

Situation update of Dengue 2023 (As of 15 July, 2023)

Dengue is a viral infection transmitted to humans through the bite of infected Aedes mosquitoes. Dengue is widespread throughout the tropics, with local variations in risk influenced by climate parameters as well as social and environmental factors. Dengue is caused by a virus of the Flaviviridae family and there are four distinct, but closely related, serotypes of the virus that cause dengue (DENV-1, DENV-2, DENV-3 and DENV-4).

Dengue has become a rapidly growing concern in Nepal. The country has actively conducted vector surveillance in various districts, revealing the presence of Aedes aegypti and Aedes albopictus mosquitoes, which are known vectors for dengue transmission. Nepal has a historical record of all four dengue serotypes circulating, but in 2022, DENV-1 and DENV-3 were the most prevalent, with no evidence of DENV-4. In that same year, Nepal reported 54,784 dengue cases and 88 deaths, marking the highest number ever recorded in the country. This figure was more than three times the number of cases reported in 2019.

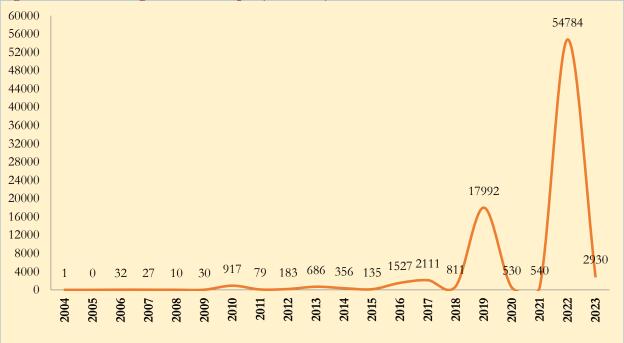


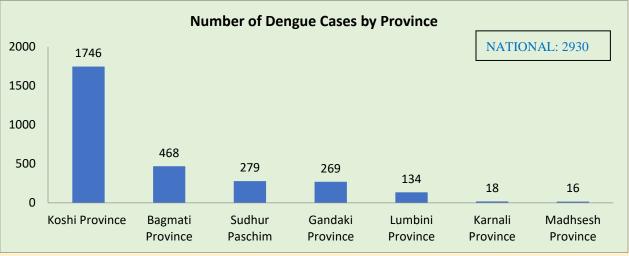
Figure 1: Trend of dengue cases in Nepal (2004-2023)

Source: EWARS and Line-Listing from Districts (as of 15 July 2023)

As of 15 July, 2023 a total of 2930 dengue cases have been identified from 68 districts, with Koshi province reporting highest number (1746), followed by Bagmati province (468) and Sudurpaschim Province (279) as listed details in Figure 2.







Source: EWARS and Line-Listing from Districts (as of 15 July 2023)

The top 10 districts account for **82** % of all reported cases **(2411 cases)**, while the cases are sporadic in other districts (Table 1). These top 10 districts include Sunsari (1571), Dhading (258), Darchula (188), Kaski (149), Sankhuwasabha (58),Kathmandu (46), Kanchanpur (39), Bhaktapur (35), Myagdi (35), and Jhapa(32) as shown in Figure 3.

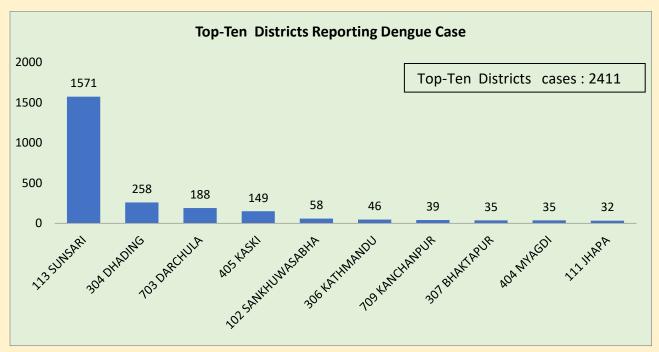


Figure 3: Top 10 districts reporting dengue cases (2023, EWARS and District line list)

Source: EWARS and Line-Listing from Districts (as of 15 July 2023)



Interventions and Activities conducted for Dengue Prevention and Control

- The comprehensive Action Plan on Dengue Prevention and Control has been developed by EDCD, which has been disseminated to all provinces, districts and local levels.
- EDCD has been conducting routine surveillance of dengue cases through the Early Warning and Reporting System (EWARS). The line-lists of Dengue cases have been shared with 92 local levels in 66 districts to initiate timely response.
- A Clinical Seminar on Dengue with a focus on clinical case management was recently organized by EDCD (Epidemiology and Disease Control Division). The seminar brought together international experts in Dengue, and it saw the participation of over 110 doctors and nurses.
- The Epidemiology and Disease Control Division (EDCD) is actively conducting a series of sensitization meetings with stakeholders from different workplaces to raise awareness about Dengue Prevention and Control. The EDCD has successfully completed sensitization meetings with the Auto-mechanic Proprietors' Association of Nepal and the Nepal Recollection and Recyclers' Association (Kawadi)
- The Ministry of Health and Population (MOHP) has initiated a campaign encouraging all public offices to conduct a cleanliness campaign in their office premises for at least **10 minute on every Friday at 10:30 am.**
- In collaboration with NHEICC, EDCD has created a flyer for dengue prevention and control, which is regularly distributed through online and social media channels
- Dengue test diagnostic kits are being supplied to provinces and districts on a need basis.
- A joint program review of vector-borne diseases, including dengue, was undertaken by a team of national and international experts. This review assessed the issues and challenges related to dengue prevention and control, and identified the key priorities for action.
- EDCD is maintaining a regular communication and collaboration with relevant levels, partners, and stakeholders to enhance the recording, reporting, and response to dengue.



