# Integrated Disease Surveillance & Response (IDSR) Report

**Center of Disease Control**
**National Institute of Health, Islamabad**

**http:/www.phb.nih.org.pk/**

Integrated Disease Surveillance & Response (IDSR) Weekly Public Health Bulletin is your go-to resource for disease trends, outbreak alerts, and crucial public health information. By reading and sharing this bulletin, you can help increase awareness and promote preventive measures within your community.



**Public Health Bulletin Pakistan**

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# Public Health Bulletin - Pakistan.

## Overview

## IDSR Reports

## Ongoing Events

## Field Reports

### Public Health Bulletin - Pakistan, Week 17, 2024

The latest Public Health Bulletin serves as a comprehensive resource for both healthcare professionals and the public alike, promoting proactive measures towards a healthier Pakistan. This report transcends a simple list of illnesses by offering a detailed analysis of prevalent diseases and tracking trends in critical areas like tuberculosis and dog bites. This granular data empowers stakeholders to tailor preventive interventions and address emerging public health concerns.

Furthermore, the Bulletin functions as an early warning system, enabling proactive investigations into potential outbreaks of concerning diseases such as Acute Flaccid Paralysis and Brucellosis. This swift response is instrumental in containing the spread of these illnesses and protecting public health.

Beyond presenting valuable data, the Bulletin delves deeper by providing dedicated reports on recent outbreaks of measles and suspected dengue fever. Additionally, it offers insightful perspectives on Landmark Initiative by Punjab: Free Home Delivery of Medicine for Improved Public Health" and an editor's commentary titled "Immunization and its Triumphant Role in Pakistan."

The "Knowledge Hub" section further empowers individuals by equipping them with the knowledge necessary to protect themselves. This week, the hub features an informative article titled "Combating Leprosy Through Awareness."

By staying informed through the Public Health Bulletin and translating its insights into action, we can collectively work towards building a healthier Pakistan. This essential tool empowers all stakeholders to play a vital role in safeguarding the nation's health and well-being.

Sincerely,
The Chief Editor

# Overview

- *During week 17, the most frequently reported cases were of Acute Diarrhea (Non-Cholera) followed by Malaria, B. Diarrhea, ILI, ALRI <5 years, TB, Typhoid, VH (B, C & D), dog bite and SARI.*

- *Twenty-two cases of AFP reported from KP, ten from Sindh, four from Balochistan and two each from AJK and GB. All are suspected cases and need field verification.*

- *Seven suspected cases of HIV/ AIDS reported from Sindh and four from KP. Field investigation required to verify the cases.*

- *Seven cases of Brucellosis reported from KP, six from Balochistan and one from Sindh. These are suspected cases and require field verification.*

- *Six suspected cases of Leprosy reported from KP. Field investigation required to verify the cases.*

- *There is an increasing trend observed for Acute Diarrhea (Non-Cholera), Malaria and B. Diarrhea while almost a same trend observed for ALRI <5 years, TB, Typhoid, VH (B, C & D), dog bite and SARI cases this*

## IDSR compliance attributes

- *The national compliance rate for IDSR reporting in 149 implemented districts is 78%*
- *Gilgit Baltistan and AJK are the top reporting regions with a compliance rate of 99%, followed by Sindh 95% and Balochistan 72%*
- *The lowest compliance rate was observed in ICT.*

| Region | Expected Reports | Received Reports | Compliance (%) |
|---|---|---|---|
| *Khyber Pakhtunkhwa* | 2740 | 1670 | 61 |
| *Azad Jammu Kashmir* | 382 | 379 | 99 |
| *Islamabad Capital Territory* | 35 | 18 | 51 |
| *Balochistan* | 1220 | 881 | 72 |
| *Gilgit Baltistan* | 374 | 371 | 99 |
| *Sindh* | 2086 | 1982 | 95 |
| *National* | 6837 | 5301 | 78 |

# Pakistan

Table 1: Province/Area wise distribution of most frequently reported suspected cases during week 17, Pakistan.

| Diseases | AJK | Balochistan | GB | ICT | KP | Punjab | Sindh | Total |
|---|---|---|---|---|---|---|---|---|
| AD (Non-Cholera) | 1,828 | 7,526 | 756 | 376 | 22,439 | 110,445 | 50,718 | 194,088 |
| Malaria | 2 | 4,501 | 0 | 3 | 5,002 | 3,953 | 54,218 | 67,679 |
| B.Diarrhea | 82 | 1,620 | 52 | 2 | 1,023 | 1,744 | 48,157 | 52,680 |
| ILI | 2,568 | 7,584 | 411 | 1,141 | 5,528 | 41 | 26,641 | 43,914 |
| ALRI < 5 years | 1,253 | 1,615 | 684 | 7 | 2,068 | 2 | 10,624 | 16,253 |
| TB | 60 | 75 | 60 | 2 | 430 | 3 | 12,631 | 13,261 |
| Typhoid | 36 | 702 | 45 | 1 | 640 | 1,993 | 1,773 | 5,190 |
| VH (B, C & D) | 14 | 58 | 0 | 0 | 163 | 0 | 4,747 | 4,982 |
| Dog Bite | 100 | 90 | 0 | 0 | 339 | 0 | 2,065 | 2,594 |
| SARI | 284 | 724 | 286 | 0 | 1,141 | 0 | 150 | 2,585 |
| Measles | 23 | 35 | 15 | 0 | 370 | 0 | 231 | 674 |
| AVH (A&E) | 51 | 12 | 2 | 0 | 172 | 0 | 430 | 667 |
| AWD (S. Cholera) | 46 | 317 | 61 | 0 | 96 | 0 | 1 | 521 |
| CL | 1 | 65 | 0 | 0 | 374 | 0 | 5 | 445 |
| Mumps | 11 | 47 | 2 | 2 | 70 | 0 | 278 | 410 |
| Chickenpox/ Varicella | 4 | 13 | 1 | 1 | 47 | 55 | 100 | 221 |
| Dengue | 0 | 28 | 0 | 0 | 14 | 0 | 115 | 157 |
| Pertussis | 0 | 71 | 2 | 0 | 27 | 0 | 0 | 100 |
| Gonorrhea | 0 | 46 | 0 | 0 | 18 | 0 | 12 | 76 |
| AFP | 2 | 4 | 2 | 0 | 22 | 0 | 10 | 40 |
| Meningitis | 6 | 1 | 0 | 0 | 1 | 0 | 14 | 22 |
| Brucellosis | 0 | 6 | 0 | 0 | 7 | 0 | 1 | 14 |
| HIV/AIDS | 0 | 0 | 0 | 0 | 4 | 0 | 7 | 11 |
| Syphilis | 0 | 2 | 0 | 0 | 0 | 0 | 9 | 11 |
| Diphtheria (Probable) | 0 | 3 | 0 | 0 | 7 | 0 | 0 | 10 |
| Leprosy | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 6 |
| Rubella (CRS) | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 |
| NT | 1 | 0 | 0 | 0 | 3 | 0 | 0 | 4 |
| VL | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 2 |

Figure 1: Most frequently reported suspected cases during week 17, Pakistan.
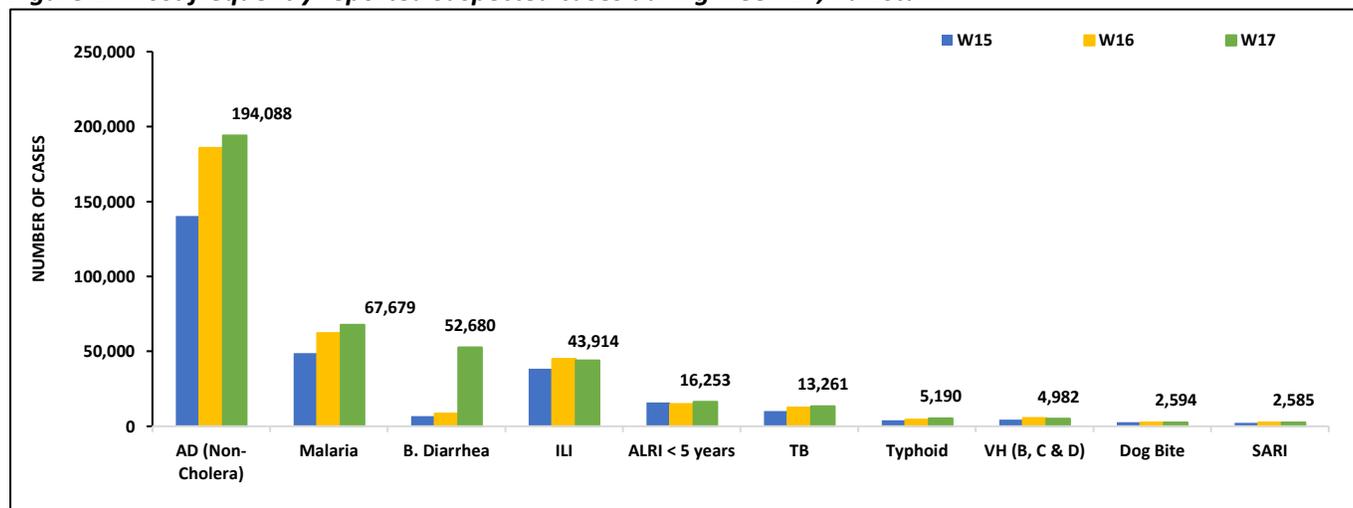
- Malaria cases were maximum followed by AD (Non-Cholera), B. Diarrhea, ILI, TB, ALRI<5 Years, VH (B, C, D), dog bite, Typhoid and AVH (A & E).
- Malaria cases are mostly from Larkana, Khairpur and Dadu whereas AD (Non-Cholera) cases are from Khairpur, Badin and Dadu.
- Seven suspected cases of HIV/ AIDS and Ten cases of AFP reported from Sindh. All are suspected cases and need field verification.
- There is an increasing trend observed for Malaria, B. Diarrhea, TB, ALRI<5 Years and Typhoid cases while a decreasing trend observed for AD (Non-Cholera), ILI, VH (B, C, D) and AVH (A & E) cases this week.

