



**Republic of Namibia
Ministry of Health and Social Services**

**Outbreak of Hepatitis E Virus (HEV) in Namibia
Situation Report (SITREP No. 64)**

Reporting Date: 15/08/2019

Reporting Period: 29 July-04 August & 05-11 August 2019

Epidemiological weeks: 31 & 32

1. SIGNIFICANT ACTIVITIES & HIGHLIGHTS:

- There was a decrease in the number of reported cases during the last two weeks (Epidemiological week 31 & 32) compared to weeks 29 & 30.
- During this reporting period 29 July -11 August 2019 (weeks 31 & 32), a total of **168** Hepatitis E Virus cases were reported country-wide, compared to **215** cases reported during 15 – 28 July 2019 (i.e. weeks 29 & 30).
- Majority of cases are reported from Khomas 72 (43 %), Erongo 34 (20%) and Kavango 26 (15%) during the reporting period.
- National Health Emergency Management Committee deployed the thematic team leads to conduct an integrated support supervision visit to the Hepatitis E affected region that started on the 16 July, and will continue until 31 August 2019.
- CLTS task force committees that were identified, involving the councillors, were orientated on HEV and sanitation by UNICEF and MoHSS.
- Omaruru District have not reported any HEV case for about 7 months.

Table 1: Summary of Reported Cases by Regions during the last reporting week (29&30) compared to previous two weeks (week 27& 28)

Regions	Districts	Lab Confirmed	Epi-linked	Suspected	Discarded	Total (Week 31&32)	Previous Week 29&30
Khomas	Windhoek	9	56	7	0	72	139
Erongo	All	15	13	6	6	34	26
Hardap	Rehoboth	6	0	0	5	6	9
Omusati	All	6	0	9	12	15	6
Kavango	Andara, Rundu	16	0	10	39	26	6
Omaheke	Gobabis	7	0	0	4	7	14
Oshana	Oshakati	0	0	1	0	1	2
Ohangwena	Engela	1	0	0	3	1	2
Oshikoto	All	2	0	1	0	3	1
Kunene	Khorixas, Opuwo	0	0	0	0	0	1
Otjozondjupa,	All	0	0	3	0	3	8
Karas	Luderitz	0	0	0	0	0	1
Total		62	69	37	69	168	215

2. BACKGROUND

- MoHSS declared an HEV outbreak on 14 December 2017 in Windhoek, Khomas region. The outbreak continued in Windhoek, and spread to other regions around April 2018, eventually involving Erongo, Kavango, Ohangwena, Omusati, Oshana, Oshikoto, Omaheke, Hardap and Otjozondjupa regions amounting to 10 regions and all are carrying out the response activities.
- Cases have been reported mainly from informal settlements such as Havana and Goreangab in Windhoek, DRC in Swakopmund and similar settings in other regions where access to safe water, sanitation, and hygiene is limited. Most cases from less affected regions have a travel history to the above-mentioned informal settlements in Windhoek or Swakopmund.
- Apart from the above nine 10 outbreak affected regions, sporadic cases have also been reported during 2018-2019 (to date) as follow:
 - Kunene region all district reported 9 confirmed (6 asymptomatic) cases
 - Luderitz in Karas region reported 5 sporadic confirmed cases while
- Otjozondjupa region recently confirmed an outbreak during week 30 with a total of 20 lab confirmed cases of which 10 are from **Okahandja district** during week 24-30.
- All the above cases have a history of travel to outbreak affected regions, especially Khomas and Erongo.
- Cumulatively, as of 11 August 2019, a total of **6151** HEV cases were reported. This includes **1390** laboratory confirmed, **3966** Epi-linked and **795** Suspected/probable cases. Since the outbreak was confirmed, **964** specimens tested negative for Hepatitis E and were therefore discarded.
- Khomas region remains the most affected region, accounting for **3894 (63%)** of the confirmed cases, followed by Erongo **1393 (23%)** since the outbreak began. The remaining regions account for **864 (14%)** of the reported cases. Among the total HEV cases **20 (0.3%)** are residence of Angola.
- The national Case Fatality Rate (CFR) is **56 (0.9%)**, **female are 36 (64%); male 20 (46%)**. Of the 56 deaths, **23 (41%)** are maternal deaths, of which pregnant are 12 (52%), postpartum 10 (43%) and miscarriage 1 (4%).
- Majority (73%) of cases are among those in the age-group **20-29 (39%)** and **30-39 (34%)** respectively and the lowest is children under 1 year, whereas males are more affected than their female counterparts
- Omusati region continue to report increased number of **Hepatitis A** cases presumed to be with a total of **81** cases to date, however all other regions except Kavango have reported few (**56**) sporadic cases since 2018 to date.

