

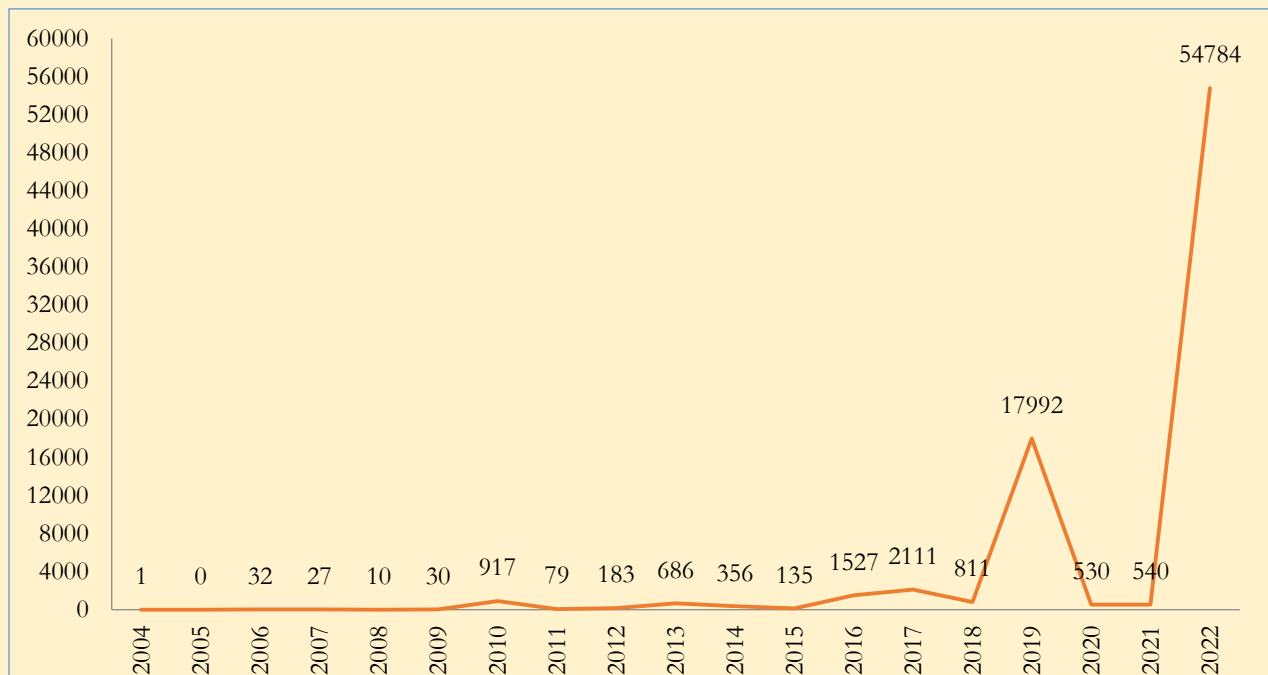


Situation update of Dengue 2022 (As of 31th Dec,2022)

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).

In Nepal, dengue is a rapidly emerging disease. Vector surveillance conducted in three districts: Dang, Lalitpur and Kathmandu has demonstrated presence of the vector *Aedes aegypti* and *Aedes albopictus*. All 4 dengue serotypes exist in Nepal, with DENV-1 and 2 historically contributing the highest burden (EDCD, 2019).

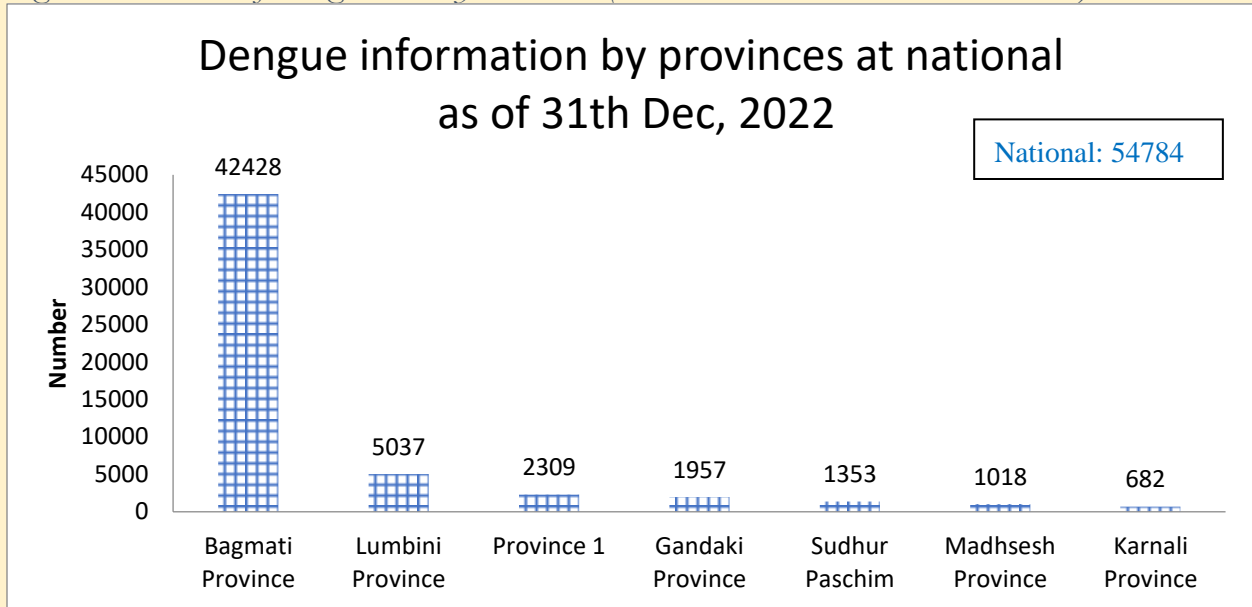
Figure 1: Trend of dengue cases in Nepal (2004-2022) (Source: EDCD)



