PUBLIC HEALTH BULLETIN-PAKISTAN

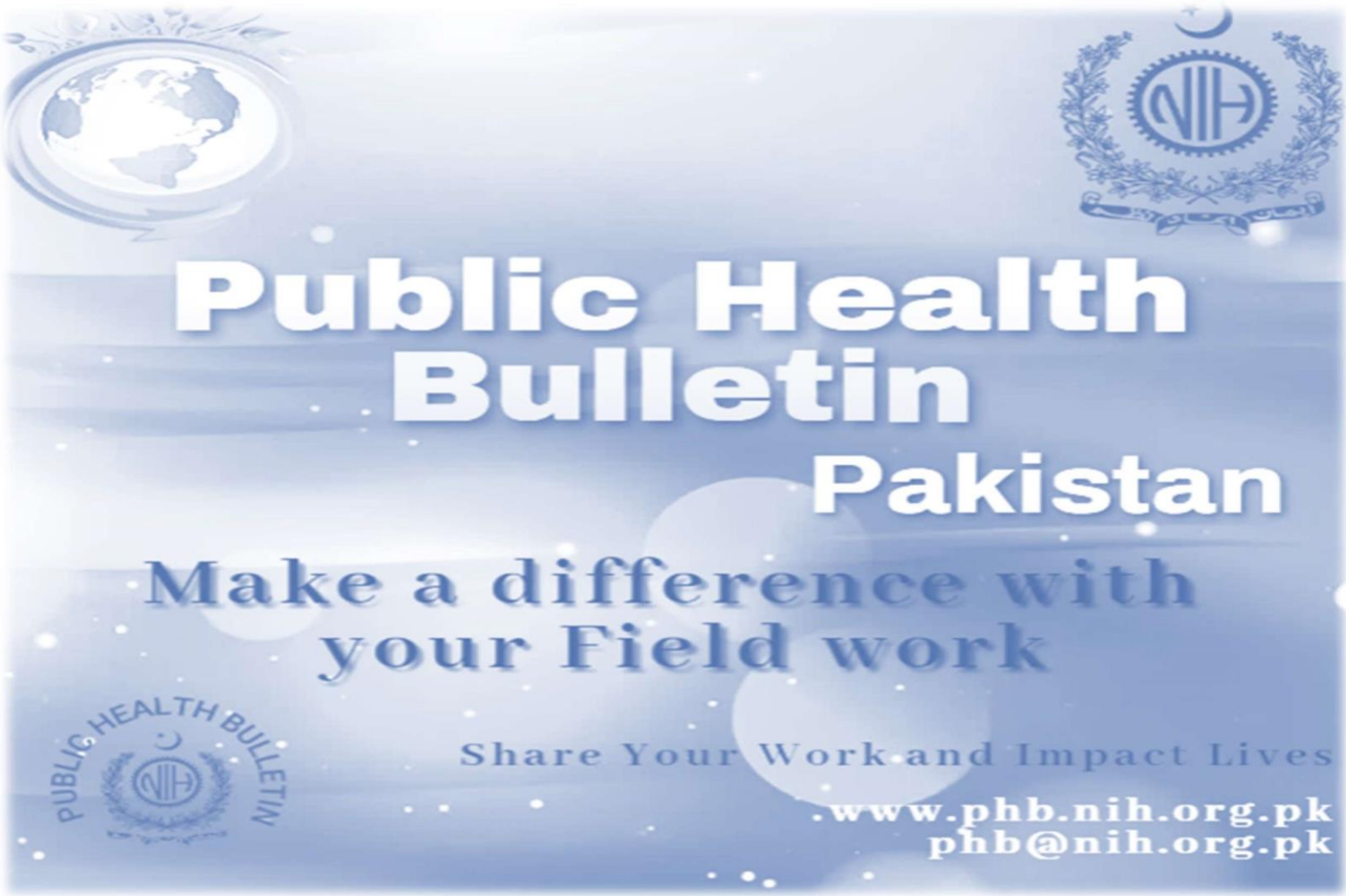
Vol. 4 | Week 47
18th Nov– 24th Nov
28th Nov, 2024

# 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.



*Overview*

*IDSR Reports*

*Ongoing Events*

*Field Reports*

**Public Health Bulletin - Pakistan, Week 47, 2024**

*Evolving from a basic disease registry, Pakistan's Public Health Bulletin has become an indispensable tool for safeguarding public health. By meticulously tracking disease trends, the Bulletin serves as an early warning system, enabling timely interventions to prevent outbreaks.*

*This Weeks Highlights include;*

- *National Multi-Stakeholder Consultative Meeting on Gender Equity in the Fight against Antimicrobial Resistance (AMR)*
- *Outbreak investigation of Typhoid Fever in in Killi Mughtian, District Pishin, Balochistan May 2024.*
- *A knowledge review on mumps*

*By transforming complex health data into actionable intelligence, the Public Health Bulletin continues to be an indispensable tool in our collective journey toward a healthier Pakistan.*

