DEPARTMENT OF HEALTH & HUMAN SERVICES

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

Memorandum

Date: April 16, 2021

From: WHO Collaborating Center for Dracunculiasis Eradication, CDC

Subject: GUINEA WORM WRAP-UP #276

To: Addressees

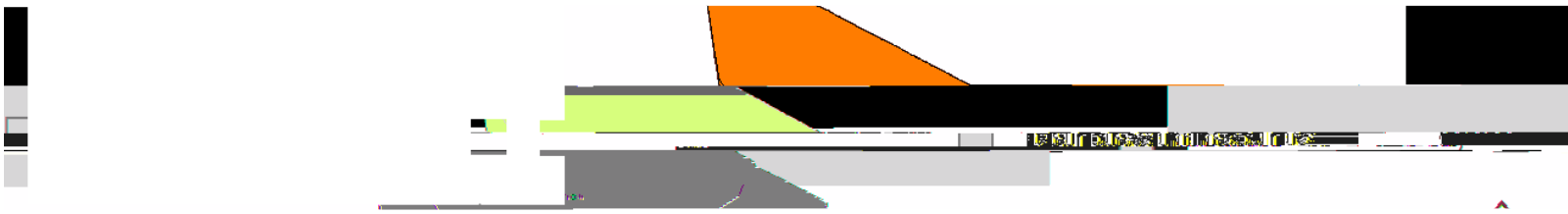
The dogs bark, but the caravan moves on.
Arab proverb

There is no such thing as a sporadic case.
Joel Breman

ANNUAL INTERNATIONAL REVIEW MEETING OF PROGRAM MANAGERS MEETS VIRTUALLY

Over 140 persons participated in the annual International Review Meeting of Guinea Worm Eradication Program Managers organized by The Carter Center in cooperation with the World Health Organization (WHO) that occurred virtually on March 16-19, 2021. The National Program Coordinators from five endemic countries (Angola, Chad, Ethiopia, Mali, South Sudan), two countries in the pre-certification phase (Democratic Republic of Congo, Sudan), and Cameroon presented final official data for 2020 on behalf of their countries. The Carter Center's Board of Trustees Chairman Mr. Jason Carter, Chief Executive Officer Mrs. Paige Alexander, and Vice-President for Health Programs Dr. Kashef Ijaz; WHO Director General Dr. Tedros Ghebreyesus

Figure 1



ETHIOPIA

The Ethiopia Dracunculiasis Eradication Program (EDEP) reported 11 cases of Guinea worm disease (all contained) in humans, 8 cats (all contained), 3 dog (all contained), and 4 baboon (none contained) infections in 2020. The human cases occurred in two separate point source outbreaks in Gog district of Gambella Region: 7 cases at Duli Farm (April 2-April 22) and 4 cases in PRC Agnua, Pochalla D (August 9-October 11) that were exposed to contaminated water from Lel Bonge pond and Ogul ponds, respectively. The cats may have been infected by a shared source of contaminated water or food in or near PRC Agnua (July 27-

Number of rumors: humans 15,224 (99% investigated in 24h), animals 5,228 (99% investigated in 24h)
Cash reward awareness: 95% humans and animals (levels 1 & 2)
Cash reward amount: US$240 equivalent for reporting a human case, US$12 for reporting infected animal
Integrated surveys: 151,538 persons (polio, trachoma, +)
Number and reporting rate for IDSR (Integrated Disease Surveillance and Reporting): 20,644 units, 91%

% presumed sources of human cases identified*: 100% (11/11)
% human and animal Guinea worm infections contained: 85% (22/26)
*see definition p

ChAD

Chad's Guinea Worm Eradication Program (CGWEP) reported 12 cases of Guinea worm disease (5 contained) in humans, 1,508 infected dogs (1,252 contained), and 63 infected cats (32 contained) in 2020. One of the human cases (#10, worm emerged July 10, 2020) is believed to have been infected in Am-

Figure 3

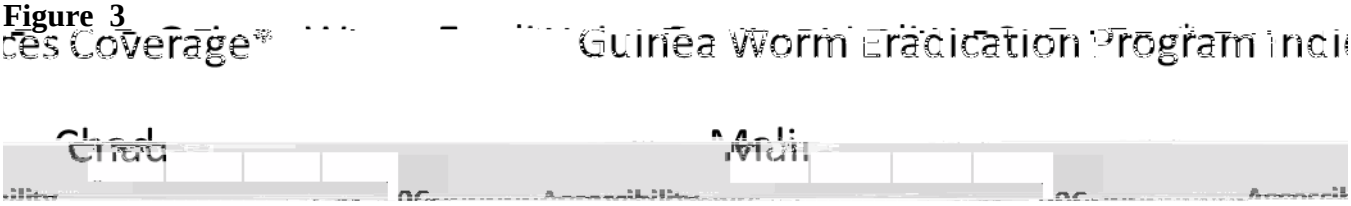

ces Coverage*
Guinea Worm Eradication Program Inci
Chad
Mali

Table 5

Number of Laboratory-Confirmed Cases of Guinea Worm Disease, and Number Reported Contained by Month during 2021*