*Table 2: District wise distribution of most frequently reported suspected cases during week 17, Sindh*

| Districts | Malaria | AD (Non-Cholera) | B. Diarrhea | ILI | TB | ALRI < 5 years | VH (B, C & D) | Dog Bite | Typhoid | AVH(A&E) |
|---|---|---|---|---|---|---|---|---|---|---|
| Badin | 3656 | 3791 | 238 | 422 | 907 | 641 | 211 | 76 | 717 | 8 |
| Dadu | 4206 | 3566 | 596 | 387 | 517 | 810 | 72 | 175 | 127 | 7 |
| Ghotki | 939 | 1191 | 141 | 0 | 250 | 421 | 320 | 221 | 0 | 27 |
| Hyderabad | 228 | 1617 | 5 | 2149 | 177 | 162 | 25 | 0 | 11 | 0 |
| Jacobabad | 741 | 937 | 119 | 334 | 153 | 317 | 118 | 48 | 44 | 0 |
| Jamshoro | 1670 | 2099 | 67 | 97 | 437 | 192 | 59 | 5 | 22 | 5 |
| Kamber | 4011 | 1826 | 44294 | 0 | 908 | 391 | 214 | 170 | 39 | 0 |
| Karachi Central | 92 | 1324 | 15 | 1624 | 418 | 83 | 159 | 0 | 49 | 0 |
| Karachi East | 45 | 529 | 18 | 227 | 16 | 16 | 1 | 9 | 3 | 0 |
| Karachi Keamari | 4 | 313 | 2 | 135 | 0 | 9 | 0 | 0 | 1 | 6 |
| Karachi Korangi | 50 | 269 | 2 | 46 | 1 | 2 | 0 | 0 | 1 | 0 |
| Karachi Malir | 217 | 1833 | 64 | 3591 | 126 | 378 | 77 | 56 | 34 | 7 |
| Karachi South | 40 | 107 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 |
| Karachi West | 124 | 1015 | 50 | 2012 | 159 | 152 | 96 | 116 | 33 | 27 |
| Kashmore | 1537 | 654 | 61 | 823 | 303 | 155 | 45 | 194 | 12 | 0 |
| Khairpur | 4694 | 3996 | 485 | 4569 | 1104 | 1059 | 238 | 126 | 297 | 1 |
| Larkana | 6234 | 2623 | 447 | 4 | 1166 | 725 | 184 | 0 | 5 | 0 |
| Matiari | 1477 | 2688 | 120 | 0 | 611 | 475 | 296 | 28 | 8 | 5 |
| Mirpurkhas | 2634 | 2946 | 201 | 3294 | 758 | 566 | 261 | 62 | 26 | 8 |
| Naushero Feroze | 866 | 642 | 63 | 759 | 313 | 137 | 63 | 94 | 47 | 0 |
| Sanghar | 3455 | 1470 | 36 | 5 | 1268 | 496 | 875 | 94 | 22 | 2 |
| Shaheed Benazirabad | 1625 | 2586 | 136 | 0 | 384 | 423 | 127 | 146 | 175 | 0 |
| Shikarpur | 2241 | 1334 | 201 | 0 | 169 | 152 | 699 | 253 | 3 | 0 |
| Sujawal | 1633 | 934 | 55 | 0 | 138 | 123 | 60 | 35 | 5 | 60 |
| Sukkur | 1822 | 1686 | 193 | 1519 | 515 | 351 | 74 | 26 | 3 | 1 |
| Tando Allahyar | 1553 | 1745 | 183 | 821 | 540 | 286 | 184 | 48 | 9 | 5 |
| Tando Muhammad Khan | 1836 | 1386 | 80 | 0 | 408 | 191 | 14 | 0 | 3 | 0 |
| Tharparkar | 2636 | 1954 | 144 | 1865 | 448 | 1033 | 60 | 5 | 41 | 32 |
| Thatta | 2181 | 2023 | 89 | 1943 | 65 | 411 | 149 | 78 | 23 | 222 |
| Umerkot | 1771 | 1634 | 52 | 0 | 372 | 467 | 66 | 0 | 13 | 7 |
| Total | 54,218 | 50,718 | 48,157 | 26,641 | 12,631 | 10,624 | 4,747 | 2,065 | 1,773 | 430 |

**Figure 2: Most frequently reported suspected cases during week 17 Sindh**
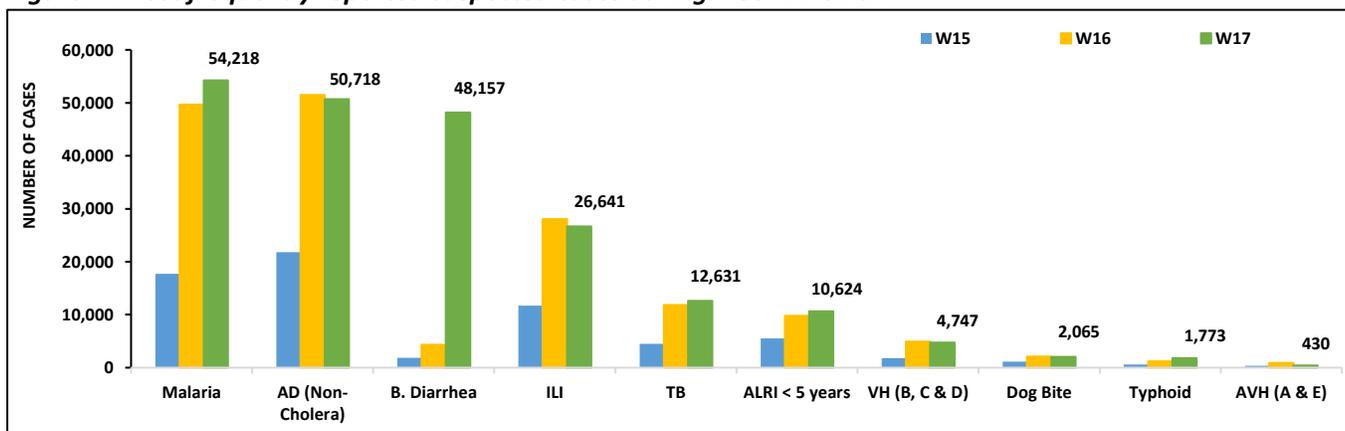
- ILI, AD (Non-Cholera), Malaria, B. Diarrhea, ALRI <5 years, SARI, Typhoid, AWD (S. Cholera), dog bite and TB cases were the most frequently reported diseases from Balochistan province.
- ILI cases are mostly reported from Gwadar, Quetta and Sibi while AD (Non-Cholera) cases are mostly reported from Jhal Magsi, Gwadar and Usta Muhammad.
- ILI, AD (Non-Cholera), Typhoid and AWD (S. Cholera) cases showed an increasing trend while Malaria, ALRI <5 years, dog bite and TB cases showed a decreasing trend this week.