***Subscribe to the Weekly Bulletin today!***

*Stay informed. Stay prepared. Stay healthy.*

*Sincerely,*
*The Chief Editor*

- *During week 47, the most frequently reported cases were of Acute Diarrhea (Non-Cholera) followed by Malaria, ILI, TB, ALRI <5 years, dog bite, B. Diarrhea, VH (B, C & D), Typhoid and SARI.*
- *Twenty-nine cases of AFP reported from KP, seventeen from Punjab, thirteen from Sindh and one from AJK. All are suspected cases and need field verification.*
- *Sixteen suspected cases of HIV/ AIDS reported from Punjab, six from KP, six from Sindh and one from Balochistan. Field investigation required to verify the cases.*
- *Twelve suspected cases of Brucellosis reported from KP. Field investigation required to verify the cases.*

## IDSR compliance attributes

- *The national compliance rate for IDSR reporting in 158 implemented districts* is 82%
- *Gilgit Baltistan , Sindh and AJK are the top reporting regions with a compliance rate of 94, followed by ICT 80% and KP 75%*
- *The lowest compliance rate was observed in Balochistan 70%.*

| Region | Expected Reports | Received Reports | Compliance (%) |
|---|---|---|---|
| Khyber Pakhtunkhwa | 2319 | 1740 | 75 |
| Azad Jammu Kashmir | 405 | 381 | 94 |
| Islamabad Capital Territory | 36 | 29 | 80 |
| Balochistan | 1307 | 900 | 70 |
| Gilgit Baltistan | 407 | 385 | 94 |
| Sindh | 2094 | 1974 | 94 |
| National | 6568 | 5409 | 82 |

# Public Health Actions

Federal, Provincial, Regional Health Departments and relevant programs may consider following public health actions to prevent and control diseases.

## Viral Hepatitis

**Strengthen Surveillance**: Utilize the IDSR system to monitor hepatitis cases and guide targeted interventions in regions with high prevalence.

**Increase Access to Testing and Treatment**: Improve availability of hepatitis B and C testing and expand access to antiviral treatments, particularly in underserved areas.

**Expand Community Education**: Collaborate with local health workers to raise awareness about prevention, safe practices, and available treatments for hepatitis.

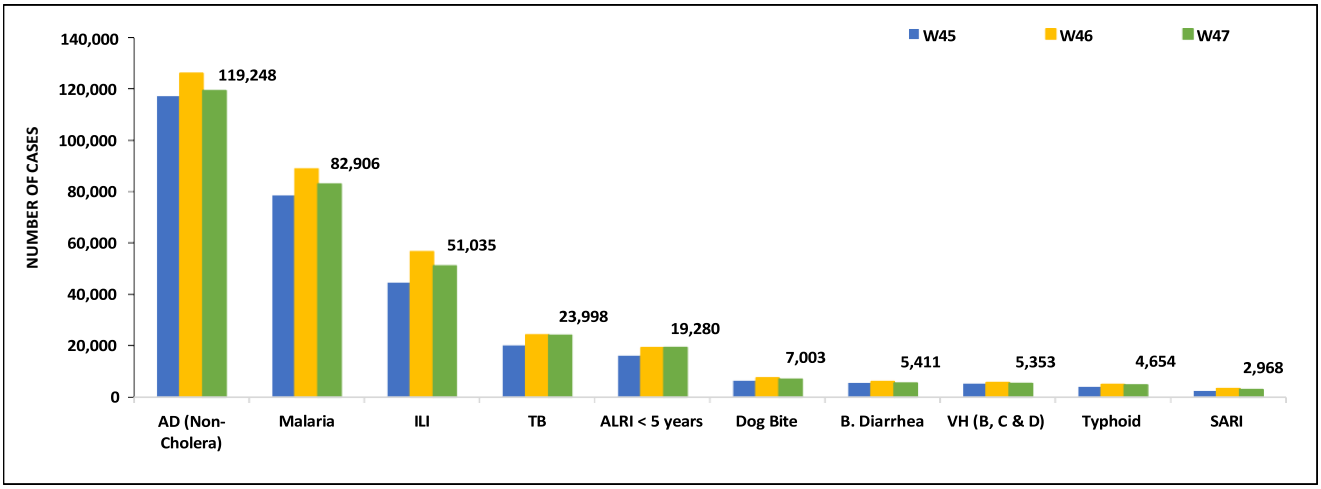
## Meningitis

- **Enhance Surveillance via IDSR**: Strengthen the IDSR system to detect and respond quickly to meningitis cases, enabling timely outbreak management.
- **Public Education on Symptoms**: Raise awareness about the early symptoms of meningitis to encourage prompt medical treatment and reduce complications.