As of 31th Dec, 2022 a total of **54784 dengue** cases have been identified, with Bagmati province reporting highest number (42428) followed by Lumbini province (5037), Province-1 (2309) and other provinces respectively as listed details in figure number 2.

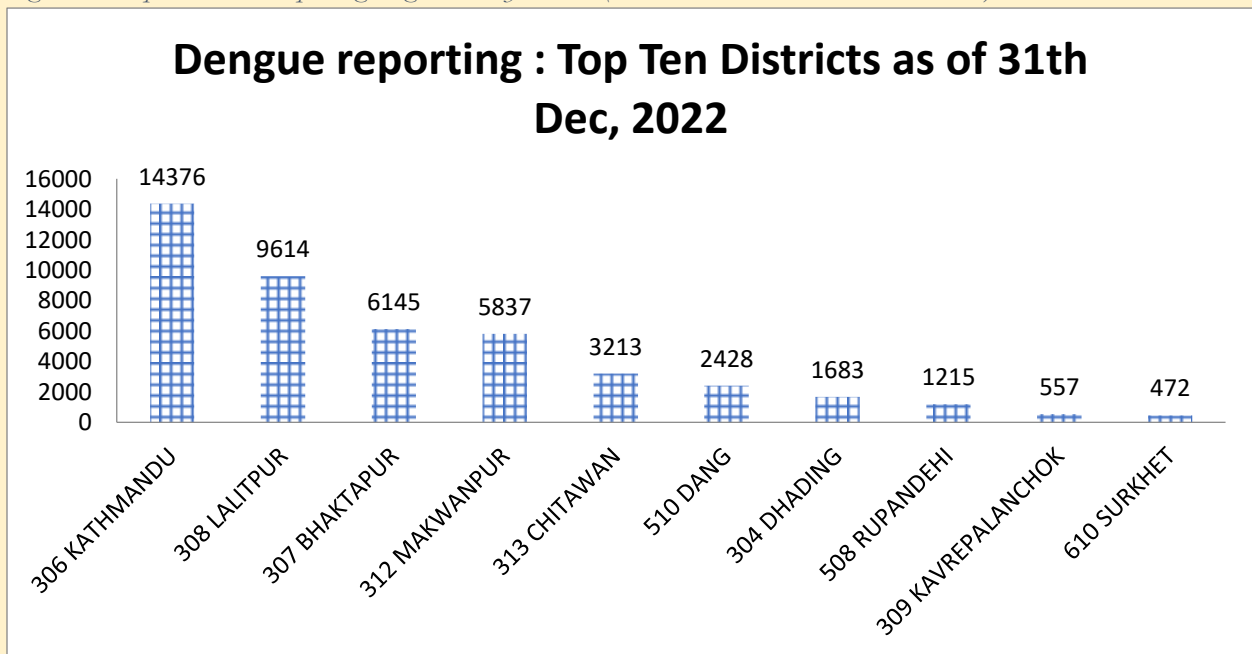


Figure 2: Number of Dengue cases by Provinces (2022, EWARS and district line list)



The top 10 districts have reported the highest number of cases (**45,540, 83%**), with sporadic cases reported from other districts, as highlighted in Table 1. Out of the top 10 districts reporting dengue cases, the highest numbers of cases are being reported from Kathmandu (14,375), Lalitpur (9,614), Bhaktapur (6,145), Makawanpur (5,837), Chitwan (3,213), Dang (2,428), Dhading (1,683) and Rupandehi (1,215) as shown in figure 3. **Till date, 88 deaths due to dengue are verified.**

Figure 3 : Top 10 districts reporting dengue cases by months (2022, EWARS and District line list)