**Table 3: District wise distribution of most frequently reported suspected cases during week 17, Balochistan**

| Districts | ILI | AD Non-Cholera) | Malaria | B. Diarrhea | ALRI < 5 years | SARI | Typhoid | AWD (S.Cholera) | Dog Bite | TB |
|---|---|---|---|---|---|---|---|---|---|---|
| Awaran | 71 | 16 | 78 | 22 | 3 | 4 | 6 | 19 | 0 | 0 |
| Barkhan | 111 | 128 | 57 | 6 | 35 | 4 | 58 | 27 | 13 | 5 |
| Chagai | 306 | 212 | 50 | 73 | 0 | 1 | 17 | 17 | 1 | 0 |
| Chaman | 241 | 97 | 10 | 74 | 3 | 27 | 52 | 24 | 0 | 1 |
| Dera Bugti | 52 | 55 | 126 | 42 | 52 | 47 | 23 | 0 | 1 | 0 |
| Gwadar | 1,107 | 719 | 94 | 82 | 16 | 0 | 36 | 0 | 0 | 1 |
| Harnai | 14 | 79 | 61 | 67 | 159 | 0 | 3 | 10 | 3 | 2 |
| Hub | 91 | 300 | 240 | 42 | 8 | 0 | 4 | 1 | 23 | 4 |
| Jaffarabad | 124 | 258 | 278 | 57 | 49 | 22 | 7 | 0 | 3 | 0 |
| Jhal Magsi | 174 | 1,350 | 483 | 13 | 22 | 4 | 14 | 15 | 16 | 12 |
| Kachhi (Bolan) | 52 | 149 | 133 | 49 | 18 | 79 | 58 | 21 | 0 | 0 |
| Kalat | 6 | 25 | 24 | 14 | 20 | 0 | 27 | 0 | 0 | 0 |
| Kech (Turbat) | 541 | 212 | 132 | 40 | 13 | 1 | 1 | NR | NR | NR |
| Kharan | 401 | 206 | 75 | 68 | 0 | 0 | 19 | 2 | 0 | 0 |
| Khuzdar | 114 | 86 | 101 | 47 | 11 | 8 | 9 | 0 | 1 | 0 |
| Killa Saifullah | 3 | 123 | 162 | 58 | 138 | 15 | 19 | 1 | 0 | 0 |
| Kohlu | 425 | 227 | 115 | 135 | 31 | 103 | 32 | 21 | 0 | 0 |
| Lasbella | 128 | 337 | 407 | 19 | 105 | 4 | 6 | 0 | 11 | 2 |
| Loralai | 341 | 168 | 42 | 44 | 41 | 117 | 19 | 0 | 0 | 0 |
| Mastung | 218 | 152 | 60 | 51 | 64 | 15 | 22 | 8 | 0 | 3 |
| Naseerabad | 15 | 370 | 208 | 9 | 25 | 2 | 47 | 0 | 4 | 4 |
| Nushki | 23 | 136 | 14 | 58 | 0 | 14 | 0 | 3 | 0 | 0 |
| Panjgur | 65 | 248 | 200 | 69 | 125 | 8 | 14 | 58 | 0 | 2 |
| Pishin | 276 | 111 | 13 | 53 | 23 | 2 | 8 | 0 | 2 | 1 |
| Quetta | 990 | 351 | 9 | 78 | 14 | 19 | 14 | 12 | 0 | 0 |
| Sherani | 48 | 14 | 2 | 20 | 1 | 8 | 5 | 0 | 0 | 0 |
| Sibi | 628 | 265 | 310 | 44 | 56 | 61 | 46 | 45 | 3 | 2 |
| Sohbat pur | 8 | 286 | 417 | 84 | 194 | 21 | 45 | 7 | 3 | 6 |
| Surab | 154 | 40 | 35 | 0 | 0 | 0 | 31 | 0 | 0 | 0 |
| Usta Muhammad | 192 | 453 | 429 | 34 | 114 | 25 | 10 | 0 | 6 | 2 |
| Washuk | 136 | 83 | 27 | 44 | 0 | 0 | 1 | 0 | 0 | 0 |
| Zhob | 210 | 121 | 57 | 47 | 248 | 69 | 16 | 3 | 0 | 28 |
| Ziarat | 319 | 149 | 52 | 77 | 27 | 44 | 33 | 23 | 0 | 0 |
| Total | 7,584 | 7,526 | 4,501 | 1,620 | 1,615 | 724 | 702 | 317 | 90 | 75 |

**Figure 3: Most frequently reported suspected cases during week 17, Balochistan**

# Khyber Pakhtunkhwa
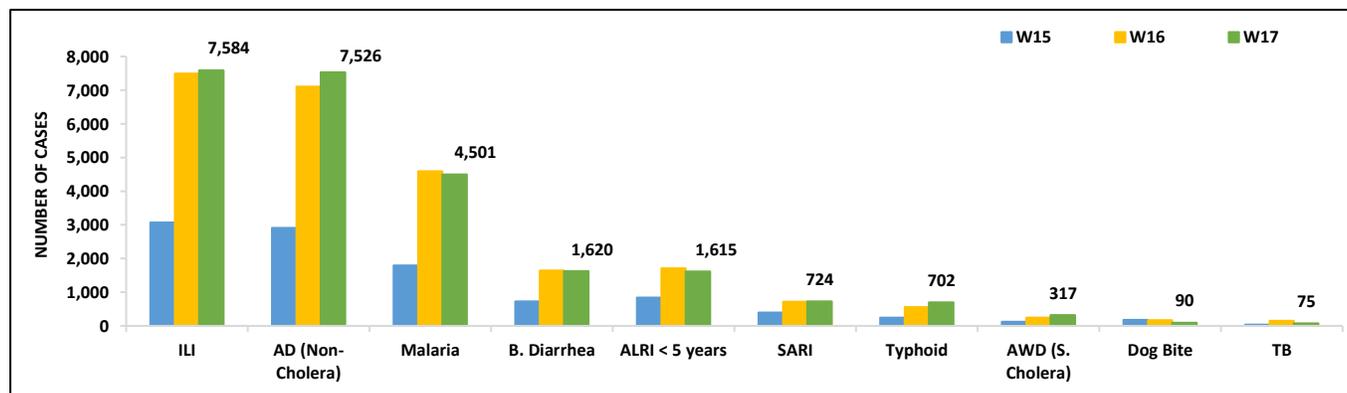
- Cases of AD (Non-Cholera) were maximum followed by ILI, Malaria, ALRI<5 Years, SARI, B. Diarrhea, Typhoid, TB, CL and Measles cases.
- AD (Non-Cholera), ILI, Malaria, ALRI<5 Years, SARI, B. Diarrhea, Typhoid, CL and Measles cases showed an increasing trend this week.
- Twenty-two cases of AFP reported from KP. All are suspected cases and need field verification.
- Seven cases of Brucellosis and Four suspected cases of HIV/ AIDS reported from KP. Field investigation required to verify the cases.

**Table 4: District wise distribution of most frequently reported suspected cases during week 17, KP**

| Districts | AD (Non-Cholera) | ILI | Malaria | ALRI <5 Years | SARI | B. Diarrhea | Typhoid | TB | CL | Measles |
|---|---|---|---|---|---|---|---|---|---|---|
| Abbottabad | 532 | 57 | 0 | 22 | 26 | 7 | 14 | 18 | 0 | 12 |
| Bajaur | 205 | 34 | 88 | 3 | 15 | 18 | 0 | 0 | 0 | 5 |
| Bannu | 919 | 4 | 1569 | 15 | 21 | 33 | 80 | 16 | 0 | 17 |
| Battagram | 50 | 106 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Buner | 438 | 0 | 205 | 0 | 0 | 5 | 6 | 4 | 0 | 0 |
| Charsadda | 785 | 645 | 486 | 121 | 6 | 27 | 19 | 1 | 0 | 0 |
| Chitral Lower | 243 | 30 | 9 | 32 | 24 | 19 | 15 | 8 | 2 | 2 |
| Chitral Upper | 103 | 6 | 1 | 5 | 8 | 6 | 10 | 2 | 0 | 1 |
| D.I. Khan | 2098 | 0 | 198 | 3 | 13 | 23 | 0 | 31 | 9 | 74 |
| Dir Lower | 936 | 5 | 375 | 144 | 0 | 77 | 52 | 18 | 1 | 19 |
| Dir Upper | 383 | 74 | 3 | 15 | 0 | 6 | 42 | 24 | 4 | 1 |
| Hangu | 203 | 342 | 369 | 38 | 30 | 6 | 7 | 2 | 14 | 2 |
| Haripur | 1231 | 536 | 12 | 50 | 28 | 97 | 28 | 31 | 0 | 10 |
| Karak | 283 | 44 | 140 | 22 | 0 | 0 | 7 | 8 | 79 | 45 |
| Khyber | 250 | 34 | 82 | 7 | 23 | 64 | 45 | 14 | 22 | 4 |
| Kohat | 89 | 73 | 94 | 7 | 18 | 0 | 0 | 0 | 0 | 0 |
| Kohistan Lower | 122 | 0 | 9 | 4 | 0 | 10 | 0 | 0 | 0 | 0 |
| Kohistan Upper | 290 | 40 | 0 | 6 | 0 | 28 | 24 | 0 | 0 | 1 |
| Kolai Palas | 91 | 0 | 3 | 8 | 12 | 10 | 1 | 1 | 0 | 0 |
| L & C Kurram | 15 | 50 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 |
| Lakki Marwat | 803 | 40 | 171 | 9 | 0 | 29 | 8 | 15 | 3 | 5 |
| Malakand | 577 | 41 | 9 | 35 | 15 | 40 | 8 | 1 | 28 | 14 |
| Mansehra | 693 | 637 | 13 | 47 | 61 | 9 | 12 | 6 | 0 | 3 |
| Mardan | 528 | 0 | 11 | 870 | 0 | 17 | 0 | 1 | 0 | 2 |
| Mohmand | 198 | 56 | 159 | 4 | 31 | 21 | 4 | 4 | 139 | 3 |
| Nowshera | 1928 | 79 | 37 | 2 | 15 | 25 | 4 | 14 | 16 | 28 |
| Orakzai | 45 | 20 | 25 | 0 | 0 | 6 | 0 | 0 | 0 | 0 |
| Peshawar | 3927 | 615 | 22 | 37 | 60 | 219 | 75 | 32 | 3 | 45 |
| SD Peshawar | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SD Tank | 21 | 0 | 48 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Shangla | 611 | 0 | 573 | 25 | 0 | 14 | 43 | 83 | 2 | 4 |
| SWA | 67 | 486 | 60 | 87 | 160 | 17 | 25 | 0 | 29 | 4 |
| Swabi | 1349 | 709 | 48 | 344 | 48 | 30 | 16 | 69 | 0 | 36 |
| Swat | 1725 | 181 | 12 | 69 | 13 | 53 | 0 | 17 | 0 | 5 |
| Tank | 504 | 125 | 80 | 23 | 0 | 11 | 88 | 8 | 18 | 19 |
| Tor Ghar | 76 | 0 | 63 | 0 | 19 | 18 | 3 | 0 | 5 | 0 |
| Upper Kurram | 120 | 459 | 28 | 14 | 495 | 75 | 4 | 2 | 0 | 9 |
| Total | 22,439 | 5,528 | 5,002 | 2,068 | 1,141 | 1,023 | 640 | 430 | 374 | 370 |