***Table 1: Province/Area wise distribution of most frequently reported suspected cases during Week 47, Pakistan.***

| Diseases | AJK | Balochistan | GB | ICT | KP | Punjab | Sindh | Total |
|---|---|---|---|---|---|---|---|---|
| AD (Non-Cholera) | 1,125 | 3,628 | 636 | 221 | 17,940 | 59,643 | 36,055 | 119,248 |
| Malaria | 6 | 4,888 | 1 | 0 | 6,601 | 3,003 | 68,407 | 82,906 |
| ILI | 2,710 | 5,133 | 473 | 1,627 | 5,766 | 3 | 35,323 | 51,035 |
| TB | 58 | 63 | 64 | 9 | 620 | 10,370 | 12,814 | 23,998 |
| ALRI < 5 years | 1,565 | 1,404 | 1,051 | 16 | 1,159 | 1,318 | 12,767 | 19,280 |
| Dog Bite | 75 | 122 | 5 | 0 | 674 | 3,666 | 2,461 | 7,003 |
| B. Diarrhea | 39 | 770 | 69 | 2 | 725 | 594 | 3,212 | 5,411 |
| VH (B, C & D) | 13 | 128 | 4 | 0 | 273 | 0 | 4,935 | 5,353 |
| Typhoid | 21 | 536 | 54 | 0 | 983 | 2,030 | 1,030 | 4,654 |
| SARI | 325 | 684 | 256 | 2 | 1,489 | 0 | 212 | 2,968 |
| Dengue | 12 | 1 | 26 | 0 | 313 | 1,154 | 87 | 1,593 |
| AWD (S. Cholera) | 37 | 178 | 8 | 0 | 131 | 579 | 0 | 933 |
| AVH (A & E) | 24 | 0 | 9 | 0 | 323 | 0 | 198 | 554 |
| Measles | 7 | 24 | 2 | 3 | 222 | 196 | 32 | 486 |
| CL | 0 | 126 | 0 | 0 | 187 | 0 | 1 | 314 |
| Mumps | 7 | 41 | 5 | 0 | 109 | 0 | 126 | 288 |
| Chikungunya | 0 | 0 | 0 | 0 | 8 | 0 | 270 | 278 |
| Chickenpox/ Varicella | 12 | 2 | 16 | 2 | 85 | 14 | 17 | 148 |
| Meningitis | 6 | 0 | 1 | 0 | 2 | 69 | 8 | 86 |
| AFP | 1 | 0 | 0 | 0 | 29 | 17 | 13 | 60 |
| Pertussis | 0 | 29 | 9 | 0 | 9 | 0 | 7 | 54 |
| Gonorrhea | 0 | 21 | 0 | 0 | 16 | 0 | 11 | 48 |
| Diphtheria (Probable) | 0 | 5 | 0 | 0 | 17 | 7 | 11 | 40 |
| HIV/AIDS | 0 | 1 | 0 | 0 | 6 | 16 | 6 | 29 |
| Leprosy | 0 | 0 | 0 | 0 | 23 | 0 | 0 | 23 |
| Syphilis | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 15 |
| Brucellosis | 0 | 0 | 0 | 0 | 12 | 0 | 0 | 12 |
| NT | 0 | 1 | 0 | 0 | 6 | 3 | 0 | 10 |
| Rubella (CRS) | 0 | 7 | 0 | 0 | 0 | 2 | 0 | 9 |

***Figure 1: Most frequently reported suspected cases during Week 47, Pakistan.***



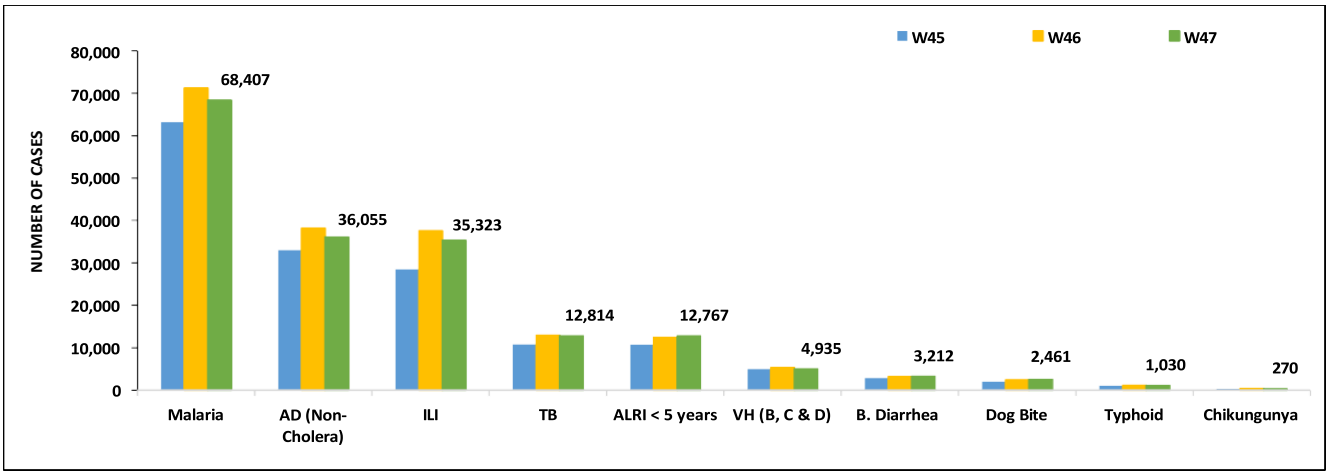
## Sindh

- Malaria cases were maximum followed by AD (Non-Cholera), ILI, TB, ALRI<5 Years, VH (B, C, D), B. Diarrhea, dog bite, Typhoid and chikungunya.
- Malaria cases are mostly from Larkana, Khairpur and Dadu whereas AD (Non-Cholera) cases are from Mirpurkhas,Khairpur, Badin.
- Thirteen cases of AFP reported from Sindh. All are suspected cases and need field verification.
- Six suspected cases of HIV/ AIDS reported from Sindh. Field investigation required to verify the case.

