Memorandum

Date: August 29, 2025

From: Guinea Worm Eradication Program, The Carter Center

Subject: GUINEA WORM WRAP-UP #323

To: Addressees

Surveillance	**Containment**	**Investigation**	**Interventions**	**Political Support**
(Detect cases fast)	(Prevent contamination)	(Link cases)	(Prevent infection)	Minister visits
Active searches	Isolate cases	Source?	Abate, filters, safe water	Traditional leaders
Reward awareness	Tether infected dogs, cats	Contamination?	Proactive tethering	Safe water advocacy
Rumors	Health education	Infection mode?	Bury fish wast, IEC	Cease-fire advocacy

CHAD REDUCED GW INFECTIONS 49% IN JANUARY-JULY 2025

Table 1

Chad Guinea Worm Eradication Program

	Total GWs*	Number of Infected Dogs
2019	4,328	1,934
2020	3,420	1,480
2021	1,477	757
2022	1,082	514
2023	911	407
2024	531	234

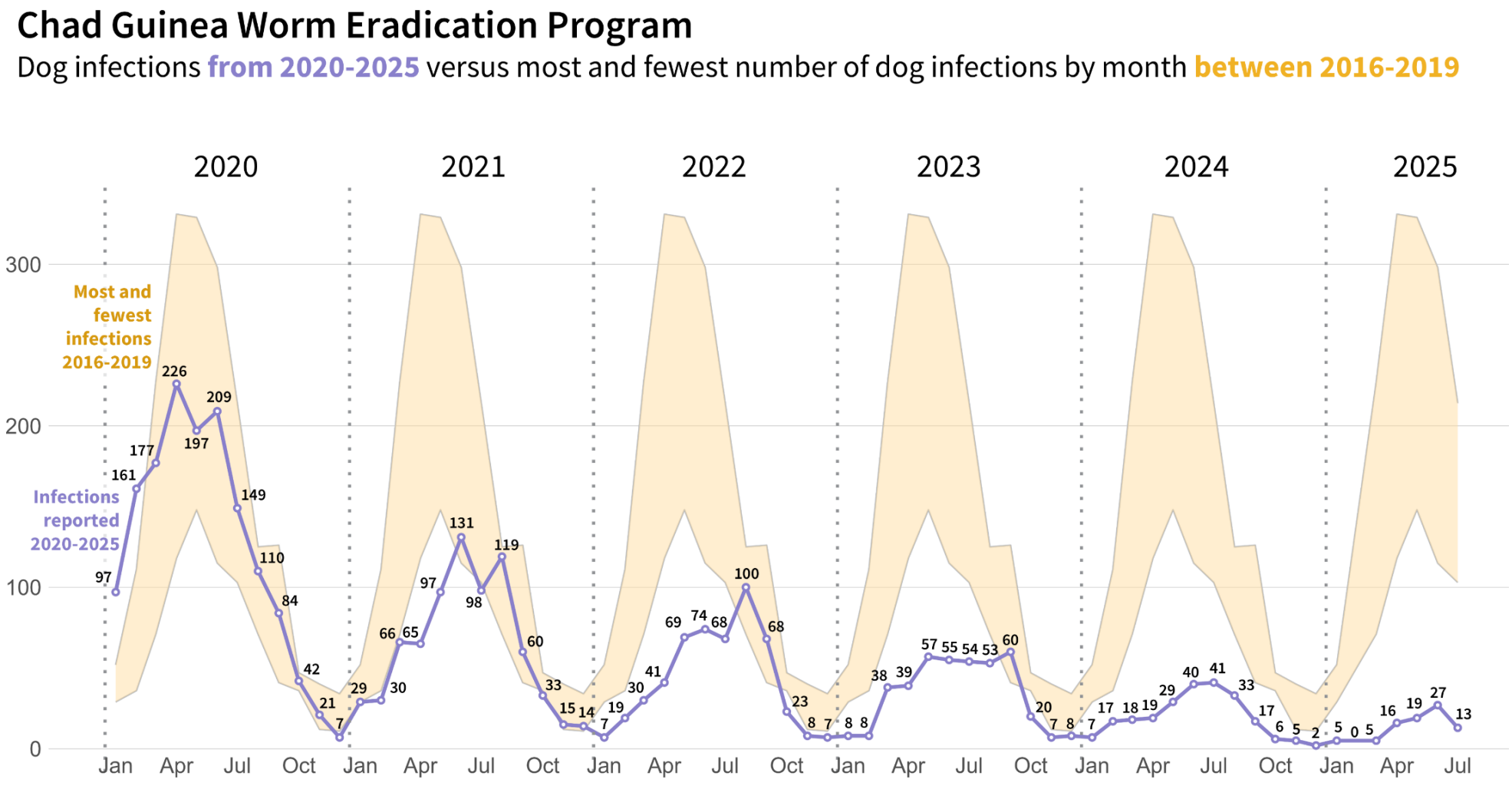
*Emerged, from humans and animals

2024 (Jan-Jul) 200 infected animals

2025 (Jan-Jul) 98 infected animals

After discovering GW infections in dogs in 2012, Chad's Guinea Worm Eradication Program (CGWEP) introduced enhanced health education (cook aquatic animals well, safely dispose and manage aquatic animal waste) in 2013, increased Abate treatments in 2019, and began proactive tethering of domestic dogs and cats in villages at risk in 2020. The program reported provisional totals of 83 dogs (70% contained) and 15 cats (60% contained) in January-July 2025, compared to 171 dogs and 29 cats in January-July 2024, for a provisional 49% reduction in GW-infected animals in the first seven months of 2025.

Figure 1.


Chad Guinea Worm Eradication Program