**Figure 4: Most frequently reported suspected cases during week 17, KP**

**ICT, AJK & GB**
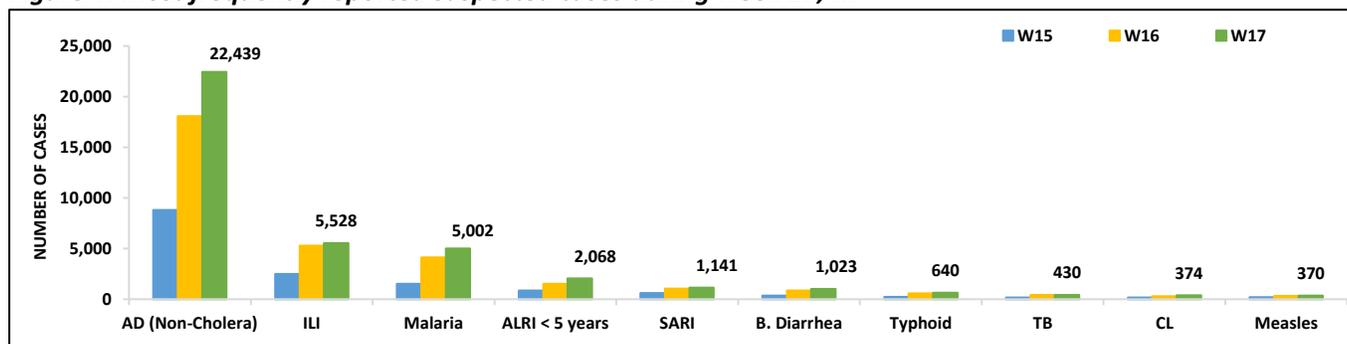
**ICT**: The most frequently reported cases from Islamabad were ILI followed by AD (Non-Cholera) and ALRI < 5 years. ILI showed a decreasing trend while AD (Non-Cholera) showed an increasing trend in cases this week.

**AJK:** ILI cases were maximum followed by AD (Non-Cholera), ALRI <5 years, SARI, dog bite, B. Diarrhea, TB, AVH (A & E), AWD (S. Cholera) and Typhoid cases. Cases of ILI, AD (Non-Cholera), ALRI <5 years and dog bite showed an increasing trend while cases of SARI, B. Diarrhea and TB showed a decreasing trend this week.

**GB:** AD (Non-Cholera) cases were the most frequently reported diseases followed by ALRI <5 Years, ILI, SARI, AWD (S. Cholera), TB, B. Diarrhea and Typhoid cases. Increasing trend for AD (Non-Cholera), ALRI <5 Years, ILI, SARI, AWD (S. Cholera) and B. Diarrhea cases observed this week.

*Figure 5: Week wise reported suspected cases of ILI, ICT*
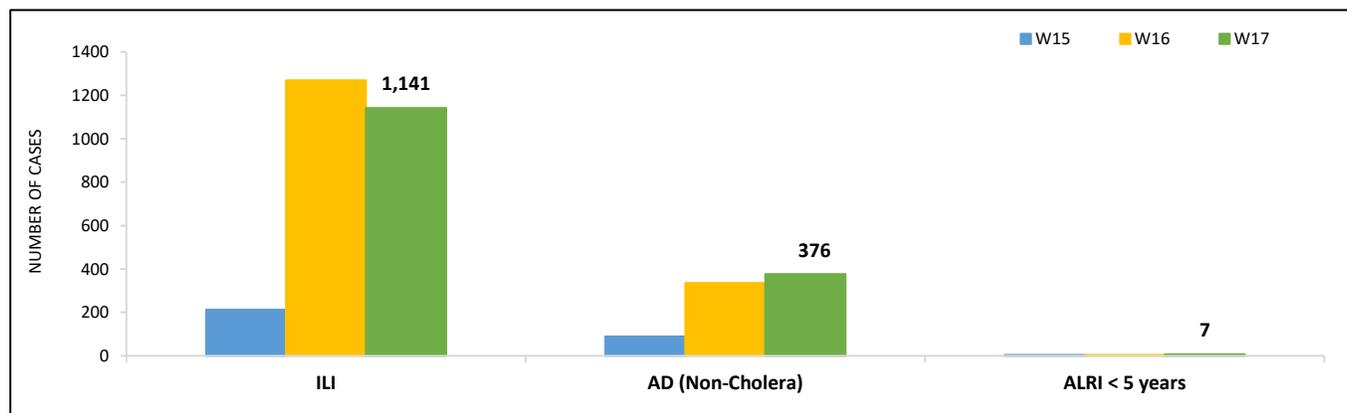


*Figure 6: Week wise reported suspected cases of ILI, ICT*
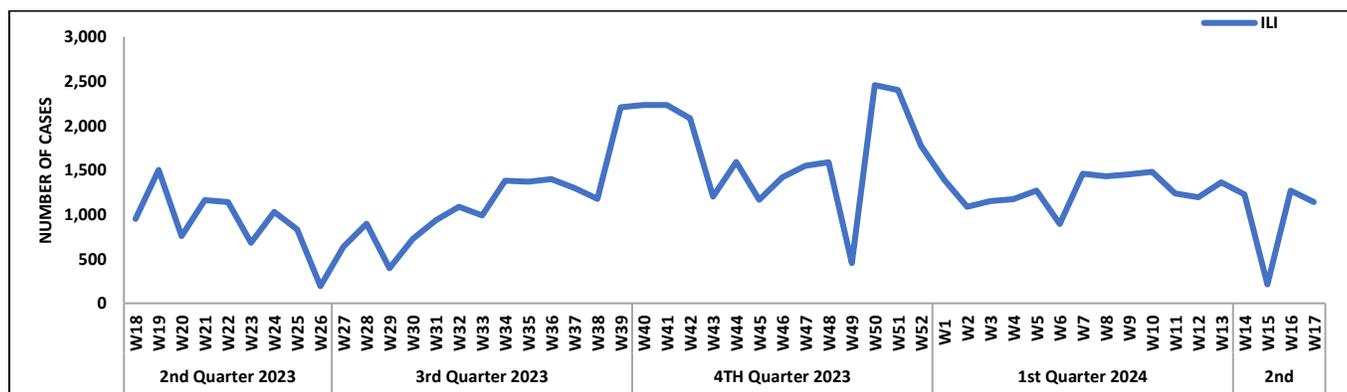