3. RESULTS

Table 2: Cumulative total Hepatitis E cases reported in all affected regions, Namibia, September 2017 –11 August 2019.

Summary of Reported Cases by Region										
Region	District	Laboratory Confirmed	Epi-linked	Suspected	Cum HEV ^a cases reported	Discard ed	Total cases with AJS ^b	HEV ^d deaths	Maternal ^C case s reported	Maternal deaths
Khomas	Windhoek	334	3176	384	3894	102	3996	35	235	13
Erongo	All 4 districts	404	777	212	1393	67	1460	6	64	2
Omusati	All 4 districts	132	1	84	217	305	522	3	15	3
Ohangwena	All 3 districts	73	0	47	120	88	208	1	5	1
Oshana	Oshakati	85	5	9	99	33	132	3	6	1
Oshikoto	All 3 districts	83	0	13	96	59	155	0	5	0
Kavango	All 4 districts	72	0	24	96	209	305	3	1	1
Omaheke	Gobabis	86	7	6	99	45	144	3	5	2
Otjozondjup	All 4 districts	20	0	11	31	6	37	0	2	0
Kunene	All 3 districts	8	0	1	9	1	10	0	1	0
Hardap	Rehoboth	87	0	3	90	44	134	2	3	0
Karas	Luderitz	6	0	1	7	5	12	0	0	0
Total		1390	3966	795	6151	964	7115	56 <i>CFR^e</i> 0.9%	342	23

Footprints

1. ^a *Hepatitis E Virus Which Excludes discarded and cases with unassigned classification, and includes only lab confirmed, epi-linked, and suspected cases*
2. ^b *Acute Jaundice Syndrome (AJS) which includes lab confirmed, epi-linked, suspected, discarded, and unclassified cases*
3. ^c *Maternal cases include those labs confirmed, epi-linked, or suspected cases reported as pregnant, miscarriage, or postpartum. Discarded or cases with unassigned classification cases are excluded*
4. ^d *HEV deaths include those reported among lab confirmed, epi-linked, or suspected cases. Discarded cases are excluded*
5. ^e *Case fatality rate is calculated using the number of lab confirmed, epi-linked, or suspected cases who died divided by the cumulative number of lab confirmed, epi-linked, or suspected cases. Discarded cases are not included in the calculation as they have been ruled out as cases of hepatitis E infection, and unassigned are not included as they have not been ruled in as a case.*