Dog infections from 2020-2025 versus most and fewest number of dog infections by month between 2016-2019
2020
2021
2022
2023
2024
2025
300
200
100
0
Most and fewest infections 2016-2019
Infections reported 2020-2025
97 161 177 226 197 209 149 110 84 42 21 7 29 30 66 65 97 131 98 119 60 33 15 14 7 19 30 41 69 74 68 100 68 23 8 7 8 8 38 39 57 55 54 53 60 20 7 8 7 17 18 19 29 40 41 33 17 6 5 2 5 0 5 16 19 27 13
Jan Apr Jul Oct Jan Apr Jul Oct Jan Apr Jul Oct Jan Apr Jul Oct Jan Apr Jul Oct Jan Apr Jul

This follows Chad's 86% reduction in animal GW infections between 2019 (1,934 dogs, 47 cats) and 2024 (234 dogs, 47 cats) (Table 1, Figure 1). Chad has provisionally reported 1 confirmed human GW case in January-July 2025 compared to 4 human cases in January-July 2024 and 5 cases in January-July 2023. Chad's recent gains are benefits of strong political support, including ministerial visits to endemic villages in 2019 and 2023, and adoption of national and provincial declarations of engagement in 2024.

The southernmost part of the Logone River shared between Chad and Cameroon remains the most endemic area, accounting for 60% of Chad's total GW infections in January-July 2025, with Bongor and Guene districts reporting a total of 61 animal infections. Bongor district is the highest reporting district in Chad, reporting 42 animal infections (77% contained) in January-July 2025. The district's animal infections increased by 120% from January-July 2024 (19 animal infections, 47% contained). Bongor district's peak transmission period is coming to an end, with GW infections projected to decline in the coming months.