*Figure 7: Most frequently reported suspected cases during week 17, AJK*
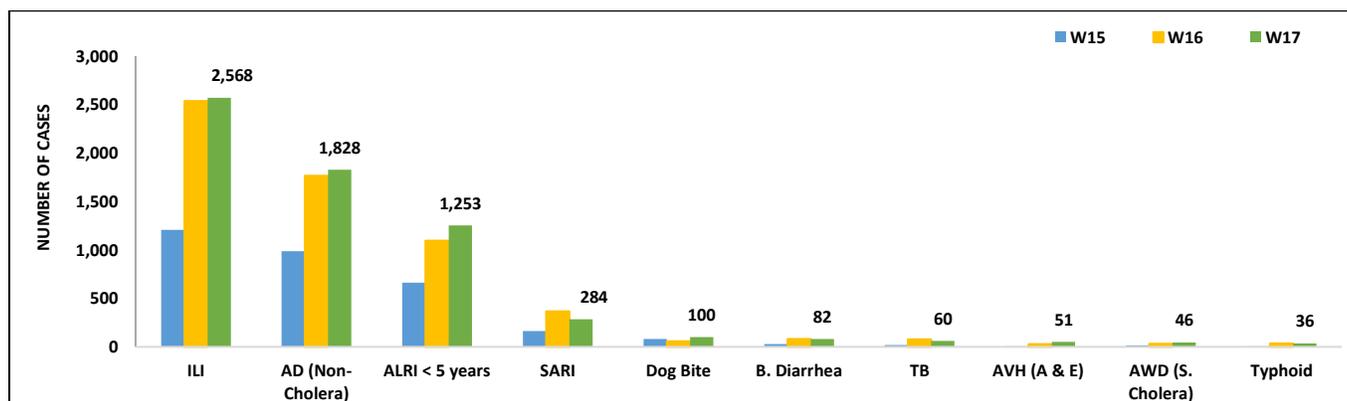
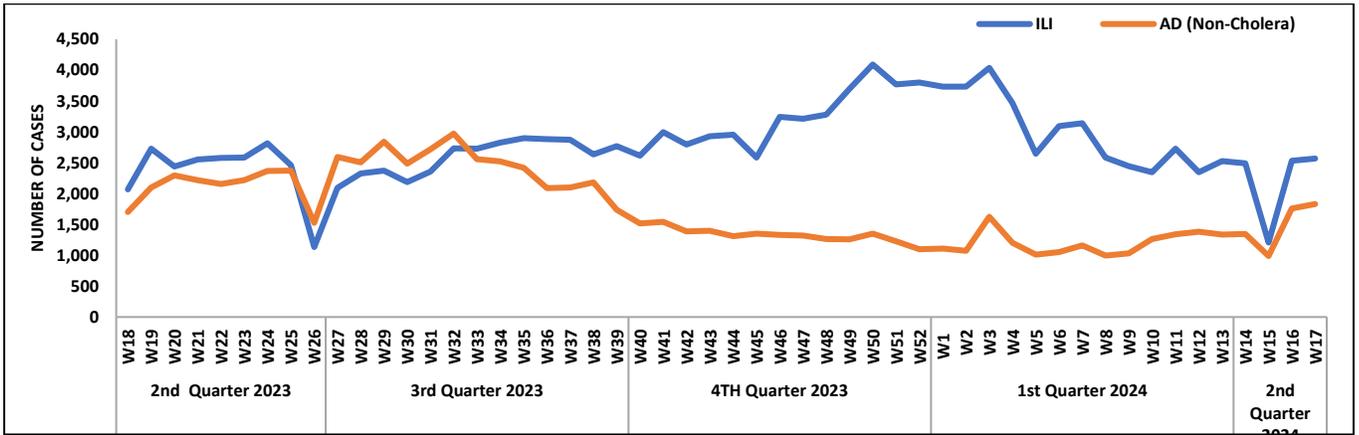*Figure 8: Week wise reported suspected cases of ILI and AD (Non-Cholera) AJK*



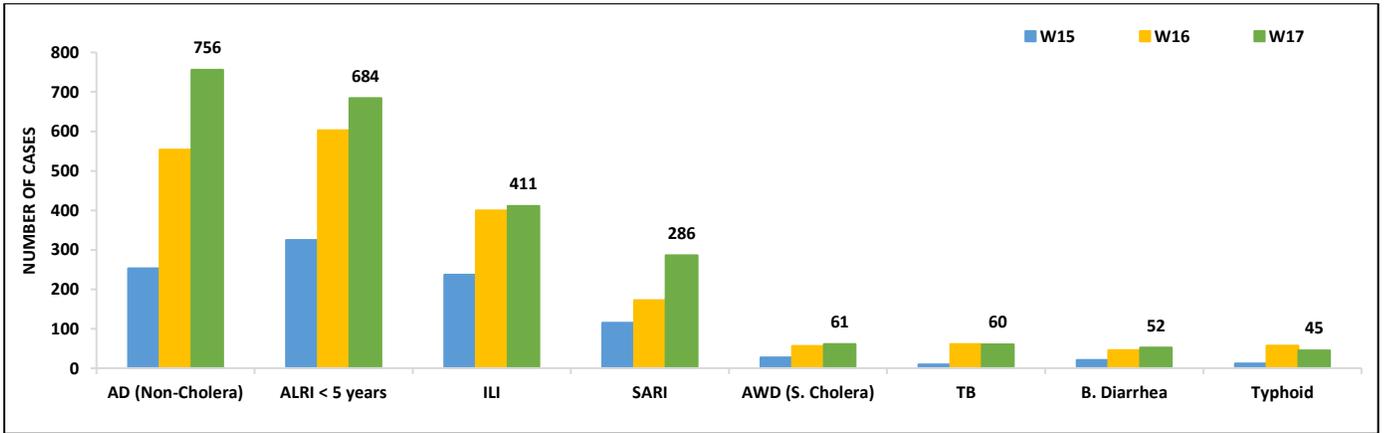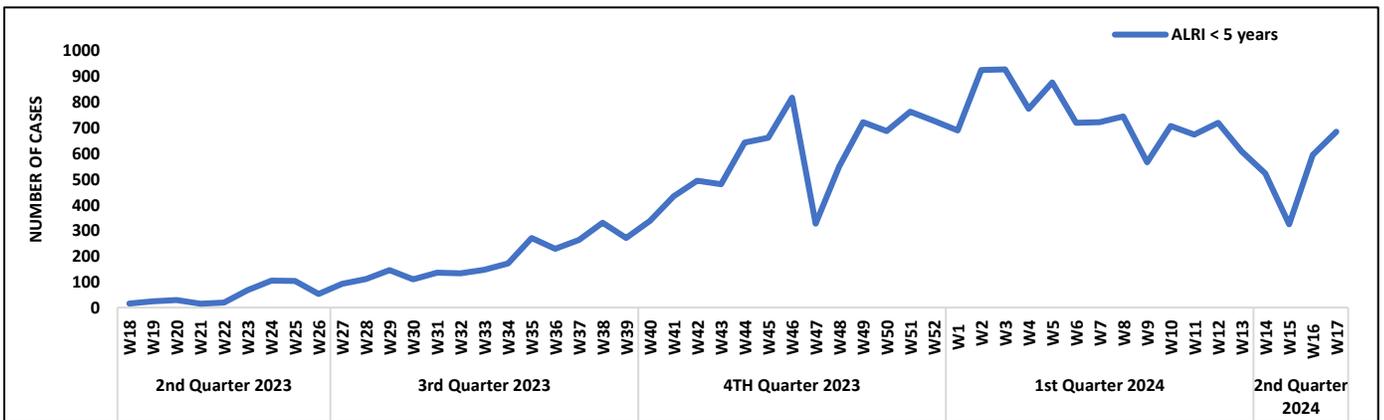*Figure 9: Most frequent cases reported during Week 17, GB*



*Figure 10: Week wise reported suspected cases of ALRI, GB*

# *Punjab*

- Cases of AD (Non-Cholera) were maximum followed by Malaria, Typhoid, B. Diarrhea, ILI, Chickenpox and CL. AD (Non-Cholera), Malaria, Typhoid and B. Diarrhea cases showed increasing trend this week.