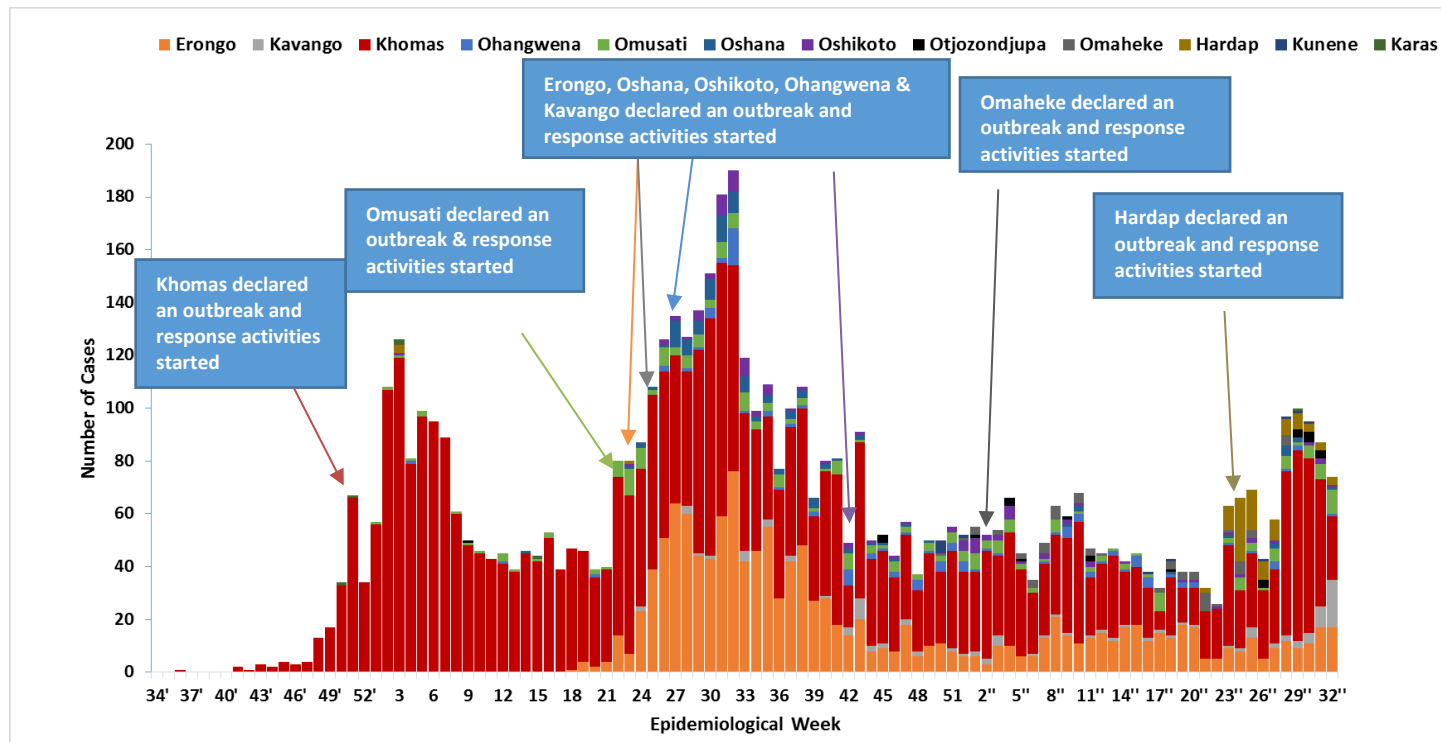


Figure 1: Epi Curve of HEV cases (Lab confirmed, epi-linked, and suspected hepatitis E cases) by epidemiological weeks, Namibia, September 2017 – 11 August 2019 (n=6151).

The epidemiological curve above shows that, cases continue to fluctuate. It clearly shows slight decrease in cases during the last three weeks.