ETHIOPIA REPORTS 3 PROVISIONAL HUMAN GW CASES

After reporting GW in only 1 dog in 2023, and only 2 baboons with emerged Guinea worms and 2 baboons with un-emerged GWs in 2024, Ethiopia's Dracunculiasis Eradication Program (EDEP) has detected 3 provisional human GW cases in June and July 2025:

1. A 32-year-old male Agnuak resident of Utuyu village in Gog district of Gambella Region had one Guinea worm that began emerging on **June** 17, 2025, after he entered a case containment center (CCC) on June 16. His infection was contained. He stayed in the CCC for 42 days. Utuyu has one operational borehole well and has not reported an indigenous human GW case or animal infection for over twelve years. During his likely period of infection in 2024, this patient served as a village-based volunteer for high-risk groups, a daily laborer on vector control activities, hunted and collected wood and honey in the forest around Thoronak in northwestern Gog district (Figure 2), and drank unfiltered water from local ponds, some of which were frequented by baboons and are the presumed source and mode of transmission of his GW infection. The patient and his travel partners reported that there were no fish in the water sources they used.

   In response to the detection of this case the EDEP conducted case and infection searches in 1,552 households, interviewed 6,851 persons, examined 721 dogs and 149 cats, and distributed 216 cloth and pipe filters to high-risk groups such as hunters, wood and honey collectors, and daily laborers on commercial farms. The program also applied Abate to 136 water sources deemed potentially contaminated this year, and held meetings with community and high-risk group members in Utuyu and other targeted local villages and non-village areas under active surveillance. Baboon tracking teams identified and are tracking 11 troops: 7 in Kobiyi, 2 in Thoronak, 1 in Ogul, and 1 near the Olham Bhaw pond.

2. A 27-year-old male Agnuak resident of Gog district who lived and worked at several commercial farms and gold mining sites, none of which had access to safe drinking water, in Gog and Abobo districts of Gambella Region during his presumed period of infection, had one Guinea worm that began emerging on **July** 19, 2025. He was admitted to a case containment center on July 16, 2025, and his GW infection was contained. He was still in the CCC as of August 23rd. This patient was

most likely infected while working at Seife farm in Terkudi sub-district of Abobo district in July or August 2024 (Figure 2). He denied eating poorly cooked fish. Water sources in both areas, including sources used by the farm managers to collect and distribute unfiltered water, were accessed by baboons. Seife farm is about 1.9 miles (3.2 km) distant from Thoronak and is frequented by a troop that travels between Thoronak, Seife, and Mulat farms.