***Table 2: District wise distribution of most frequently reported suspected cases during Week 47, Sindh***

| Districts | Malaria | AD (Non-Cholera) | ILI | TB | ALRI < 5 years | VH (B, C & D) | B. Diarrhea | Dog Bite | Typhoid | AVH (A&E) |
|---|---|---|---|---|---|---|---|---|---|---|
| Badin | 2,219 | 2,091 | 3,847 | 912 | 889 | 286 | 218 | 94 | 55 | 0 |
| Dadu | 5,530 | 1,821 | 585 | 502 | 1,179 | 127 | 420 | 284 | 115 | 0 |
| Ghotki | 1,615 | 587 | 53 | 259 | 279 | 219 | 78 | 245 | 4 | 0 |
| Hyderabad | 386 | 1,663 | 2,845 | 66 | 115 | 30 | 0 | 0 | 15 | 0 |
| Jacobabad | 2,177 | 855 | 1,011 | 127 | 359 | 275 | 100 | 144 | 41 | 0 |
| Jamshoro | 3,257 | 1,546 | 139 | 589 | 448 | 147 | 88 | 56 | 64 | 0 |
| Kamber | 5,144 | 1,747 | 0 | 1,028 | 357 | 141 | 102 | 152 | 23 | 0 |
| Karachi Central | 21 | 557 | 1,693 | 24 | 12 | 6 | 12 | 0 | 77 | 207 |
| Karachi East | 62 | 384 | 800 | 23 | 18 | 5 | 7 | 11 | 3 | 0 |
| Karachi Keamari | 13 | 464 | 301 | 6 | 73 | 0 | 3 | 0 | 7 | 20 |
| Karachi Korangi | 26 | 235 | 0 | 16 | 2 | 0 | 1 | 0 | 1 | 0 |
| Karachi Malir | 535 | 1,440 | 3,974 | 180 | 379 | 51 | 47 | 50 | 39 | 43 |
| Karachi South | 33 | 60 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Karachi West | 225 | 908 | 1,246 | 121 | 172 | 122 | 30 | 31 | 27 | 0 |
| Kashmore | 3,988 | 483 | 665 | 377 | 290 | 51 | 112 | 223 | 13 | 0 |
| Khairpur | 6,217 | 2,230 | 7,092 | 1,091 | 1,188 | 179 | 328 | 167 | 188 | 0 |
| Larkana | 7,198 | 1,682 | 10 | 988 | 548 | 81 | 365 | 35 | 9 | 0 |
| Matiari | 1,816 | 1,115 | 3 | 558 | 350 | 261 | 54 | 46 | 6 | 0 |
| Mirpurkhas | 2,831 | 2,316 | 4,841 | 920 | 841 | 88 | 137 | 78 | 13 | 0 |
| Naushero Feroze | 2,203 | 1,168 | 799 | 475 | 459 | 45 | 118 | 176 | 115 | 0 |
| Sanghar | 4,306 | 1,687 | 126 | 1,272 | 642 | 1,092 | 40 | 207 | 35 | 0 |
| Shaheed Benazirabad | 1,689 | 1,637 | 10 | 336 | 279 | 60 | 77 | 130 | 106 | 0 |
| Shikarpur | 4,101 | 1,241 | 4 | 315 | 264 | 997 | 190 | 128 | 4 | 0 |
| Sujawal | 1,124 | 1,142 | 0 | 113 | 443 | 25 | 122 | 22 | 0 | 0 |
| Sukkur | 4,114 | 1,150 | 1,842 | 559 | 460 | 61 | 138 | 110 | 8 | 0 |
| Tando Allahyar | 1,939 | 986 | 1,279 | 512 | 391 | 297 | 120 | 44 | 9 | 0 |
| Tando Muhammad Khan | 900 | 884 | 0 | 563 | 211 | 47 | 107 | 3 | 0 | 0 |
| Tharparkar | 2,359 | 1,769 | 1,858 | 407 | 862 | 63 | 86 | 0 | 16 | 0 |
| Thatta | 545 | 795 | 297 | 32 | 642 | 64 | 42 | 25 | 10 | 0 |
| Umerkot | 1,834 | 1,412 | 0 | 443 | 615 | 115 | 70 | 0 | 27 | 0 |
| Total | 68,407 | 36,055 | 35,323 | 12,814 | 12,767 | 4,935 | 3,212 | 2,461 | 1,030 | 270 |