(Countries arranged in descending order of cases in 2020)

NUMBER OF CASES CONTAINED / NUMBER OF CASES REPORTED											% CONT.	COUNTRIES WITH TRANSMISSION OF		
0 / 0	1 / 1	0 / 0	/	/	/	/	/	/	/	/	/	/	/	
0 / 0	0 / 0	0 / 0	/	/	/	/	/	/	/	/	/	/	/	
0 / 0	0 / 0	0 / 0	/	/	/	/	/	/	/	/	/	/	/	
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0 / 0	0 / 0	0 / 0	/	/	/	/	/	/	/	/	/	/	/	

ANGOLA

Angola reported one confirmed human case (uncontained) of Guinea worm disease in 2020 and investigated 3 rumors of cases within 24 hours. Since a human case was discovered unexpectedly in 2018 during pre-certification surveys, the Angolan Ministry of Health has identified a total of 3 confirmed human cases and 1 confirmed dog infection; all were detected in Cunene Province in the southern part of the country during January-April (rainy season) in 2018-2020. The source of infection has not been found for any of the cases or dog infection. Fifty-four communities are considered at-risk in three *municipios* (districts): Cuanhama, Namacunde, and Cuvelai. The ministry has trained village volunteers and community-based health workers, sensitized over 1500 health professionals, provided health education to community members, and distributed cloth filters, assisted by the

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World Health Organization - Sudan, with Federal Ministry of Health, and Ministry of Religious Affairs; on 12th April 2021, launched the “Sudan Khali Mein El Ferendit ” campaign to spread & raise awareness, report GWD rumours, on occasion of Holy month of Ramadan, as continued efforts to achieve GWD certification for Sudan by 2021.

MODIFIED INTERVENTION INDICES TO REFLECT VARIABLE

indicator are: 1) the denominator = surveill

TRANSITION

The Carter Center's Country Representative to South Sudan, Mr. Jake Wheeler, left that position on March 19, 2021. He was Deputy before being appointed Acting Country Representative in April 2019, then Country Representative. Ms. Giovanna Steel is serving as Acting Country Representative. Thank you, Jake, and Godspeed!

RECENT PUBLICATIONS

Boyce MR, Carlin EP, Schermerhorn J, Standley CJ. A One Health Approach for Guinea Worm Disease Control: Scope and Opportunities. Tropical Medicine and Infectious Disease. 2020;5(4). doi:10.3390/tropicalmed5040159

Durrant C, Thiele EA, Holroyd N, et al. Population genomic evidence that human and animal infections in Africa come from the same populations of Dracunculus medinensis. PLoS Neglected Tropical Diseases. 2020;14(11):e0008623. https://doi.org/10.1371/journal.pntd.0008623

Gebre, T. 2021. Rethinking disease eradication: putting countries first. International Health. https://doi-org.proxy.library.emory.edu/10.1093/inthealth/ihab011

Gonzalez Engelhard CA, Hodgkins AP, Pearl EE, Spears PK, Rychtar J, Taylor D. A mathematical model of Guinea worm disease in Chad with fish as intermediate transport hosts. Journal of Theoretical Biology. March 2021:110683. doi:10.1016/j.jtbi.2021.110683

Guagliardo, S et.al., 2021. Correlates of variation in Guinea worm burden among infected domestic dogs. Am J Trop Med Hyg xx:pp-pp. doi:10.4269/ajtmh.19-0924

Rubenstein, B. L., Roy, S. L., Unterwegner, K., Yerian, S., Weiss, A., Zirimwabagabo, H., Chop, E., Romero, M., Ouakou, P. T., Moundai, T., & Guagliardo, S. A. J. (2021). Community-based Guinea worm surveillance in Chad: Evaluating a system at the intersection of human and animal disease. PLoS Neglected Tropical Diseases, 15(3), e0009285. https://doi-org.proxy.library.emory.edu/10.1371/journal.pntd.0009285

Setback for campaign to eradicate Guinea worm disease. The Veterinary Record. 2020;187(10):382-383.

Senyonjo, L., Downs, P., Schmidt, E., Bailey, R., & Blanchet, K. (2021). Lessons learned for surveillance strategies for trachoma elimination as a public health problem, from the evaluation of approaches utilised by Guinea worm and onchocerciasis programmes: A literature review. PLoS Neglected Tropical Diseases, 15(1), e0009082. https://doi-org.proxy.library.emory.edu/10.1371/journal.pntd.0009082

Thach PN, van Doorn HR, Bishop HS, et al. Human infection with an unknown species of Dracunculus in Vietnam. International Journal of Infectious D L V H D V, H, V×× R I I L F L D O S X E O L of the International Society for Infectious Diseases. March 2021. doi:10.1016/j.ijid.2021.02.018

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