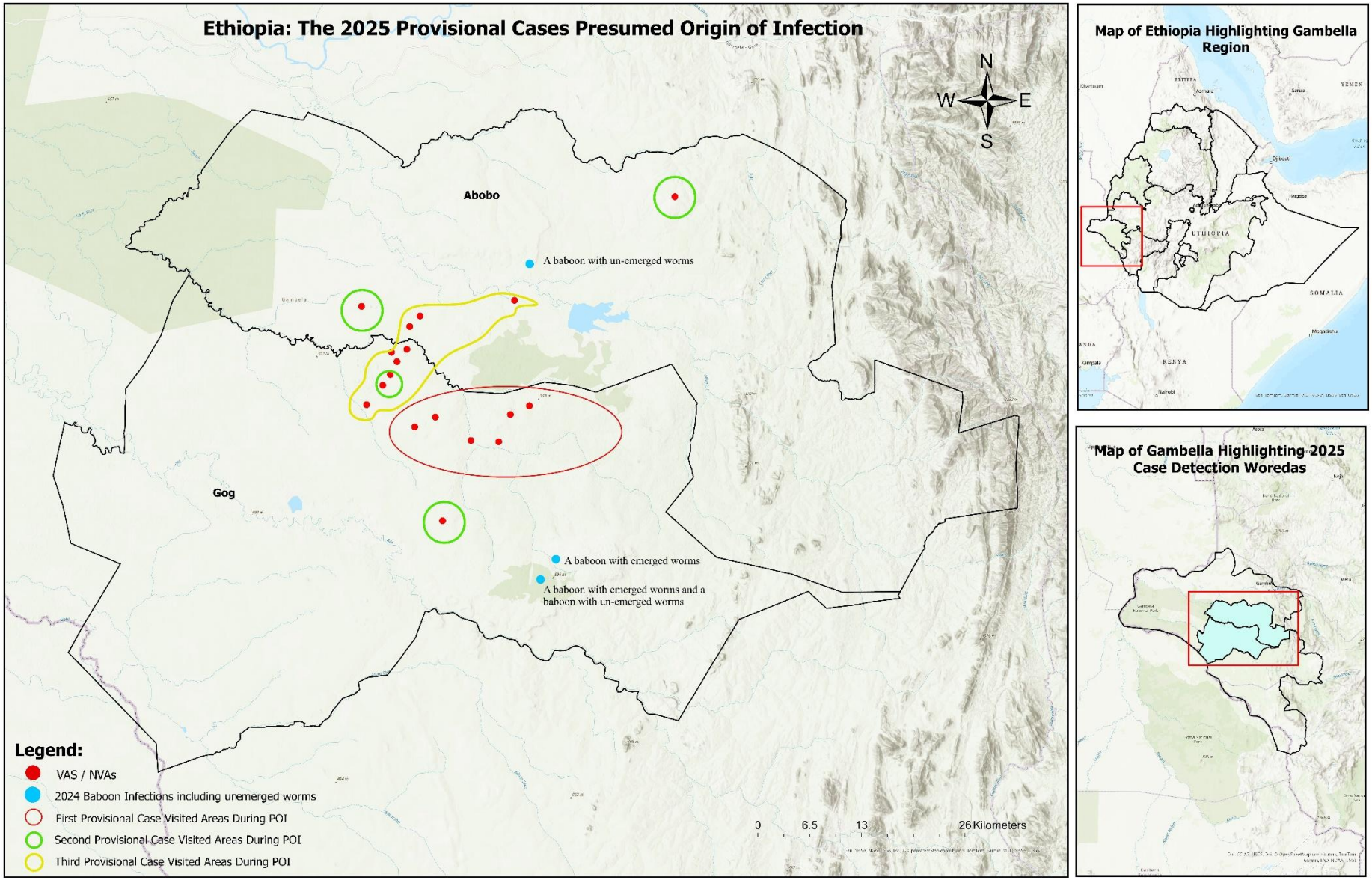
Following the detection of this case, the EDEP deployed an investigation and response team in parts of Gog and Abobo districts, and in Gambella Region's Dimma district, where this case was detected. They visited 1,521 households, interviewed 7,673 people, examined 225 dogs and 24 cats, distributed 894 cloth and pipe filters to high-risk groups, and met with district and sub-district government authorities in Gog and Abobo. The team discovered 71 new water sources in both Abobo and Gog districts, of which 17 held water. The program applied Abate to a total of 41 water sources. The teams also identified seven baboon troops (Chengchaw, Garaganti, Seife farm, Mulat farm, Kella troop, Teklegirmay farm, and Tubo) around the Thoronak, Seife, and Mulat farms.

3. A 25-year-old male resident of Elanyi village in Terkudi sub-district of Abobo district had a provisional Guinea worm emerge on **July** 28, 2025. Like the first provisional case, this patient worked as a daily laborer for the program. He was engaged in vector control activities at six commercial farms, namely Mulat, Seife, Tsegaye, Belay, Daniel, and Melak farms in Terkudi sub-district. None of the farms had access to safe drinking water. It is therefore believed that the patient contracted GW by consuming water contaminated with infective Guinea worm larvae at Seife or Mulat farm in Terkodi sub-district of Abobo in July or August 2024. He was admitted to a case containment center on July 23, 2025, and his infection was contained. He was still in the CCC as of August 23rd.

   Following the detection of this case, the EDEP deployed an investigation and response team and conducted case and infection searches in Abobo district. They visited 1,435 households and interviewed 5,875 persons and checked 806 dogs and 134 cats for signs of GW and distributed 276 pipe and cloth filters for high-risk groups in Abobo district. The vector control and baboon tracking teams discovered 23 new water sources in the forested areas between Gog and Abobo districts. The program applied Abate to 52 water sources. In addition to Seife, Kella, Mulat, and Tubo baboon troops, the teams identified a baboon troop at Tsegaye farm.