***Figure 2: Most frequently reported suspected cases during Week 47 Sindh***



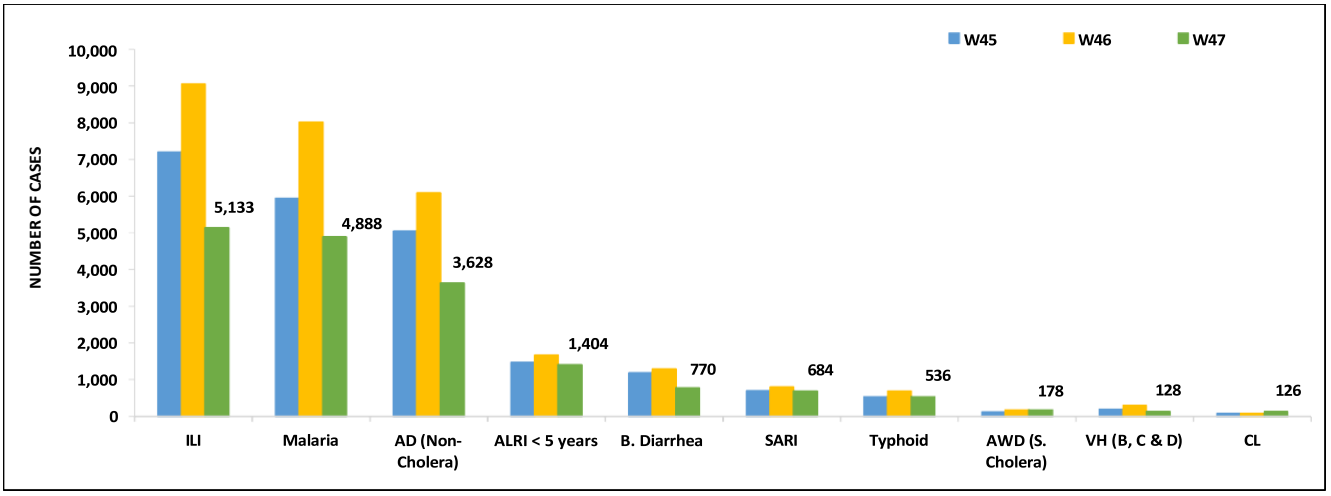
## Balochistan

- ILI, Malaria, AD (Non-Cholera), ALRI <5 years, B. Diarrhea, SARI, Typhoid, AWD (S. Cholera) ,VH(B,C&D) and CL cases were the most frequently reported diseases from Balochistan province.
- ILI cases are mostly reported from Quetta, Jhal Magsi and Khuzdar while Malaria cases are mostly reported from Jhal Magsi,Naseerabad and Lasbella.
- One suspected case of HIV/ AIDS reported from Balochistan. Field investigation required to verify the case.

***Table 3: District wise distribution of most frequently reported suspected cases during Week 47, Balochistan***

| Districts | AD (Non-Cholera) | Malaria | ILI | B. Diarrhea | ALRI < 5 years | Typhoid | SARI | AWD (S.Cholera) | TB | CL |
|---|---|---|---|---|---|---|---|---|---|---|
| Barkhan | 89 | 71 | 68 | 38 | 5 | 13 | 21 | 6 | 1 | 2 |
| Chagai | 241 | 100 | 93 | 0 | 20 | 0 | 16 | 0 | 1 | 0 |
| Dera Bugti | 62 | 141 | 49 | 58 | 14 | 3 | 8 | 0 | 0 | 0 |
| Duki | 56 | 20 | 52 | 18 | 21 | 11 | 4 | 0 | 0 | 2 |
| Gwadar | 20 | 15 | 24 | 16 | 1 | 0 | 16 | 0 | 4 | 0 |
| Hub | 65 | 117 | 94 | 10 | 4 | 0 | 0 | 0 | 0 | 0 |
| Jhal Magsi | 526 | 1,234 | 286 | 260 | 2 | 3 | 20 | 38 | 0 | 2 |
| Kalat | 0 | 30 | 25 | 21 | 3 | 2 | 24 | 0 | 0 | 0 |
| Kharan | 409 | 55 | 128 | 0 | 59 | 10 | 5 | 2 | 0 | 0 |
| Khuzdar | 479 | 233 | 274 | 14 | 109 | 49 | 55 | 15 | 0 | 0 |
| Kohlu | 461 | 117 | 151 | 9 | 73 | 64 | 54 | NR | 4 | 1 |
| Lasbella | 66 | 545 | 323 | 94 | 53 | 0 | 22 | 0 | 5 | 10 |
| Loralai | 345 | 36 | 135 | 52 | 22 | 103 | 22 | 0 | 0 | 10 |
| Mastung | 166 | 54 | 123 | 80 | 36 | 22 | 17 | 0 | 1 | 0 |
| MusaKhel | 53 | 124 | 35 | 12 | 8 | 5 | 7 | 8 | 9 | 1 |
| Naseerabad | 42 | 733 | 317 | 26 | 18 | 0 | 90 | 2 | 83 | 17 |
| Nushki | 29 | 7 | 125 | 0 | 8 | 0 | 0 | 0 | 0 | 0 |
| Panjgur | 171 | 212 | 132 | 74 | 38 | 4 | 14 | 12 | 0 | 0 |
| Quetta | 614 | 18 | 184 | 103 | 34 | 110 | 32 | 51 | 0 | 6 |
| Sibi | 190 | 390 | 226 | 176 | 75 | 188 | 80 | 32 | 0 | 74 |
| Surab | 168 | 77 | 66 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Usta Muhammad | 226 | 326 | 450 | 144 | 43 | 33 | 7 | 2 | 20 | 1 |
| Washuk | 413 | 151 | 195 | 3 | 91 | 8 | 13 | 2 | 0 | 0 |
| Zhob | 172 | 76 | 67 | 193 | 21 | 56 | 5 | 5 | 0 | 0 |
| Ziarat | 70 | 6 | 6 | 3 | 12 | 0 | 4 | 3 | 0 | 0 |
| Total | 5,133 | 4,888 | 3,628 | 1,404 | 770 | 684 | 536 | 178 | 128 | 126 |

