contained ? * (Y/N)	Confirmed Y/N	Total # of GW
1	Segou	Tominian	Togo	Togo	Bozo	Teacher	Dog	Togo	4-Jun	7-Jun	No	Yes	Yes	Yes	1
2.1								Kolongo Bozo Hamlet	17-Jun	29-Jun	No	Yes	Yes		
2.2	Segou	Macina	Kolongo Bozo	Kolongo Bozo Hamlet	Bozo	Fisherman	Dog	Kolongo Bozo Hamlet	17-Jun	15-Aug				Yes	3

14	Segou	Macina	Kolongo	Kolongo Bozo Hamlet	Bozo	Fishing	Dog	Kolongo Bozo Hamlet	30-Aug	30-Aug	No	Yes	Yes	Yes	1
15	Mopti	Djenne	Djenne Central	Kanafa (Djenne)	Fulani	Trader	Dog	Djenne Town	26-Aug	29-Aug	No	Yes	Yes	Yes	1
16	Segou	Macina	Kolongo	Kolongo Bozo	Bozo	Fishing	Dog	Kolongo Bozo Village	04-Sept	04-Sept	No	No	Yes	Yes	1
17.1	Segou	Tominian	N'Dienso	Kerere	Bozo	Farming	Dog	Yonga Bozo/ Kouakourou/ Djenne	03-Sept	04-Sept	Likely	Yes	No	Yes	5
17.2									06-Sept	06-Sept		Yes	No	Yes	
17.3									06-Sept	06-Sept				Yes	
17.4									16-Sept	16-Sept				Yes	
17.5									16-Sept	16-Sept				Yes	
18.1	Segou	Markala	Babougou	Barakabougou Hamlet (Nawrena)	Bozo	Fishing	Dog	Barakabougou/ Kolongo Bozo	30-Aug	06-Sept	No	Yes	Yes	Yes	2
18.2									30-Aug	06-Sept	No	Yes	Yes	Yes	
19.1	Segou	Macina	Kolongo	Kolongo Bozo Hamlet	Bozo	Fishing	Dog	Kolongo Bozo Hamlet	02-Sept	06-Sept	Likely	Yes	No	Yes	3
19.2															
19.3															
20	Segou	Macina	Kolongo	Kolongo Bozo Hamlet	Bozo	Fishing	Dog	Kolongo Bozo Hamlet	07-Sept	07-Sept	No	Yes	Yes	Yes	1
21.1	Segou	Macina	Kolongo	Kolongo Bozo Hamlet	Sarakole	Mechanic	Dog	Kolongo Bozo Hamlet	09-Sept	09-Sept	No	Yes	Yes	Yes	2
21.2															
22	Segou	Macina	Kolongo	Kolongo Bozo Hamlet	Dogon	Farming	Dog	Kolongo Bozo Hamlet	11-Sept	11-Sept	No	Yes	Yes	Yes	1
23.1	Segou	Markala	Babougou	Barakabougou	Bozo	Fishing	Dog	Barakabougou	15-Sept	15-Sept	Likely	No	No	Yes	2
23.2															
24	Segou	Macina	Macina Central	Ke-Bozo	Bozo	Fishing	Dog	Ke-Bozo	14-Sept	15-Sept	Likely	Yes	No	Yes	1
25	Segou	Macina	Kolongo	Kolongo Bozo	Bozo	Farming/ Fishing	Dog	Kolongo Bozo	23-Sept	23-Sept	No				