If these provisional human GW cases are confirmed, the preliminary case investigations summarized above add to epidemiological evidence that baboons are now sustaining GW transmission in certain forested areas of Gog and/or Abobo districts and that humans in those parts of Ethiopia's Gambella Region who drink unfiltered water from sources shared by baboons are at risk of GW infection. Establishing presumptive epidemiological and/or genetic links between known GW human cases or animal infections in the previous year and GW cases and/or infections the next year helps document specific chains of transmission and whether they are being interrupted.

Figure 2.


Ethiopia: The 2025 Provisional Cases Presumed Origin of Infection
N
W
E
S
Abobo
A baboon with un-emerged worms
Gog
A baboon with emerged worms
A baboon with emerged worms and a baboon with un-emerged worms
Legend:
VAS / NVAs
2024 Baboon Infections including unemerged worms
First Provisional Case Visited Areas During POI
Second Provisional Case Visited Areas During POI
Third Provisional Case Visited Areas During POI
0
6.5
13
26 Kilometers
Map of Ethiopia Highlighting Gambella Region
ERITREA
YEMEN
Khartoum
Asmara
Djibouti
Hargeisa
ETHIOPIA
SOMALIA
Mogadishu
KENYA
Kampala
Nairobi
Map of Gambella Highlighting 2025 Case Detection Woredas

IN BRIEF

Angola reported a provisional total of 19 animal GW infections (58% contained) in January-July 2025, compared to 36 infections in the same period of 2024—a 47% decrease. [*Angola, see **CHAD**, above*.]

Correction to *Guinea Worm Wrap-Up* #321: As part of national administrative restructuring, the number of municipalities in Cunene Province was increased from 6 to 14.

Cameroon reported a provisional total of 431 animal GW infections (74% contained) in January-July 2025, compared to 303 infections in the same period of 2024—a 42% increase. Cameroon's known GW transmission is limited to 18 accessible villages in a single district, peaking during the logistically favorable dry season, with no known spread to wild animals. The line list of Cameroon's affected villages and status of interventions in 2025 is in Table 2. [*Cameroon. see **CHAD**, above*.]

See *Guinea Worm Wrap-Up* #310 (June 2024) for Cameroon's line list as of January – May 2024.

Mali reported 2 contained GW infections in dogs in January-July 2025, compared to 2 infected dogs (1 contained) in January-July 2024. The program reports 98% of 1,261 targeted dogs and cats proactively tethered in Macina district as of July 2025, 100% of 1,462 dogs and cats in Djenne district, and 70% of 483 dogs and cats in Markala district. These three districts reported 15, 8, and 5, respectively, of Mali's 29 animal GW infections reported in 2024. The program also monitors fish gut disposal in the three districts; it reported proper management of fish gut disposal in 83 of 86 households and 5 of 7 fish sellers surveyed in Macina district in May 2025. *Insecurity is limiting GWEP activities in parts of Macina, Djenne, Mopti, and Tominian districts.*

Sudan has not reported a GW case since 2002, and has never detected GW in an animal, but has not been certified as GW-free due to insecurity.