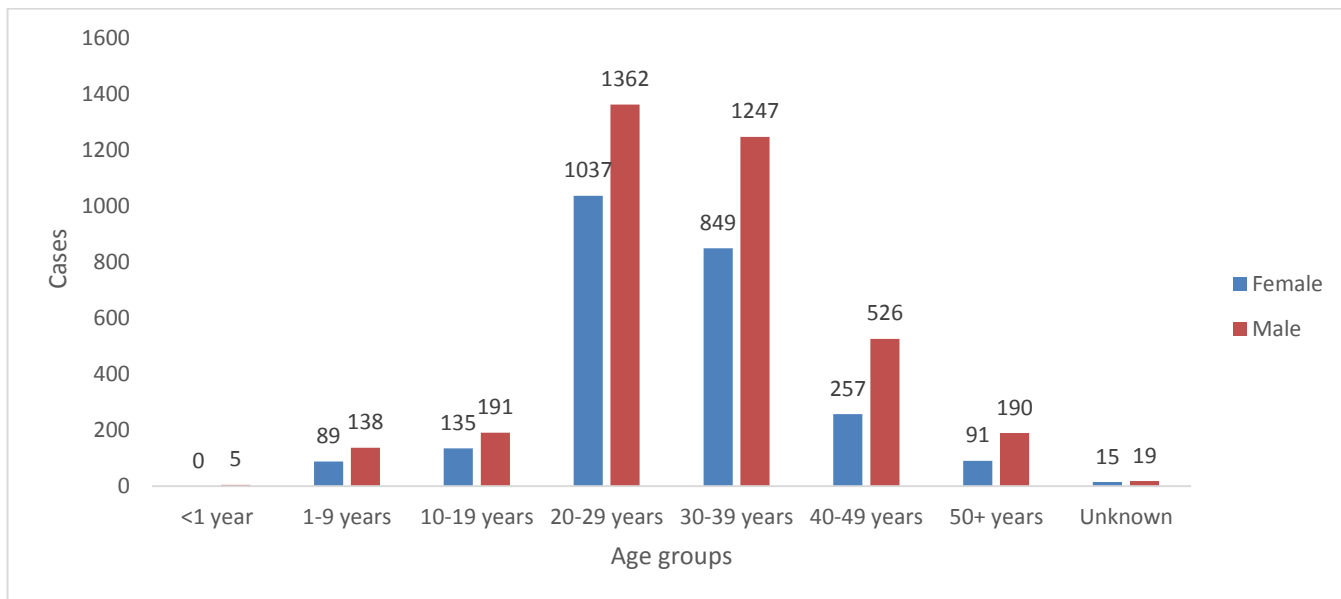


Figure: HEV cases (Lab confirmed, epi-linked and suspected) by sex and age, Namibia, as of 11 August 2019 (epi week 32) (n=6151)

The graph above illustrates that most of the cases (60%) are male, topping in all age groups compared to female. Male are more likely to eat food from street vendors than female (P-Value ≤ 0.0001), apart from that male are also less likely to wash their hand before eating. Majority (73%) of cases are recorded among those in the age-group 20-29 (39%) and 30-39 (34%) respectively and the lowest in children under 1 year.

