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Current major events

ACUTE HEMORRHAGIC CONJUNCTIVITIS IN SOUTHERN SUDAN

The Ministry of Health of Government of Southern Sudan (MOH/GOSS) reported an outbreak of acute hemorrhagic conjunctivitis "red eye syndrome" in Juba town and the surrounding districts. A team composed of the Field Epidemiology and Laboratory training Program (FELTP) Residents and FELTP alumni investigated the outbreak to identify the etiological agent and the magnitude of spread in Juba town. The outbreak started on the 19th International epidemiological week. As of July 11, a total of 428 cases were listed from 6 health facilities. Three out of six conjunctival swabs sent to KEMRI/CDC laboratory in Kenya tested positive for coxsackie virus A24v. The MOH/GOSS and WHO/Juba with support from health NGOs initiated a massive health education targeting eye and personal hygiene, and case management.

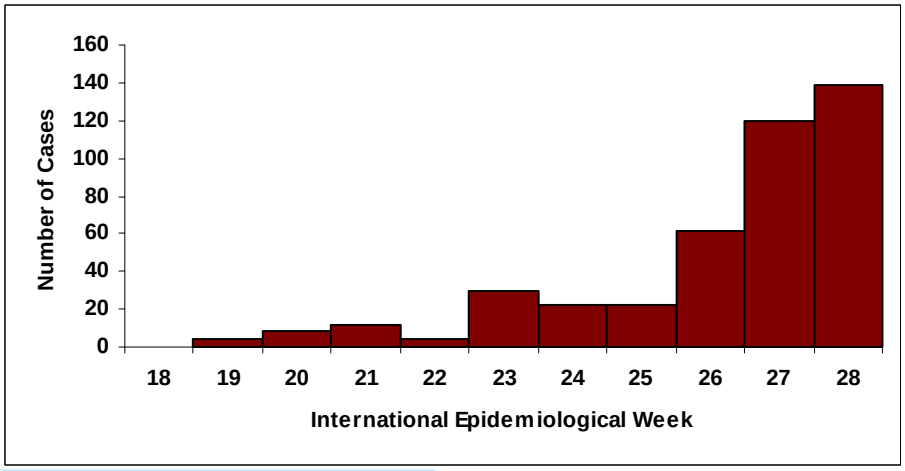
Editorial note

Acute hemorrhagic conjunctivitis (AHC) is a rapidly progressive and highly contagious viral disease that is primarily caused by two distinct enteroviruses: enterovirus 70 (EV70) and a variant of coxsackievirus A24 (CA24v). AHC is characterized by sudden onset of painful, swollen, red eyes with subconjunctival hemorrhages and excessive tearing. However, most cases are self-limiting. Symptoms start after an incubation period of 12 to 48 hours, and the clinical signs usually disappear in 1 to 2 weeks.

Both EV70 and CA24v have caused large outbreaks of ACH in tropical and coastal regions throughout the world (see table). The disease was first reported in Ghana, Africa, in 1969 and subsequently spread to several other countries of the Middle East, Asia, and Oceania. Currently, ongoing AHC epidemics have been reported from Uganda, Kenya, Turkey and probably in Lebanon. Initial laboratory tests carried on samples sent to NAMRU-3 from Lebanon could not identify the causative agent.

The first four cases of AHC outbreak in Juba were recorded on the 16th May 2010. The cases all came from the same district of the city. The investigating team could not trace the index case in the public health facilities visited. It was also evident that the AHC spread was not detected by the surveillance system until 30th June 2010 (more than one month after the beginning of the outbreak).

Acute Hemorrhagic Conjunctivitis Epi curve in Juba, Southern Sudan 2010



Some reported outbreaks of ACH

Country	Year	# 0f Cases	Cause
Trinidad	1986	15,396	CA24v
Kingston, Jamaica	1986	>500	CA24v
New Delhi, India	1996		EV70
South Korea	2002	>1million	CA24v
Rio de Janeiro, Brazil	2004	>60,000	CA24v

Detection of the outbreak was largely based on rumors that reached the Epidemic Preparedness task force (made up MOH/GOSS, WHO and all health agencies operating in Southern Sudan). The delay could be attributed to the fact that AHC is not routinely reported in the MOH/GOSS integrated disease surveillance and response (IDSR) system. The system also does not capture data from the private health facilities where many patients seek medical care.

Disease surveillance in South Sudan is relatively weak. Gaps in the surveillance coverage might be responsible for the delay in the early detection and under-reporting of this outbreak.. IDSR was only introduced two years ago and there is a room for improving it. The health authorities should strengthen the rumor verification, event monitoring and reporting system within the IDSR. The IDSR should include events that are not covered in the indicator-based surveillance. Equally, data from the private sector need be included in the surveillance network.

The epidemic curve shows steady and upward increase in the number of cases reported every week. The collaboration with KEMRI of Kenya has greatly assisted in confirming the diagnosis of AHC. Once verified, the response of the health authorities was prompt and appropriate interventions were instituted.

Update on outbreaks

Avian Influenza A(H5N1) in Egypt.; **Dengue fever** in Yemen; **Floods** in Pakistan; **Cholera** in Afghanistan; **Kala-Azar** in s. Sudan; **Acute Viral Conjunctivitis** in s. Sudan

Current public health events of international concern
[cumulative N° of cases (deaths), **CFR %**]

Avian influenza	
Egypt	[111 (35), **31.5%**]
Indonesia	[168 (139), **82.7 %**]
Viet Nam	[119 (59), **49.6%**
China	[39 (26), **66.6%**]
Global total	[504(299), **59.3%**]
Dengue fever	
Yemen	[9608(11), **0.1%**]
AWD (Cholera)	
Yemen	[300 (4), **1.3 %**]
Benin	[278(2),**0.72%**]
Kala-Azar (Visceral Leishmaniasis)	
S. Sudan	[2114(99), **4.7%**]
Acute Haemorrhagic Conjunctivitis	
S. Sudan	[428(0)., **0.0%**]
Uganda	[6818(0), **0.0%**]

CFR=Case-Fatality Rate

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