***Figure 3: Most frequently reported suspected cases during Week 47, Balochistan***

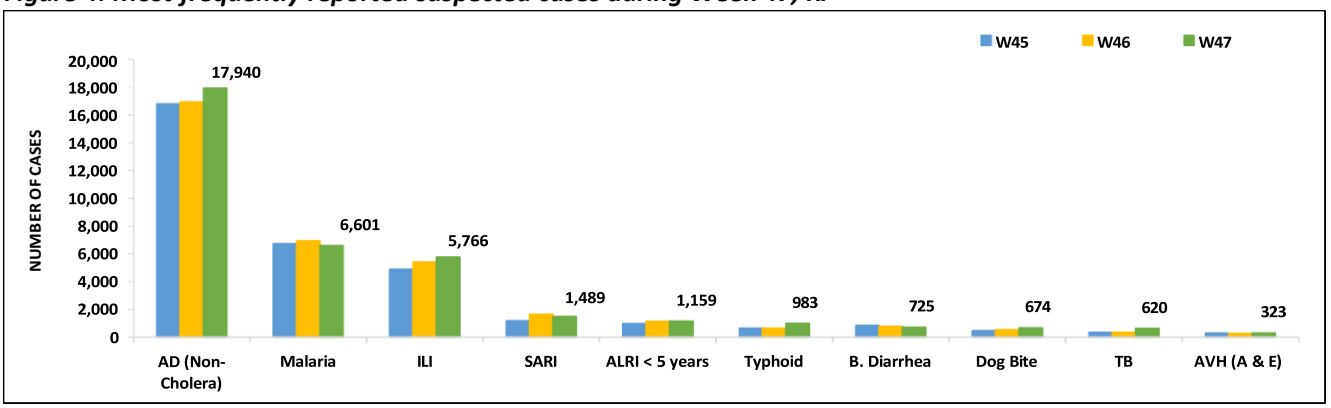


- Cases of AD (Non-Cholera) were maximum followed by Malaria, ILI, SARI, ALRI<5 Years,Typhoid, B. Diarrhea, dog bite, TB and AVH (A & E) cases.
- AD (Non-Cholera) ,ILI,Typhoid,dog bite,TB and AVH(A &E) cases showed an increasing trend while Malaria,SARI and B.Diarrhea cases showed a decreasing trend and ALRI<5years cases showed same trend this week.
- Twenty-nine cases of AFP, Six suspected cases of HIV/ AIDS, Twelve suspected cases of Brucellosis reported from KP. All are suspected cases and need field verification.

***Table 4: District wise distribution of most frequently reported suspected cases during Week 47, KP***

| Districts | AD (Non-Cholera) | Malaria | ILI | B.Diarrhea | SARI | ALRI <5 Years | Typhoid | Dog Bite | TB | AVH (A&E) |
|---|---|---|---|---|---|---|---|---|---|---|
| Abbottabad | 780 | 60 | 278 | 111 | 123 | 420 | 6 | 2 | 190 | 1 |
| Bajaur | 939 | 212 | 96 | 94 | 20 | 0 | 63 | 63 | 16 | 57 |
| Bannu | 619 | 1,837 | 9 | 17 | 17 | 89 | 28 | 4 | 20 | 13 |
| Battagram | 94 | 30 | 513 | NR | NR | 0 | NR | 13 | 42 | NR |
| Buner | 207 | 265 | 40 | 0 | 2 | 2 | 0 | 13 | 3 | 0 |
| Charsadda | 1,022 | 380 | 475 | 5 | 87 | 106 | 59 | 2 | 4 | 21 |
| Chitral Lower | 218 | 11 | 112 | 35 | 16 | 4 | 11 | 10 | 4 | 1 |
| Chitral Upper | 68 | 0 | 2 | 3 | 28 | 10 | 5 | 6 | 2 | 1 |
| D.I. Khan | 1,152 | 671 | 0 | 0 | 4 | 2 | 17 | 19 | 38 | 2 |
| Dir Lower | 966 | 380 | 2 | 0 | 105 | 47 | 89 | 77 | 13 | 26 |
| Dir Upper | 709 | 7 | 104 | 0 | 18 | 1 | 1 | 0 | 15 | 0 |
| Hangu | 63 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 |
| Haripur | 480 | 13 | 402 | 14 | 91 | 6 | 8 | 2 | 22 | 26 |
| Karak | 291 | 204 | 44 | 482 | 17 | 6 | 20 | 18 | 4 | 3 |
| Khyber | 352 | 142 | 0 | 39 | 19 | 57 | 84 | 0 | 0 | 0 |
| Kohat | 425 | 191 | 180 | 80 | 11 | 5 | 11 | 12 | 0 | 0 |
| Kohistan Lower | 131 | 4 | 6 | 9 | 4 | 0 | 6 | 0 | 2 | 11 |
| Kohistan Upper | 383 | 42 | 31 | 0 | 6 | 12 | 20 | 0 | 18 | 0 |
| Kolai Palas | 63 | 3 | 15 | 7 | 7 | 4 | 6 | 0 | 1 | 0 |
| L & C Kurram | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lakki Marwat | 588 | 410 | 0 | 0 | 32 | 2 | 24 | 50 | 8 | 0 |
| Malakand | 624 | 42 | 0 | 9 | 19 | 30 | 67 | 0 | 0 | 40 |
| Mansehra | 396 | 4 | 559 | 58 | 29 | 14 | 4 | 65 | 6 | 4 |
| Mardan | 556 | 25 | 0 | 0 | 47 | 2 | 5 | 69 | 6 | 0 |
| Mohmand | 140 | 314 | 175 | 168 | 5 | 8 | 33 | 9 | 0 | 0 |
| North Waziristan | 39 | 26 | 0 | 32 | 0 | 7 | 12 | 0 | 1 | 0 |
| Nowshera | 998 | 141 | 18 | 2 | 3 | 14 | 16 | 0 | 14 | 19 |
| Orakzai | 99 | 4 | 14 | 0 | 0 | 5 | 12 | 1 | 0 | 0 |
| Peshawar | 2,183 | 70 | 1,442 | 196 | 215 | 37 | 66 | 12 | 13 | 8 |
| SD Tank | 10 | 11 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Shangla | 622 | 416 | 8 | 29 | 12 | 27 | 4 | 65 | 92 | 3 |
| SWA | 51 | 60 | 188 | 25 | 11 | 11 | 11 | 8 | 6 | 0 |
| Swabi | 913 | 37 | 777 | 56 | 80 | 11 | 1 | 117 | 50 | 9 |
| Swat | 1,215 | 40 | 118 | 0 | 111 | 14 | 9 | 28 | 3 | 74 |
| Tank | 481 | 459 | 142 | 0 | 18 | 24 | 4 | 4 | 24 | 0 |
| Tor Ghar | 37 | 60 | 0 | 18 | 2 | 6 | 19 | 5 | 1 | 4 |
| Upper Kurram | 24 | 0 | 13 | 0 | 0 | 0 | 4 | 0 | 0 | 0 |
| Total | 17,940 | 6,601 | 5,766 | 1,489 | 1,159 | 983 | 725 | 674 | 620 | 323 |