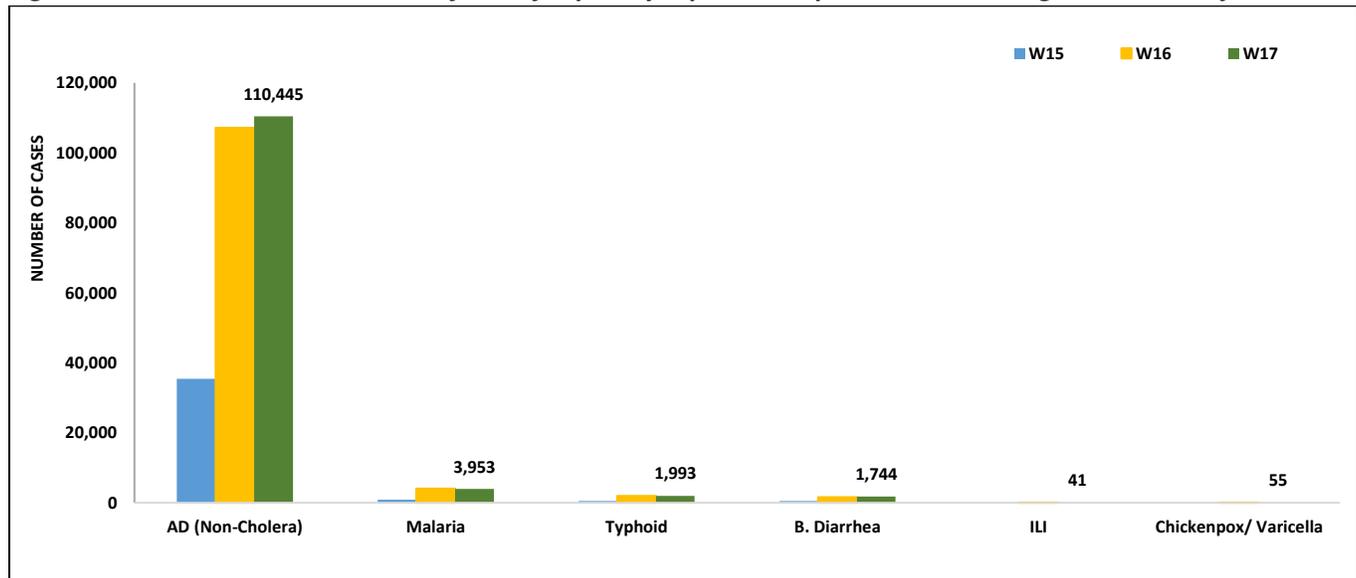*Figure 11: District wise distribution of most frequently reported suspected cases during week 17, Punjab*



*Table 5: Public Health Laboratories confirmed cases of IDSR Priority Diseases during Epid Week 17*

| Diseases | Sindh | | Balochistan | | KPK | | ISL | | GB | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Total Test | Total Positive | Total Test | Total Positive | Total Test | Total Positive | Total Test | Total Positive | Total Test | Total Positive |
| AWD (S. Cholera) | 24 | 0 | - | - | - | - | 1 | 0 | - | - |
| AD (Non-Cholera) | 93 | 0 | - | - | - | - | - | - | - | - |
| Malaria | 2,238 | 78 | - | - | - | - | - | - | - | - |
| CCHF | - | - | 4 | 0 | 4 | 0 | 1 | 0 | - | - |
| Dengue | 461 | 22 | - | - | 5 | 0 | 13 | 0 | - | - |
| VH (B) | 3,750 | 90 | 90 | 73 | - | - | - | - | 180 | 1 |
| VH (C) | 3,818 | 310 | 75 | 21 | - | - | - | - | 180 | 0 |
| VH (A&E) | 1 | 0 | - | - | - | - | - | - | - | - |
| Covid-19 | - | - | 51 | 0 | 9 | 0 | 94 | 5 | - | - |
| HIV | 124 | 0 | - | - | - | - | - | - | - | - |
| Diphtheria | - | - | - | - | - | - | 1 | 0 | - | - |
| Influenza A | 0 | 0 | 0 | 0 | 9 | 0 | 12 | 0 | 0 | 0 |
| TB | 107 | 0 | - | - | - | - | - | - | - | - |
| Syphilis | 100 | 0 | - | - | - | - | - | - | - | - |
| Pertussis | - | - | - | - | - | - | 2 | 0 | - | - |
| Typhoid | 550 | 13 | - | - | - | - | 13 | 1 | - | - |
| Mumps | - | - | - | - | - | - | 0 | 0 | - | - |
| Measles | - | - | - | - | - | - | - | - | - | - |

# IDSR Reports Compliance

- Out OF 149 IDSR implemented districts, compliance is low from KPK. Green color showing >50% compliance while red color is <50% compliance

*Table 6: IDSR reporting districts Week 17, 2024*

| Provinces/Regions | Districts | Total Number of Reporting Sites | Number of Reported Sites for current week | Compliance Rate (%) |
|---|---|---|---|---|
| Khyber Pakhtunkhwa | Abbottabad | 111 | 104 | 94% |
| | Bannu | 234 | 130 | 56% |
| | Battagram | 63 | 7 | 11% |
| | Buner | 34 | 28 | 82% |
| | Bajaur | 44 | 26 | 59% |
| | Charsadda | 59 | 52 | 88% |
| | Chitral Upper | 34 | 27 | 79% |
| | Chitral Lower | 35 | 35 | 100% |
| | D.I. Khan | 114 | 111 | 97% |
| | Dir Lower | 74 | 74 | 100% |
| | Dir Upper | 52 | 40 | 77% |
| | Hangu | 22 | 20 | 91% |
| | Haripur | 72 | 65 | 90% |
| | Karak | 35 | 35 | 100% |
| | Khyber | 64 | 19 | 30% |
| | Kohat | 61 | 61 | 100% |
| | Kohistan Lower | 11 | 11 | 100% |
| | Kohistan Upper | 20 | 20 | 100% |
| | Kolai Palas | 10 | 10 | 100% |
| | Lakki Marwat | 70 | 70 | 100% |
| | Lower & Central Kurram | 40 | 3 | 8% |
| | Upper Kurram | 42 | 19 | 45% |
| | Malakand | 42 | 35 | 83% |
| | Mansehra | 136 | 96 | 71% |
| | Mardan | 80 | 75 | 94% |
| | Nowshera | 55 | 54 | 98% |
| | North Waziristan | 380 | 0 | 0% |
| | Peshawar | 151 | 132 | 87% |
| | Shangla | 65 | 16 | 25% |
| | Swabi | 63 | 58 | 92% |
| | Swat | 76 | 73 | 96% |
| | South Waziristan | 134 | 54 | 40% |
| | Tank | 34 | 34 | 100% |
| | Torghar | 14 | 14 | 100% |
| | Mohmand | 86 | 37 | 43% |
| | SD Peshawar | 5 | 1 | 20% |
| | SD Tank | 58 | 6 | 10% |
| | Orakzai | 68 | 18 | 26% |
| | Mirpur | 37 | 37 | 100% |
| | Bhimber | 20 | 20 | 100% |
| | Kotli | 60 | 60 | 100% |
| | Muzaffarabad | 45 | 44 | 98% |
| | Poonch | 46 | 46 | 100% |
| | Haveli | 39 | 38 | 97% |

| Region | District | Target | Achieved | % |
|---|---|---|---|---|
| **Azad Jammu Kashmir** | Bagh | 40 | 39 | 98% |
| | Neelum | 39 | 39 | 100% |
| | Jhelum Vellay | 29 | 29 | 100% |
| | Sudhnooti | 27 | 27 | 100% |
| **Islamabad Capital Territory** | ICT | 21 | 11 | 52% |
| | CDA | 14 | 7 | 50% |
| **Balochistan** | Gwadar | 25 | 25 | 100% |
| | Kech | 40 | 14 | 35% |
| | Khuzdar | 20 | 19 | 95% |
| | Killa Abdullah | 20 | 0 | 0% |
| | Lasbella | 55 | 55 | 100% |
| | Pishin | 62 | 10 | 16% |
| | Quetta | 43 | 14 | 33% |
| | Sibi | 36 | 35 | 97% |
| | Zhob | 39 | 28 | 72% |
| | Jaffarabad | 16 | 16 | 100% |
| | Naserabad | 32 | 32 | 100% |
| | Kharan | 30 | 30 | 100% |
| | Sherani | 15 | 4 | 27% |
| | Kohlu | 75 | 68 | 91% |
| | Chagi | 35 | 27 | 77% |
| | Kalat | 41 | 40 | 98% |
| | Harnai | 17 | 17 | 100% |
| | Kachhi (Bolan) | 35 | 35 | 100% |
| | Jhal Magsi | 26 | 26 | 100% |
| | Sohbat pur | 25 | 25 | 100% |
| | Surab | 32 | 32 | 100% |
| | Mastung | 45 | 45 | 100% |
| | Loralai | 33 | 25 | 76% |
| | Killa Saifullah | 28 | 27 | 96% |
| | Ziarat | 29 | 23 | 79% |
| | Duki | 31 | 0 | 0% |
| | Nushki | 32 | 30 | 94% |
| | Dera Bugti | 45 | 29 | 64% |
| | Washuk | 46 | 12 | 26% |
| | Panjgur | 38 | 22 | 58% |
| | Awaran | 23 | 7 | 30% |
| | Chaman | 24 | 23 | 96% |
| | Barkhan | 20 | 20 | 100% |
| | Hub | 33 | 33 | 100% |
| | Musakhel | 41 | 0 | 0% |
| | Usta Muhammad | 34 | 33 | 97% |
| **Gilgit Baltistan** | Hunza | 32 | 30 | 100% |
| | Nagar | 20 | 20 | 100% |
| | Ghizer | 40 | 40 | 100% |
| | Gilgit | 40 | 40 | 100% |
| | Diamer | 62 | 62 | 100% |
| | Astore | 54 | 54 | 100% |