Table 2. Number of Infections in Cameroon, January-June 2025

Village[1]	# Infection YTD	% Infection contained	# Months received GW health ed?	% Eligible water sources treated (6 months: Jan-Jun)	% Eligible animals tethered (6 months: Jan-Jun)	% HH with cloth & pipe filters	% HH practicing safe burial of fish guts	At least one safe drinking source? Y/N	Estimate % of people aware of GW cash reward
Karam 1*	89	67%	6	100%	88%	55%	49%	Y	no data available
Naiguissia*	64	97%	6	100%	94%	39%	36%	Y	no data available
Karam 2*	49	73%	6	100%	91%	54%	46%	Y	no data available
Bastebe*	45	84%	6	92%	90%	44%	39%	Y	no data available
Dabana*	43	72%	6	99%	89%	63%	41%	Y	no data available
Nouldaina*	32	78%	6	100%	82%	14%	39%	Y	no data available
Yakréo*	24	75%	6	100%	89%	36%	44%	Y	no data available
Dongho	12	75%	6	100%	100%	17%	26%	Y	no data available
Massa Koutweita*	9	67%	6	99%	89%	43%	46%	Y	no data available
Dobona*	9	89%	6	100%	90%	34%	31%	Y	no data available
Goufga 1	8	50%	2	100%	100%	61%	43%	Y	no data available
Gadambe*	5	80%	6	100%	83%	29%	56%	Y	no data available
Groum	3	100%	5	100%	100%	36%	16%	Y	no data available
Fourgana	2	100%	2	100%	100%	11%	19%	Y	no data available
Baiga 2	1	100%	6	100%	100%	29%	48%	Y	no data available
Massa Ika	1	0%	6	100%	100%	24%	30%	Y	no data available
Kaina	1	100%	1	100%	100%	0%	0%	Y	no data available
Dompya	1	0%	3	100%	100%	0%	0%	Y	no data available
Djelme Bosso	0	100%	6	0%	100%	32%	65%	Y	no data available
Baiga 1	0	100%	6	0%	0%	96%	85%	Y	no data available
Gononda	0	100%	6	100%	0%	8%	41%	Y	no data available
Total	**398**	**77%**				**34%**	**34%**		

* Villages enrolled in proactive tethering of domestic dogs and cats from May - June 2025

[1]All villages have at least 1 health worker trained in GW surveillance

DEFINITIONS:

A **rumor** is defined as any information about a possible case of Guinea worm disease or animal infection.

A **suspect** is a person or animal exhibiting a sign or symptoms compatible with GW infection (i.e., localized or generalized itching and/or swelling, a painful blister, and/or a skin lesion) but no visible Guinea worm.

A Guinea worm/dracunculiasis **case** is defined as an infection occurring in a person exhibiting a skin lesion or lesions with emergence of one or more worms that is laboratory-confirmed as *Dracunculus medinensis* at CDC. Because *D. medinensis* has a 10-14-month incubation period, each infected person is counted as having an infection only once during a calendar year. [The same requirement of worm emergence applies to confirmed *D. medinensis* infections in animals.]

A presumed source of Guinea worm infection of a human dracunculiasis case is considered identified if: The patient drank unsafe water from the same source/location (specify) as other human case(s) or an infected animal 10-14 months before infection, or

The patient lived in or visited the (specify) household, farm, village, or non-village area of a (specify) Guinea worm patient or infected domestic/peri-domestic animal 10-14 months before infection, or

The patient drank unsafe water from a (specify) known contaminated pond, lake, lagoon or cut stream 10-14 months before infection.

If none of the above is true, the presumed source/location of the infection is unknown. Whether the patient's residence is the same as the presumed source/locality of infection or not should also be stated in order to distinguish indigenous transmission from an imported case.

A contained case** means all of the following conditions are met:

1. The patient is detected before or within 24 hours of worm emergence; and
2. The patient has not entered any water source since the worm emerged; and
3. A village volunteer or other health care provider has properly managed the case, by cleaning and bandaging until the worm is fully removed and by giving health education to discourage the patient from contaminating any water source (if two or more emerging worms are present, the case is not contained until the last worm is pulled out); and
4. The containment process, including verification that it is a case of Guinea worm disease, is validated by a supervisor within 7 days of the emergence of the worm, and
5. ABATE® is used if there is any uncertainty about contamination of the source(s) of drinking water, or if a source of drinking water is known to have been contaminated.