Intervention conducted in response to dengue

- ✓ EDCD conducted a virtual interaction meeting with provinces, districts and local levels to discuss on the current situation, responses from districts and local level and possible coordinated efforts to curve the increasing cases of dengue.
- ✓ For the response of dengue, EDCD has allocated budget for 139 palikas, 60 districts and all 7 provinces for 'search and destroy' to control the dengue. Moreover, EDCD has allocated budget to conduct stakeholders meeting for advocacy on dengue prevention during the peak month on same palika, districts and provinces.
- ✓ EDCD conducted a stakeholder meeting with hotel association of Nepal as well as school association as a preparation of outbreak especially in schools and hotels.
- ✓ EDCD has developed the dengue prevention and control flyer in coordination with NHEICC.
- ✓ EDCD is providing dengue test diagnostic kits to provinces and districts as per their request and availability in EDCD store.
- ✓ In last week of August, District health office, Lalitpur and Kathmandu started mass dengue search and destroy campaign as well as awareness activities in close collaboration with the metropolitan city/wards.
- ✓ Regular update and sharing of the information regarding current cases and deaths due to dengue with all officials (MoHP, DoHS, province, districts and palikas)
- ✓ A joint meeting among MoHP, EDCD and hub hospitals was conducted to share the situation update, ongoing intervention and outbreak preparedness.
- ✓ EDCD conducted an interaction meeting with elected officials of Kathmandu valley districts and Dang, health coordinators, with focus on sensitizing on dengue prevention and control efforts in Kathmandu districts.
- ✓ EDCD conducted two batch of technical orientation program with physicians/Medical officers all over the country to sensitize physicians on proper case management of dengue, referral and support in surveillance system. Over 225 doctors joined virtually from all over the country and 65 doctors joined physically in the program.
- ✓ Vector surveillance activity was conducted in Lalitpur, Kathmandu, and Dang districts. The preliminary findings of the surveillance were discussed and the full report will be published soon.
- ✓ The EDCD has distributed LLINs (Long-lasting insecticidal nets) to high-reporting hospitals (both public and private) in Kathmandu valley for dengue control.



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

Table :1 Dengue reporting by month at districts ((2022, EWARS and District line list)

Summary of Dengue reported cases based on EWARS reporting														
01 Jan - 31th Dec 2022														
Province	Districts	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Grand Total
3	306 KATHMANDU	0	0	0	0	1	1	35	727	9891	2911	761	49	14376
3	308 LALITPUR	0	0	0	0	0	1	99	1558	6016	1809	120	11	9614
3	307 BHAKTAPUR	0	0	0	0	0	0	6	86	1151	4204	677	21	6145
3	312 MAKWANPUR	0	0	0	0	0	0	221	337	2452	2220	590	17	5837
3	313 CHITAWAN	0	0	0	0	0	3	4	24	995	1509	638	40	3213
5	510 DANG	0	0	0	0	1	1	5	19	1702	575	120	5	2428
3	304 DHADING	0	0	0	0	0	32	24	54	483	674	378	38	1683
5	508 RUPANDEHI	1	0	2	1	0	7	109	315	374	370	20	16	1215
3	309 KAVREPALANCHOK	0	0	0	0	0	0	5	29	177	301	24	21	557
6	610 SURKHET	0	0	0	3	2	0	0	1	451	13	0	2	472
7	708 KAILALI	2	0	1	1	0	0	3	13	395	11	4	2	432
1	113 SUNSARI	0	0	0	0	0	0	2	4	114	252	18	26	416
4	407 TANAHU	0	0	0	0	0	0	2	1	86	182	78	10	359
7	703 DARCHULA	0	0	0	0	0	2	0	10	270	44	12	11	349
2	207 BARA	1	0	0	0	2	0	0	9	87	186	45	5	335
1	102 SANKHUWASABHA	0	0	0	1	0	11	30	15	64	144	39	14	318
5	504 GULMI	0	0	0	0	2	3	17	33	244	6	0	0	305
4	401 GORKHA	0	0	0	0	0	1	2	9	81	170	26	2	291
1	105 KHOTANG	0	0	0	0	1	0	0	2	75	192	8	0	278
4	410 PARBAT	0	0	0	0	1	0	3	3	77	150	31	10	275
3	305 NUWAKOT	0	0	0	0	0	0	2	12	113	107	40	0	274
7	709 KANCHANPUR	2	0	0	0	2	4	3	14	121	40	65	22	273
4	405 KASKI	0	0	0	1	0	0	3	6	84	130	37	9	270
1	111 JHAPA	1	0	1	0	1	1	2	5	68	125	35	16	255
3	310 RAMECHHAP	0	1	1	1	0	0	4	17	93	63	21	20	221
3	302 SINDHUPALCHOK	0	0	0	0	0	0	0	7	89	104	19	0	219
4	409 SYANGJA	0	0	0	0	0	0	1	5	80	105	20	7	218
5	512 BARDIYA	0	0	7	4	6	0	4	6	68	92	18	10	215
2	208 PARSA	0	0	0	0	0	3	1	3	68	94	37	8	214
5	506 PALPA	0	1	1	2	0	3	12	26	82	51	14	5	197
4	411 BAGLUNG	0	0	0	0	0	0	6	12	70	57	32	4	181
1	112 MORANG	1	0	0	1	0	3	2	3	65	54	37	11	177
4	408 NAWALPARASI EAST	0	0	0	0	0	0	2	12	64	42	37	18	175
1	108 TERHATHUM	0	0	0	0	0	0	0	88	50	33	0	1	172
3	311 SINDHULI	0	0	0	0	0	1	27	38	46	46	12	2	172
5	505 ARGHAKHANCHI	0	0	0	1	0	1	13	36	87	15	9	3	165
5	511 BANKE	0	1	0	0	0	0	2	6	49	95	2	1	156
2	205 SARLAHI	0	0	0	0	2	1	1	19	63	37	30	1	154
1	114 UDAYAPUR	0	0	0	0	0	0	0	3	53	81	14	1	152
1	107 DHANKUTA	0	0	0	0	0	0	0	4	54	77	8	2	145
2	206 RAUTAHAT	0	0	0	0	1	0	2	5	70	45	15	3	141
5	509 KAPILBASTU	0	0	1	0	0	2	6	21	53	32	17	2	134