#21: Dog/Sept9/Kolongo Bozo Hamlet/Macina	*indigenous:* **2 dogs 8/2021 in same hamlet**	dog roamed freely in 2021
#22: Dog/Sept11/Kolongo Bozo Hamlet/Macina	*indigenous:* **5 dogs 8-11/2021**	dog roamed freely in 2021
#23: Dog/Sept15/Barakabougou/Markala	*indigenous:* **1 infection in 5/2021**	dog roamed freely in 2021
#24: Dog/Sept15/Kebo Bozo/Macina	only known GW Macina Central in 2021 was in January	dog roamed freely in 2021
#25: Dog/Sept23/Kolongo Bozo Hamlet/Macina	*indigenous:* **2 dogs 8/2021 in same hamlet**	dog roamed freely in 2021
#26: Dog/Sept24/Kayo Bozo/Macina	*unknown:* no known infection in same hamlet in 2021	dog roamed freely in 2021
#27: Dog/Sept24/Lelege/Macina	*unknown:* no known infection in same hamlet in 2021	dog roamed freely in 2021
#28: Dog/Sept25/Kayo Bozo/Macina	*unknown:* no known infection in same hamlet in 2021	dog roamed freely in 2021
#29: Dog/Sept22/Yonga Bozo/Djenne	*indigenous:* **infection #17 imported from Yonga Bozo/Djenne**	unknown
#30: Dog/Sept29/Kayo Bozo/Macina	*unknown:* no known infection in same hamlet in 2021	dog roamed freely in 2021

** Provisional **See definition on page 10*

National, regional, and district officials from the MGWEP and veterinary services made a supervisory visit to Macina district/Segou Region and Djenne and Mopti districts/Mopti Region on August 11-18, 2022. In Macina district they noted good collaboration between medical and veterinary services and good community cooperation with proactive tethering, but ineffective burial of fish guts and weak involvement of women and girls in eradication activities in Kolongo Bozo. They recommended improvement of fish gut burial practices and female participation in eradication activities. MGWEP National Program Coordinator Dr. Cheick Oumar Coulibaly led a supervisory visit to Tominian and Markala endemic districts of Segou Region on August 14-21.

From 12 to 18 September, the program coordination conducted two supervisory missions in the endemic health districts of Segou and Mopti regions. National Program Coordinator Dr. Cheick Oumar Coulibaly and Guinea Worm Focal Point in the National Directorate of Veterinary Services Dr. Coulibaly Kadiatou Diarra

search of 47 residents, screened three other dogs, applied Abate to seven water sources, and distributed cloth and pipe filters. Located near a perennial river, Wunlaac village was already under active surveillance because of an uncontained human case on August 28, 2021, in Apukdit village

CHAD

Chad's Guinea Worm Eradication Program (CGWEP) has reported 453 dogs (78% contained) with Guinea worm infections in January–September 2022, which is a reduction of 36% from the 705 infected dogs it reported during the same period of 2021. It has reported 6 cases in humans (50% contained) in January–September 2022, vs. 6 cases in January–September 2021, for a reduction in cases of 0%. Of villages with 25 or more dogs with GW infections in 2019, Kemkian in Sarh district of Moyen-Chari Region reported 31 infected dogs in 2019, 26 in 2020, 4 in 2021, and 0 so far in 2022, while Mayami in Danamadji district of Moyen-Chari reported 33 infected dogs in 2019, 10 in 2020, 4 in 2021, and 0 so far in 2022. Kemanga village in Kyabe district of Moyen-Chari