***The criteria for defining a contained case of Guinea worm disease in a human should be applied also, as appropriate, to define containment for an animal with Guinea worm infection.*

Table 2

Number of Laboratory-Confirmed Human Cases of Guinea Worm Disease, and Number Reported Contained by Month during 2025*

(Countries arranged in descending order of cases in 2024)

COUNTRIES WITH TRANSMISSION OF GUINEA WORMS	NUMBER OF CASES CONTAINED / NUMBER OF CASES REPORTED													% CONT.
	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL*	
CHAD	**0 / 1**	**0 / 0**	**0 / 0**	**0 / 0**	**0 / 0**	**0 / 0**	**0 / 0**						**0 / 1**	**0%**
SOUTH SUDAN	**0 / 0**	**0 / 0**	**0 / 0**	**0 / 0**	**0 / 0**	**0 / 0**	**0 / 0**						**0 / 0**	**N / A**
CAMEROON	**0 / 0**	**0 / 0**	**0 / 0**	**0 / 0**	**0 / 0**	**0 / 0**	**0 / 0**						**0 / 0**	**N / A**
MALI	**0 / 0**	**0 / 0**	**0 / 0**	**0 / 0**	**0 / 0**	**0 / 0**	**0 / 0**						**0 / 0**	**N / A**
TOTAL*	**0 / 0**	**0 / 0**	**0 / 0**	**0 / 0**	**0 / 0**	**0 / 0**	**0 / 0**						**0 / 1**	**0%**
% CONTAINED	**0%**	**N / A**	**N / A**	**N / A**	**N / A**	**N / A**							**0%**	

Provisional

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

Number of Laboratory-Confirmed Cases of Guinea Worm Disease, and Number Reported Contained by Month during 2024

(Countries arranged in descending order of cases in 2023)

COUNTRIES WITH TRANSMISSION OF GUINEA WORMS	NUMBER OF CASES CONTAINED / NUMBER OF CASES REPORTED													% CONT.
	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL	
CHAD	**0 / 0**	**0 / 0**	**0 / 0**	**0 / 0**	**0 / 1**	**0 / 0**	**0 / 3**	**1 / 1**	**1 / 1**	**1 / 1**	**1 / 1**	**0 / 1**	**4 / 9**	**44%**
SOUTH SUDAN	**0 / 0**	**0 / 0**	**0 / 0**	**0 / 0**	**0 / 0**	**0 / 2**	**0 / 3**	**0 / 0**	**0 / 1**	**0 / 0**	**0 / 0**	**0 / 0**	**0 / 6**	**0%**
CENTRAL AFRICAN REPUBLIC	**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**	**N / A**
CAMEROON	**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**	**N / A**
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**	**N / A**
TOTAL*	**0 / 0**	**0 / 0**	**0 / 0**	**0 / 0**	**0 / 1**	**0 / 2**	**0 / 6**	**1 / 1**	**1 / 2**	**1 / 1**	**1 / 1**	**0 / 1**	**4 / 15**	**27%**
% CONTAINED	**N / A**	**N / A**	**N / A**	**N / A**	**0%**	**0%**	**0%**	**100%**	**50%**	**100%**	**100%**	**N/A**	**27%**	

	Cells shaded in black denote months when zero indigenous cases were reported. Numbers indicate how many cases were contained and reported that month.4
	Numbers indicate how many cases were contained and reported that month.

RECENT PUBLICATIONS

Smalley H, Keskinocak P, Swann J, Delea M, Eneanya O, Weiss A, 2025. Proactive tethering to prevent Guinea worm infections among dogs in Chad: an analysis of the impacts of timing and dog selection. Am J Trop Med Hyg 112:317-323. DOI: https://doi.org/10.4269/ajtmh.24-0673

Are the right people receiving the Guinea Worm Wrap-Up?

We remind leaders of National Guinea Worm Eradication Programs to make sure all appropriate persons are receiving the Guinea Worm Wrap-Up directly, by email. With frequent turnover of government officials, representatives of partner organizations, and recruitment of new Guinea worm program staff, keeping desired recipients up to date is challenging. Frequent review of who is receiving the newsletter directly is advised. To add an addressee, please send their name, title, email address, and preferred language (English, French, or Portuguese) to Adam Weiss at The Carter Center (adam.weiss@cartercenter.org).

Note to contributors: Submit your contributions via email 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, and Dr. Dieudonné Sankara of WHO. Formatted by Diana Yu.

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

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