| | | | | |
|---|---|---|---|---|
| | Shigar | 27 | 26 | 96% |
| | Skardu | 52 | 52 | 100% |
| | Ganche | 29 | 29 | 100% |
| | Kharmang | 18 | 18 | 100% |
| **Sindh** | Hyderabad | 73 | 61 | 84% |
| | Ghotki | 64 | 64 | 100% |
| | Umerkot | 43 | 43 | 100% |
| | Naushahro Feroze | 107 | 62 | 58% |
| | Tharparkar | 282 | 253 | 90% |
| | Shikarpur | 60 | 60 | 100% |
| | Thatta | 52 | 52 | 100% |
| | Larkana | 67 | 67 | 100% |
| | Kamber Shadadkot | 71 | 71 | 100% |
| | Karachi-East | 23 | 21 | 91% |
| | Karachi-West | 20 | 20 | 100% |
| | Karachi-Malir | 37 | 37 | 100% |
| | Karachi-Kemari | 18 | 9 | 50% |
| | Karachi-Central | 11 | 10 | 91% |
| | Karachi-Korangi | 18 | 16 | 89% |
| | Karachi-South | 4 | 4 | 100% |
| | Sujawal | 54 | 54 | 100% |
| | Mirpur Khas | 106 | 104 | 98% |
| | Badin | 124 | 122 | 98% |
| | Sukkur | 63 | 63 | 100% |
| | Dadu | 90 | 90 | 100% |
| | Sanghar | 100 | 100 | 100% |
| | Jacobabad | 44 | 44 | 100% |
| | Khairpur | 169 | 168 | 99% |
| | Kashmore | 59 | 59 | 100% |
| | Matiari | 42 | 42 | 100% |
| | Jamshoro | 68 | 68 | 100% |
| | Tando Allahyar | 54 | 54 | 100% |
| | Tando Muhammad Khan | 40 | 40 | 100% |
| | Shaheed Benazirabad | 124 | 124 | 100% |

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## A note from Field Activities.

### Investigation and Public Health Response to the First Dengue Case in Peshawar District (April, 2024)

**Dr. Anthony,**
**Public Health Coordinator,**
**Peshawar, KPK**

### Introduction

On April 25th, 2024, the first case of dengue fever was identified in Peshawar District. This report details the investigation and response measures implemented following the case detection.

### Methods

Following notification of the dengue case, a field investigation was conducted to gather comprehensive information and understand the context surrounding the case. The investigation team comprised Dr. Humayun Butt, In-charge Health Facility (HF) CD-SMT-1, Community Based Vaccinator (CBV) staff, and District Health Officer (DHO) team.

### Case Details

The first identified case involved a 27-year-old male resident of Ijazabad, Moh. Zulfiqar Street. This area falls under the administrative jurisdiction of Union Council (UC) SMT-1. The individual works as a general store owner within the community. The case was reported by the Community Dispensary (CD) assigned to the Ijazabad area, and a subsequent laboratory test conducted at a private facility confirmed dengue infection through a positive NS-1 antigen test.

### Investigation and Response

Following the case identification, a comprehensive investigation and response strategy was implemented:

➢ **Contact Tracing**:

A thorough investigation into the patient's recent movements was conducted to identify any potential sources of exposure. Travel history revealed the patient had not traveled outside their immediate residential area, suggesting local transmission.

➢ **Environmental Assessment**:

An evaluation of the surrounding environment was conducted to identify potential mosquito breeding sites. This assessment revealed poor sanitation practices and inadequate waste management, factors that can contribute to increased mosquito populations. Blocked sewer lines were also identified as a potential concern.

➢ **Larval Survey**:

To determine the presence of active mosquito breeding, a house-to-house search for mosquito larvae was undertaken by trained Community Based Vaccinator (CBV) staff. Fortunately, no positive containers were identified during the survey.

➢ **Active Case Finding**:

An active search for additional symptomatic cases within the surrounding community was conducted to identify any potential secondary cases. Thankfully, no additional individuals with symptoms suggestive of dengue were detected.

➢ **Case Management**:

A team led by the District Health Officer (DHO) visited the patient to assess their clinical condition. The team confirmed the patient's stable status and provided them with educational materials on dengue prevention strategies. Additionally, a bed net was distributed to the patient to further minimize mosquito exposure.

➢ **Vector Control**:

To eliminate potential mosquito breeding sites within the patient's residence, Indoor Residual Spraying (IRS) was conducted. This intervention utilizes long-lasting insecticides to kill adult mosquitoes that may be resting on walls or other surfaces.

➢ **Community Education**:

Informational pamphlets containing essential knowledge about dengue prevention were distributed to residents in the surrounding area. This initiative aimed to raise awareness and empower the

community to take steps to reduce mosquito populations and the risk of further transmission.

➤ **Specimen Collection**:

Additional blood samples were collected from the patient. These samples will undergo dengue strain typing at the Public Health Reference Laboratory (PHRL) to identify the specific dengue virus serotype involved in the infection. This information is valuable for public health surveillance and potential future outbreak response efforts.

➤ **Follow-up**:

The patient will be monitored for the next two weeks to assess their clinical course and ensure full recovery.

By implementing this multifaceted response plan, health officials aimed to effectively manage the initial case, prevent further transmission, and protect the broader community from a potential dengue outbreak.

## Conclusion

The prompt investigation and response measures implemented following the identification of the first dengue case aimed to control the potential spread of the disease. Continued surveillance and community engagement will be crucial in preventing a wider outbreak.

# *A note from Field Activities.*

## Measles Outbreak Investigation in District Mardan (18th- 22nd April 2024)

Source: DHIS-2 Reports
https://dhis2.nih.org.pk/dhis-web-event-reports/

## Introduction

Measles is a highly contagious vaccine-preventable disease caused by a paramyxovirus. An outbreak of measles was declared in district Mardan, Khyber Pakhtunkhwa, Pakistan, during Epidemiological (EPID) weeks 11 to 15 of 2024. This investigation aimed to assess the magnitude of the outbreak, identify contributing factors, and recommend control measures.

## Methods

This investigation employed a cross-sectional descriptive study design to assess the measles outbreak in Mardan district. The study period spanned Epidemiological (EPID) weeks 11 to 15 of 2024, focusing on Union Councils (UC) Sikandari and Muhabbatabad within Tehsil Mardan. To identify potential cases, an active case search was conducted in 30 households surrounding each laboratory-confirmed case. Trained personnel employed a structured questionnaire to interview household members and screen for individuals exhibiting signs and symptoms consistent with measles. Data collected during the investigation was then analyzed using Microsoft Excel software. The inclusion criteria for the study encompassed any individual meeting the established case definition for suspected measles. Conversely, anyone who developed measles symptoms outside the designated study period was excluded.

## Results

An investigation into a measles outbreak in Mardan district, Pakistan, during Epidemiological (EPID) weeks 11 to 15 of 2024 revealed a total of 66 cases. This concerning number included 13 confirmed through laboratory testing, while another 11 displayed symptoms and were awaiting lab results. An additional 41 suspected cases exhibited signs consistent with measles. Notably, April 1st saw the highest number of reported cases (n=7). Although Katlang Khas reported the most suspected cases, Union Councils Muhabbatabad and Sikandari were concerning as they contained the two laboratory-confirmed cases.

The breakdown of cases revealed a male predominance, with 43 males compared to 23 females. Infants seemed most affected, with the 1-10-month age group recording the highest number of cases (17), followed closely by the 11-20-month age group (13 cases). To understand the outbreak's impact, an attack rate was calculated, revealing a value of 1.47% per 10,000 children under five or 14.7% per 100,000 within the same age group.

Interestingly, all four index cases confirmed through laboratory testing had received two doses of the measles vaccine. Despite this, active case finding efforts involving household searches surrounding each confirmed case identified no new suspected measles cases. However, a different concern arose

when routine immunization status was verified using EPI vaccination cards for 66 children under five years old. Only 46 children were found to be fully vaccinated. This highlights a potential gap in vaccine coverage, as ten children were identified as not following the recommended immunization schedule. Furthermore, five children had not received a single dose of the measles-containing vaccine.

An encouraging finding was that 53 children were nine months or older, and 43 of them had received the first dose of the measles vaccine (MCV-1). This translates to an immunity profile of 81% for the investigated Union Councils. However, this value falls short of the 95% vaccination coverage necessary to achieve herd immunity, a crucial factor in controlling measles outbreaks.

## Discussion

The findings suggest ongoing measles transmission in Mardan district, with vaccination coverage below the 95% threshold required for herd immunity. Despite previous measles vaccinations in the index cases, the outbreak highlights the importance of maintaining high vaccination coverage.

## Conclusion

Measles remains endemic in Mardan district. Although active case finding did not identify new cases, the low vaccination coverage necessitates immediate intervention.