Ministry of Health and Population Department of Health Services Epidemiology and Disease Control Division

Summary of Dengue reported cases based on EWARS reporting											
(01 Jan - 15 July 2023)											
Province	Districts	Jan	Feb	Mar	Apr	May	Jun	Jul	Grand Total		
1	113 SUNSARI	6	2	3	1	1	667	891	1571		
3	304 DHADING	2	1	5	41	18	78	113	258		
7	703 DARCHULA	9	33	117	15	9	5	0	188		
4	405 KASKI	2	1	0	27	35	42	42	149		
1	102 SANKHUWASABHA	0	1	0	0	13	30	14	58		
3	306 KATHMANDU	10	4	4	1	2	11	14	46		
7	709 KANCHANPUR	2	12	4	7	4	5	5	39		
3	307 BHAKTAPUR	5	9	12	5	2	2	0	35		
4	404 MYAGDI	7	8	0	6	6	4	4	35		
1	111 JHAPA	5	2	6	3	0	8	8	32		
1	108 TERHATHUM	0	2	0	0	0	13	13	28		
5	508 RUPANDEHI	7	6	4	3	0	7	1	28		
5	506 PALPA	1	4	1	4	5	9	3	27		
3	308 LALITPUR	4	3	1	0	2	8	8	26		
4	406 LAMJUNG	0	0	1	7	15	2	0	25		
1	112 MORANG	2	2	3	3	1	7	6	24		
3	310 RAMECHHAP	11	11	0	0	0	1	1	24		
3	305 NUWAKOT	0	0	0	2	2	15	4	23		
3	313 CHITAWAN	14	1	1	0	0	5	0	21		
5	510 DANG	4	0	0	3	4	6	2	19		
5	505 ARGHAKHANCHI	0	1	1	0	9	3	3	17		
7	707 ACHHAM	1	1	1	2	5	6	1	17		
4	408 NAWALPARASI EAST	5	3	0	2	2	4	0	16		
5	511 BANKE	1	1	0	2	1	8	2	15		
1	107 DHANKUTA	0	0	0	0	0	7	7	14		
7	708 KAILALI	2	2	1	1	0	4	4	14		
4	407 TANAHU	0	0	0	1	4	7	0	12		
4	403 MUSTANG	0	0	11	0	0	0	0	11		
5	512 BARDIYA	5	1	1	1	2	1	0	11		
3	309 KAVREPALANCHOK	7	2	0	0	0	1	0	10		
3	311 SINDHULI	1	0	4	1	0	2	2	10		
4	410 PARBAT	2	0	0	2	2	1	1	8		
5	509 KAPILBASTU	3	2	1	0	1	1	0	8		
3	312 MAKWANPUR	1	0	2	1	0	3	0	7		
1	106 BHOJPUR	0	0	0	1	0	3	2	6		
6	601 DOLPA	0	0	0	3	0	3	0	6		
7	702 BAJHANG	0	0	1	0	1	4	0	6		
4	401 GORKHA	1	0	0	0	2	1	1	5		
5	504 GULMI	1	1	3	0	0	0	0	5		
7	704 BAITADI	0	1	3	0	1	0	0	5		
1	110 ILAM	0	0	0	0	0	2	2	4		



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2	202 SIRAHA	1	1	2	0	0	0	0	4
4	411 BAGLUNG	0	0	0	2	1	1	0	4
6	608 RUKUM WEST	0	1	1	0	1	0	1	4
6	610 SURKHET	0	0	2	1	0	1	0	4
7	701 BAJURA	1	0	1	0	0	2	0	4
7	706 DOTI	0	2	0	0	2	0	0	4
1	105 KHOTANG	0	2	1	0	0	0	0	3
1	114 UDAYAPUR	0	1	1	0	0	1	0	3
2	205 SARLAHI	0	1	0	1	1	0	0	3
2	207 BARA	1	1	0	1	0	0	0	3
2	208 PARSA	1	0	0	0	0	1	1	3
3	301 DOLAKHA	2	0	0	1	0	0	0	3
3	303 RASUWA	0	0	0	0	1	2	0	3
4	409 SYANGJA	1	0	0	0	0	2	0	3
1	104 OKHALDHUNGA	0	0	0	0	0	1	1	2
3	302 SINDHUPALCHOK	1	0	0	0	0	1	0	2
5	501 RUKUM EAST	0	0	0	1	0	1	0	2
5	507 NAWALPARASI WEST	0	0	2	0	0	0	0	2
6	606 DAILEKH	0	0	0	0	0	1	1	2
7	705 DADELDHURA	0	1	1	0	0	0	0	2
1	109 PANCHTHAR	0	1	0	0	0	0	0	1
2	201 SAPTARI	0	0	0	1	0	0	0	1
2	204 MAHOTTARI	1	0	0	0	0	0	0	1
2	206 RAUTAHAT	0	0	0	0	1	0	0	1
4	402 MANANG	0	0	0	0	1	0	0	1
6	607 JAJARKOT	0	0	1	0	0	0	0	1
6	609 SALYAN	0	0	0	0	1	0	0	1
1	101 TAPLEJUNG	0	0	0	0	0	0	0	0
1	103 SOLUKHUMBU	0	0	0	0	0	0	0	0
2	203 DHANUSA	0	0	0	0	0	0	0	0
5	502 ROLPA	0	0	0	0	0	0	0	0
5	503 PYUTHAN	0	0	0	0	0	0	0	0
6	602MUGU	0	0	0	0	0	0	0	0
6	603 HUMLA	0	0	0	0	0	0	0	0
6	604 JUMLA	0	0	0	0	0	0	0	0
6	605 KALIKOT	0	0	0	0	0	0	0	0
	Grand Total	130	128	203	153	158	1000	1152	2930