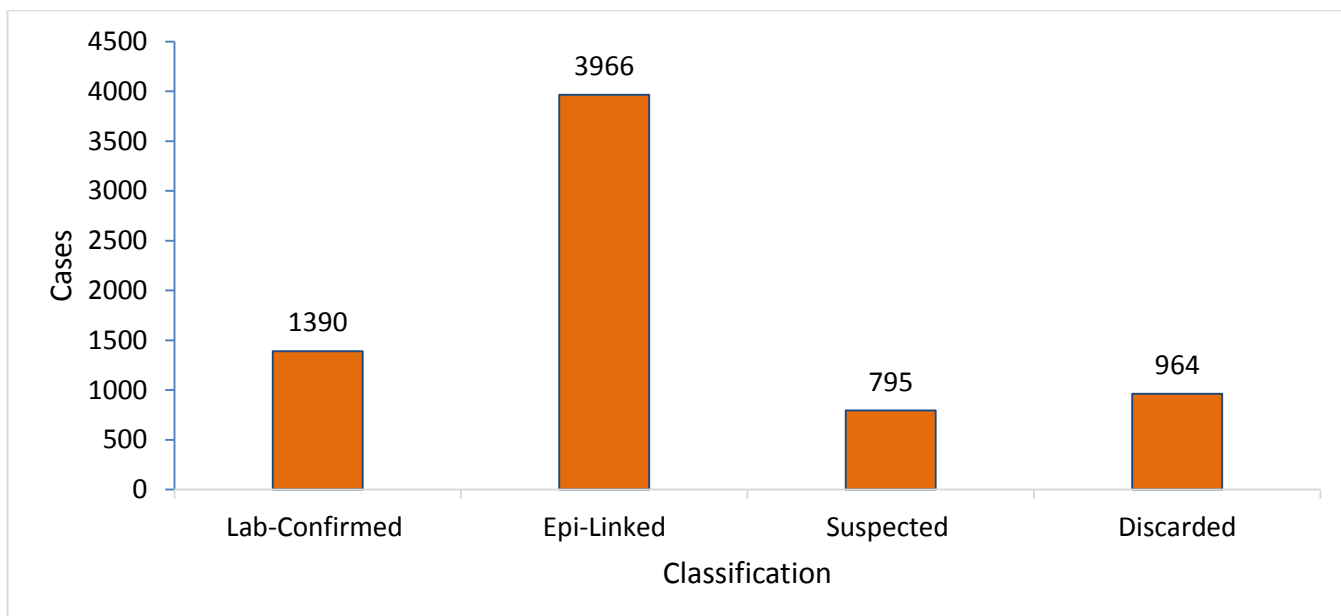


Figure 4 Classification of AJS cases seen at health facilities, Namibia, September 2017 – 11 August 2019 (n=7115).

The majority (56%) of reported cases are in the Epi-linked classification, mainly from outbreak-stricken areas of Havana, Goreangab in Windhoek District and DRC informal settlements in Swakopmund. Cases are epidemiologically linked to laboratory confirmed cases from similar geographical locations after an outbreak was established in those particular locations or settings.

Other analysis

Since the outbreak started to date, most of the cases 77%, (4563/5940) are unemployed, 77%, and (4550/5940) use communal taps and 55%, (3242/5940) ate food from street vendors.

About 9%, (549/5940) of cases were hospitalized.

A total of 137 (2%) and 164 (3%) people were diagnosed with Hepatitis A and B Laboratory confirmed respectively, of which 10 are co-infected with Hepatitis E and A, while 62 are co-infected with Hepatitis E and B. Four (4) patients had both Hepatitis A, B and E.

Hepatitis A and B cases reported per region during Hepatitis E outbreak, Namibia, January 2018- 11 August 2019

Regions	Hepatitis A	Hepatitis B
Khomas	12	26
Erongo	6	26
Omusati	81	61
Ohangwena	12	9
Oshana	9	13
Oshikoto	1	3
Kavango	0	3
Omaheke	3	19
Otjozondjupa	1	3
Kunene	2	2
Hardap	8	1
Karas	2	2
Total	137	168

There is an increase number of Hepatitis A and B reported during hepatitis E outbreak. Omusati region being the region which is testing almost all the Acute Jaundice cases; recorded the highest Hepatitis A and B cases, (81 (59%) and 61(36%) respectively.

4. MOST RECENT AND CURRENT PUBLIC HEALTH ACTIONS / RESPONSE INTERVENTIONS CARRIED OUT TO DATE

4.1 Coordination

- Partner organizations continue to provide in-country technical assistance (WHO and CDC).
- The Overall coordinator continues to support the setting up of the Public Health Operation Centre (PHEOC) located at the National Health Training Centre (NHTC, Windhoek)
- The National Costed Activity Plan for Hepatitis E response has been finalized; following incorporation of UNDP sponsored activities. However, this response plan is yet to be endorsed by the financial advisor in the MoHSS.

4.2 Surveillance, Laboratory, and Case Management

- Regional and District surveillance teams continue to conduct health education, case tracing, mapping and reporting of HEV cases on a weekly basis.
- NIP continues with Hep E testing at district laboratories, but expansion of RDTs to other facilities within Windhoek and to other regions is very slow.

4.3 Social Mobilization & Risk communication

- Community meetings are used as a platform to sensitize communities on occasional basis.
- Hepatitis E information is shared on the Otjiherero radio on a bi-weekly basis by the City of Windhoek (CoW).
- The Overall Coordinator is advocating for the additional volunteers from the community to strengthen the health education, social mobilization and referral of cases at a community level.

4.4 Water, Sanitation, and Hygiene (WASH)

- The CoW, UNICEF, MAWF and partners are working together, to facilitate the Community-Led Total Sanitation in Windhoek. Mapping of sanitation centers was done in Samora Machel and Moses Garoeb constituencies. CLTS task force committees that were identified, involving the councillors, were orientated on HEV and sanitation by UNICEF and MoHSS.