## Recommendations

1. Intensify routine measles vaccination campaigns to ensure all individuals are immunized.
2. Implement public awareness campaigns to educate communities about measles prevention.
3. Strengthen measles surveillance to monitor disease trends.
4. Collaborate with community leaders to promote vaccination acceptance.
5. Foster teamwork among healthcare providers, communities, and partner organizations for a coordinated response.

By implementing these recommendations, measles outbreaks can be controlled, and the health of the population can be protected.

## *Letter to editor*

## A Landmark Initiative in Punjab: Free Home Delivery of Medicine for Improved Public Health

**Dr. Shaban Nadeem**
**Manager Surveillance,**
**CD&EPC, Punjab**

The recent inauguration of a program offering free home delivery of essential medications for Hepatitis B and C (HBV/HCV), Tuberculosis (TB), and cardiac patients across the entire province of Punjab marks a significant milestone in public health advancement. This commendable step by the Punjab government, facilitated by TCS, directly addresses the critical need for convenient access to life-saving medications for a large and vulnerable population.

By delivering essential medication directly to patients' doorsteps, this program alleviates a significant burden for individuals battling chronic illnesses. This not only improves their quality of life but also fosters a more robust healthcare system. Studies have consistently shown that adherence to treatment regimens is a critical factor in managing chronic illnesses like HBV/HCV, TB, and heart disease. By eliminating logistical barriers to medication access, the program has the potential to significantly improve treatment outcomes for these patients.

Furthermore, it is laudable that Chief Minister publicly acknowledged the contributions of key figures like Health Minister Khawaja Salman Rafique, Primary and Specialized Healthcare Department (P&SHD) Secretary Ali Jan Khan, and Khawaja Imran Nazir during the launch ceremony. Their dedication and leadership were instrumental in bringing this program to fruition, and their recognition serves as a testament to the collaborative effort behind this critical initiative.

Looking towards the future, the announcement of complementary plans such as air ambulance services, mobile clinics for urban areas, a Nawaz Sharif Institute of Cardiology in Sargodha, and a state-of-the-art public cancer hospital in Lahore paints a very promising picture for the overall healthcare landscape within Punjab. These additional investments demonstrate a comprehensive vision for

improving healthcare accessibility and quality across the province.

The program's well-rounded approach to patient care is further underscored by the provision of two months' worth of medication, followed by essential follow-up measures including consultant checkups, laboratory diagnostic tests, and continued medication delivery based on the advice of a qualified physician. This ensures that patients receive not just medication but also the necessary medical oversight to optimize their treatment and overall health.

This innovative program serves as a shining example for other provinces within Pakistan to emulate. By prioritizing patient well-being and ensuring equitable access to healthcare services, the Punjab government has taken a significant step forward in advancing public health for its citizens. This initiative aligns perfectly with Chief Minister's vision for a "*Sehatmand Punjab*" (Healthy Punjab), and its success has the potential to inspire positive change across the nation.

## *Commentary.*
## *A Shot at Life: Immunization and its Triumphant Role in Pakistan*

**Dr. Waqar Ahmed**
**Public Health Consultant**
**SafetyNet, NIH**

Communicable diseases, once scourges of humanity, have met their match in the remarkable invention of immunization. Vaccines, the cornerstone of this life-saving strategy, have demonstrably curbed the spread of deadly infections, protecting individuals and communities alike. This commentary delves into the historical significance of immunization, explores its specific achievements in Pakistan, and underscores its continued importance in the fight against communicable diseases.

The concept of immunization dates back centuries, with practices like variolation, a precursor to smallpox vaccination, documented in ancient China and India. However, the scientific foundation for modern vaccines was laid by Edward Jenner in the 18th century with the development of the smallpox vaccine. This breakthrough paved the way for a revolution in public health, leading to the eradication of smallpox in 1980.

Pakistan inherited a fragmented immunization program following independence. However, the government made significant strides in the latter half of the 20th century, establishing the Expanded Program on Immunization (EPI) in 1978. This program, a collaboration between the World Health Organization (WHO) and UNICEF, aimed to deliver essential childhood vaccines to all children.

Pakistan's EPI program has achieved remarkable successes. Smallpox, once a leading cause of death, was eradicated from the country in 1979. Polio, a crippling and potentially fatal disease, has seen a dramatic decline, with no wild poliovirus cases reported since 2021. Additionally, routine childhood vaccinations have significantly reduced the incidence of diseases like measles, diphtheria, tetanus, and pertussis.

Beyond these triumphs, the EPI program has also made significant strides in combating maternal and neonatal tetanus (MNT). By incorporating tetanus toxoid vaccination into the routine antenatal care package, Pakistan has witnessed a dramatic decrease in MNT cases, protecting both mothers and newborns.

Furthermore, the program has embraced innovation by introducing newer vaccines into the national immunization schedule. The Hepatitis B vaccine, crucial in preventing a chronic liver infection, and the Pneumococcal Conjugate Vaccine (PCV), which protects against severe childhood pneumonia, are now part of the routine vaccination program.

However, challenges remain. Vaccine hesitancy, fueled by misinformation and cultural beliefs, can hinder program effectiveness. Ensuring equitable access to immunization across all socioeconomic groups remains a priority. Continued efforts are needed to maintain high vaccination coverage and prevent outbreaks.

Moving forward, Pakistan must embrace innovation to stay ahead of evolving infectious threats. Strengthening surveillance systems, investing

in research and development of new vaccines, and promoting evidence-based communication strategies are crucial. Collaboration with international organizations like WHO and UNICEF remains vital for technical and financial support.

**The Role of Electronic Immunization Registries:**

The introduction of electronic immunization registries (EIRs) offers immense potential for improving EPI program efficiency. EIRs allow for real-time monitoring of vaccination coverage, identification of unvaccinated children, and timely delivery of reminder messages to parents. This data-driven approach can significantly improve program targeting and resource allocation, ultimately leading to higher vaccination rates and a healthier population.

In conclusion, immunization has revolutionized public health by offering a powerful weapon against communicable diseases. Pakistan's EPI program has demonstrably saved countless lives, and continued dedication is essential to sustain these gains. By addressing existing challenges, embracing innovation, and utilizing tools like EIRs, Pakistan can ensure a healthier future for its citizens, free from the burden of preventable diseases.

## *Knowledge Hub*

### Public Health Education: Combating Leprosy Through Awareness

Leprosy, an ancient yet neglected tropical disease, continues to affect individuals globally. This article emphasizes the importance of public health education in raising awareness about leprosy, its epidemiology, signs and symptoms, and effective prevention and control measures.

Leprosy, caused by the bacterium Mycobacterium leprae, is a chronic infectious disease primarily affecting the peripheral nerves, skin, and mucous membranes. While entirely curable with multidrug therapy (MDT), delayed diagnosis due to lack of awareness often leads to permanent disability. Public health education plays a crucial role in empowering communities to recognize leprosy, reduce stigma, and seek timely treatment.

### Epidemiology:

Leprosy remains a global public health concern, with an estimated 200,000 new cases reported annually. South-East Asia, Africa, and parts of Latin America account for the highest burden. Though the prevalence has decreased significantly since the introduction of MDT in the 1980s, achieving complete elimination requires sustained efforts.

### Signs and Symptoms:

Early detection of leprosy is critical for effective treatment and preventing disability. Key signs and symptoms to be aware of include:

- **Pale, painless skin lesions:** These may appear as patches that are lighter than surrounding skin and have lost sensation.
- **Loss of sensation:** Numbness, tingling, or burning in the hands, feet, and face.
- **Muscle weakness:** Wasting of muscles in hands, feet, and face, leading to deformity.

### Prevention and Control:

Leprosy is not highly contagious. Prolonged close contact with untreated individuals with a high bacterial load is the primary mode of transmission. Implementing the following strategies can effectively prevent and control leprosy:

- **Early diagnosis and treatment:** Recognizing symptoms and seeking medical attention promptly prevents transmission and disability.
- **Multidrug Therapy (MDT):** Freely available MDT regimens are highly effective in curing leprosy and preventing transmission.
- **Contact tracing:** Identifying and examining close contacts of diagnosed cases helps detect new cases early.
- **Public health education:** Raising awareness about leprosy, transmission, and treatment options is crucial for empowering communities and reducing stigma.

### Conclusion:

Public health education is a powerful tool in the fight against leprosy. By educating communities about early detection, treatment options, and the non-contagious nature of leprosy, we can dispel stigma, encourage early diagnosis, and ultimately achieve disease elimination. Healthcare professionals, educators, and community leaders all

have a role to play in disseminating accurate information and promoting early health-seeking behavior. Together, we can create a future free from the burden of leprosy.

## Key Messages:

- Leprosy is curable with early diagnosis and treatment.
- Public health education empowers communities.
- Recognizing signs and symptoms leads to timely intervention.
- Stigma associated with leprosy hinders treatment.
- Collaboration is key to achieving leprosy elimination.

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