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5	507 NAWALPARASI WEST	0	0	0	0	0	1	16	23	33	33	15	2	123
1	110 ILAM	0	0	0	0	1	0	1	2	29	55	21	1	110
1	106 BHOJPUR	0	0	0	0	0	2	7	3	29	55	9	1	106
3	301 DOLAKHA	0	0	0	0	0	0	0	10	56	32	6	2	106
4	406 LAMJUNG	0	0	0	1	0	2	8	6	44	7	20	9	97
7	706 DOTI	0	0	0	0	0	0	1	1	72	8	2	1	85
1	109 PANCHTHAR	0	0	0	0	0	0	0	1	23	43	10	2	79
7	704 BAITADI	0	0	0	0	0	0	3	4	34	22	10	0	73
4	404 MYAGDI	0	0	0	1	0	0	1	1	43	6	14	5	71
2	204 MAHOTTARI	0	0	0	0	0	0	0	5	36	0	16	4	61
1	104 OKHALDHUNGA	0	0	0	0	0	1	3	4	27	15	6	0	56
5	503 PYUTHAN	1	0	0	0	0	1	6	6	25	6	4	0	49
6	608 RUKUM WEST	0	0	0	0	0	0	1	3	25	14	3	0	46
2	201 SAPTARI	0	0	0	0	0	0	0	3	24	9	6	0	42
7	705 DADEL DHURA	0	0	0	0	0	1	1	5	23	8	4	0	42
7	707 ACHHAM	0	0	0	0	1	1	1	1	21	12	3	0	40
2	203 DHANUSA	0	0	1	0	0	0	0	2	15	13	4	2	37
6	609 SALYAN	0	0	0	0	0	0	1	0	26	4	5	0	36
2	202 SIRAHA	0	0	0	0	0	1	0	5	17	6	2	3	34
6	606 DAILEKH	0	0	0	0	0	0	1	1	13	18	0	0	33
7	702 BAJHANG	1	0	0	0	0	0	0	4	17	7	4	0	33
6	604 JUMLA	1	0	0	0	0	0	6	6	10	4	1	3	31
6	605 KALIKOT	0	0	0	0	0	1	0	0	20	10	0	0	31
5	501 RUKUM EAST	0	0	0	0	0	0	2	3	15	4	3	0	27
1	103 SOLUKHUMBU	0	0	0	0	0	0	0	2	14	5	3	2	26
7	701 BAJURA	0	0	0	0	1	0	1	5	11	7	1	0	26
5	502 ROLPA	0	0	0	0	0	0	0	2	12	7	2	0	23
1	101 TAPLEJUNG	0	0	0	0	0	0	0	0	6	10	3	0	19
6	607 JAJARKOT	0	0	0	0	0	1	0	0	11	1	0	0	13
4	402 MANANG	0	0	0	0	0	0	0	1	5	2	4	0	12
6	602 MUGU	0	0	0	0	0	0	0	1	7	4	0	0	12
3	303 RASUWA	0	0	0	0	0	0	0	0	6	5	0	0	11
4	403 MUSTANG	0	0	0	0	0	0	0	0	2	6	0	0	8
6	601 DOLPA	0	0	0	0	0	0	0	1	1	2	1	0	5
6	603 HUMLA	0	0	0	0	0	0	0	0	2	1	0	0	3
	Grand Total	11	3	15	18	25	93	720	3708	27529	17889	4290	483	54784