5. CHALLENGES & GAPS

- The outbreak has become protracted and had spread to other locations in Windhoek and to all regions in the country, with the exception of Zambezi.
- Suboptimal coordination of the outbreak response at all levels
- Inadequate WASH interventions and sanitation facilities including portable water, latrines and hand washing facilities, among others, in informal.

- Inadequate risk communication activities to facilitate behaviour change and enforce hygiene and sanitation practices, early health seeking behaviours and sense of ownership among community members.
- Sub-optimal updates and involvements from thematic leads of the technical working groups

6. PRIORITY INTERVENTIONS NEEDED (RECOMMENDATIONS)

- Adoption of the Incident Management System (IMS) at all levels and the orientation of subnational incident managers and the response committees.
- Expedite the identification/assignment of the Incident Manager
- Intensification of outbreak response through effective coordination and use of available resources (financial, human).
- MoHSS to develop a plan and schedule for the training of additional health facility staff to further strengthen HEV testing capacity using RDTs in Khomas, Erongo and other regions, in collaboration with NIP.
- Endorsement and implementation the costed national response plan by MoHSS executive
- Massive scaling up of WASH activities including CLTS and active community involvement to ensure ownership and reduce vandalism and theft of provided sanitation facilities.
- Strengthened social mobilisation for behavioural changes
- Improved data quality through use of standardized line list and timely reporting.
- Regional management teams to ensure accountability regarding the outbreak response and timely reporting.
- Continuation of case tracing, additional case search and laboratory testing of high-risk populations.
- Resource mobilization to support response activities.

7. REGIONAL UPDATES

7.1 Oshana region

- Shortage of IEC materials
- Lack of space to put up toilets/pit latrines in some informal settlements
- The National level to assist the Region with more printed IEC materials in local languages and WASH facilities

7.2 Khomas region

- Poor community ownership of water and sanitation facilities hence vandalism and theft remains a challenge in the informal settlements

7.3 Omaheke region

- New informal settlement area in Nossobville visited by the CHW and EHO, health education and water purification tablets distributed.
- Health education talks in all languages via community radio station by MICT is ongoing.

7.4 Hardap Region

- Ministry of works assisted to weld 5 more tippy taps and all 15 are now in use.
- Community Health Workers are still working in the affected areas and are strengthening work done by EHOs such as intensive health education, symptomatic screening of clients and contact tracing of confirmed cases.

7.5 Kavango region

- Laboratory has received Rapid testing kits thus the results are received faster than before as testing is done locally
- Radio talk on Hepatitis E every Wednesday at 7 AM.
- Red cross sponsored 50 hand washing containers
- Ministry of agriculture to come up with a WASH programme activities for town and villages affected.

7.6 Ohangwena Region

- Received water purification tablets received from National level, Epidemiology division and were distributed to the districts.

7.7 Otjozondjupa Region

- Stakeholder sensitization meeting conducted at Okahandja district.
- Regional and District surveillance team continues to do health education, case tracing, and reporting of HEV cases weekly.
- Health workers at health facilities continue to give health education to patients/clients.

Omusati, and Oshikoto region did not submit their situation reports.

8. CONCLUSION

There is a decrease in number of HEV cases during the reporting period. However, the outbreak continues to be protracted and cases are still being detected in areas where water and toilet facilities are limited. In order to contain the outbreak, there is a need to intensify response activities.

9. ACKNOWLEDGMENTS

- The Ministry of Health and Social Services (MoHSS)
- Office of the Prime Minister (OPM)
- City of Windhoek (CoW)
- Ministry of Agriculture Water and Forestry (MAWF)
- Namibia Institute of Pathology (NIP)
- The World Health Organization (WHO)
- UNICEF
- UNDP
- US Centres for Disease Control & Prevention (CDC)
- Namibia Red Cross Society (NRCS)
- Ministry of Information and Communication Technology, (MICT)

- Coca Cola Company Namibia
- Media houses
- Office of the Governor and Regional Council for Khomas Region
- Ministry of Education
- Erongo Regional Council
- Swakopmund Municipality Regional Response Committees,
- University of Namibia (UNAM)
- All other stakeholders