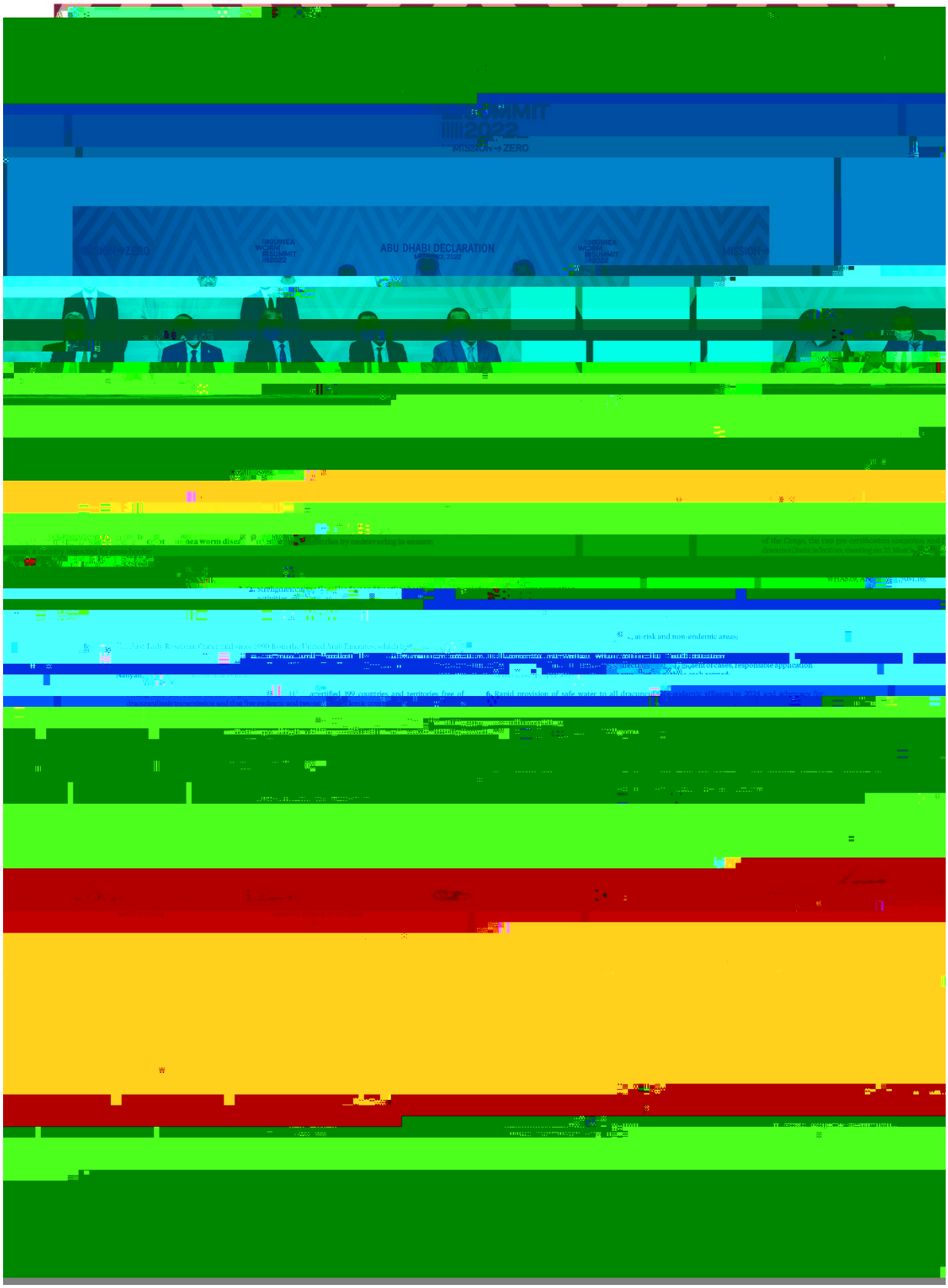
ABU DHABI DECLARATION

Table3

Number of Laboratory-Confirmed Cases of Guinea Worm Disease, and Number Reported Contained by Month during 2022*

(Countries arranged in descending order of cases in 2021)

RECENT PUBLICATIONS

Coker SM, Box EK, Stilwell N, Thiele EA, Cotton JA, Haynes E, Yabsley MJ, Cleveland CA, 2022. Development and validation of a quantitative PCR for the detection of Guinea worm (*Dracunculus medinensis)*.
https://journals.plos.org/plosntds/article?id=10.1371/journal.pntd.0010830

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 1st 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. Dieudonné Sankara of WHO.

WHO Collaborating Center for Dracunculiasis Eradication, Center for Global Health, Centers for Disease Control and Prevention, Mailstop H21-10, 1600 Clifton Road NE, Atlanta, GA 30333, USA, email: gwwrapup@cdc.gov, fax: 404-728-8040. The GW Wrap-Up web location is https://www.cdc.gov/parasites/guineaworm/wrap-up
Back issues are also available on the Carter Center web site in English, French, and Portuguese and 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

http://www.cartercenter.org/news/publications/health/guinea_worm_wrapup_portuguese.html

---

CDC is the WHO Collaborating Center for Dracunculiasis Eradication