***Figure 4: Most frequently reported suspected cases during Week 47, KP***



## ICT, AJK & GB

*ICT*: The most frequently reported cases from Islamabad were ILI followed by AD (Non-Cholera) and ALRI<5 years.

*AJK:* ILI cases were maximum followed by ALRI < 5years, AD (Non-Cholera), SARI, dog bite, TB, B. Diarrhea,AWD(S.Cholera) , AVH (A & E) and Typhoid cases. One suspected case of AFP reported from AJK. Field investigation required to verify the case.

*GB:* ALRI <5 Years cases were the most frequently reported diseases followed by AD (Non-Cholera), ILI, SARI,B. Diarrhea, TB and Typhoid cases.

***Figure 5: Most frequently reported suspected cases during Week 47, ICT***

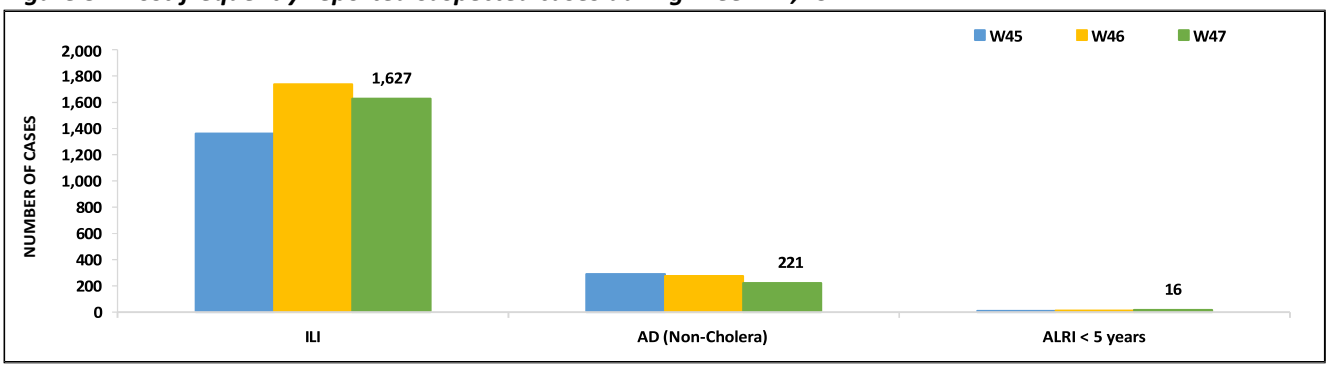



***Figure 6: Week wise reported suspected cases of ILI, ICT***

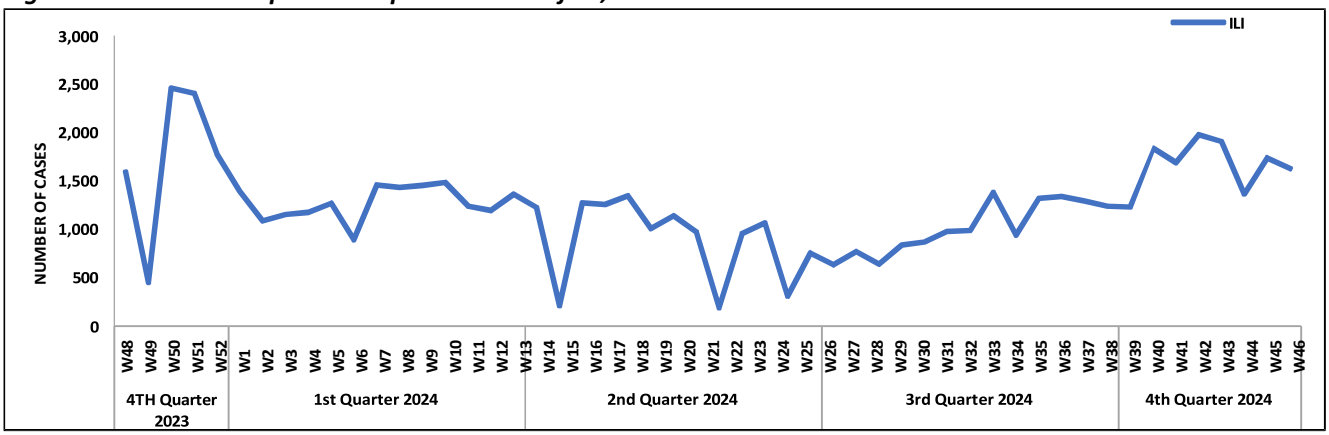



***Figure 7: Most frequently reported suspected cases during Week 47, AJK***

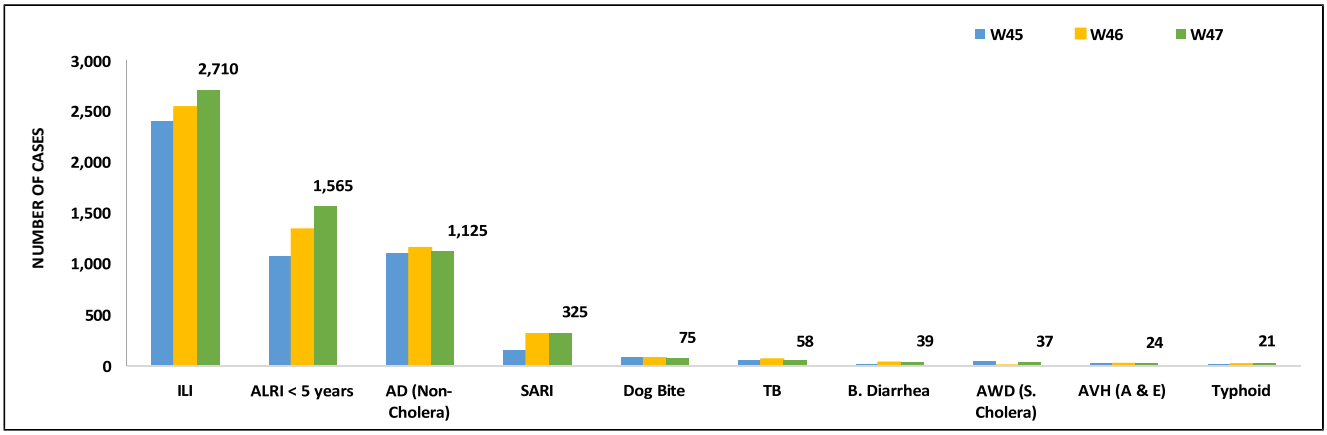


*Figure 8: Week wise reported suspected cases of ILI and AD (Non-Cholera) AJK*

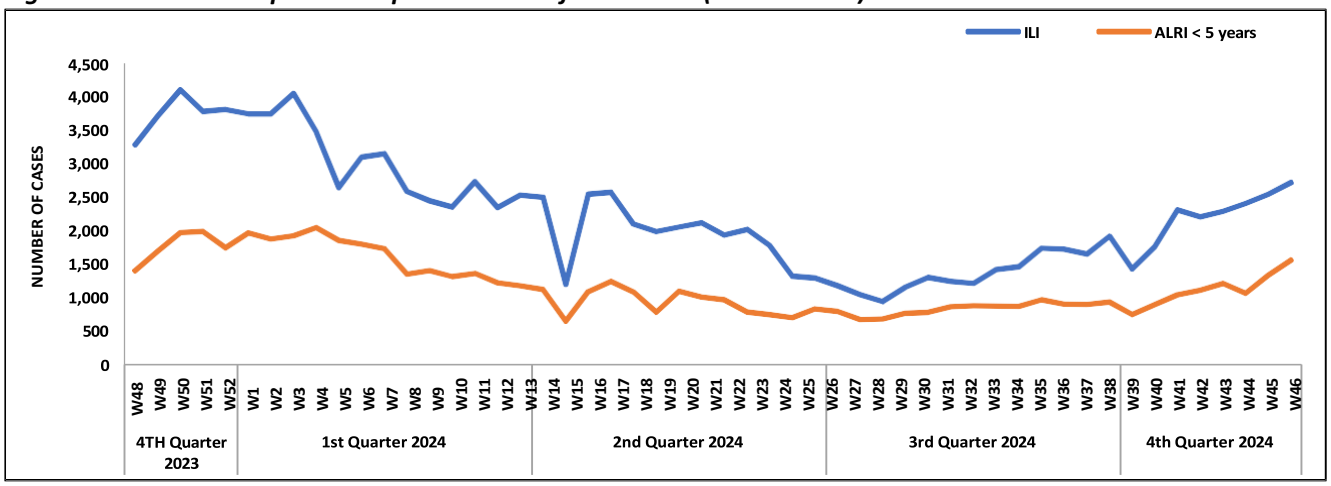



*Figure 9: Most frequent cases reported during Week 47, GB*

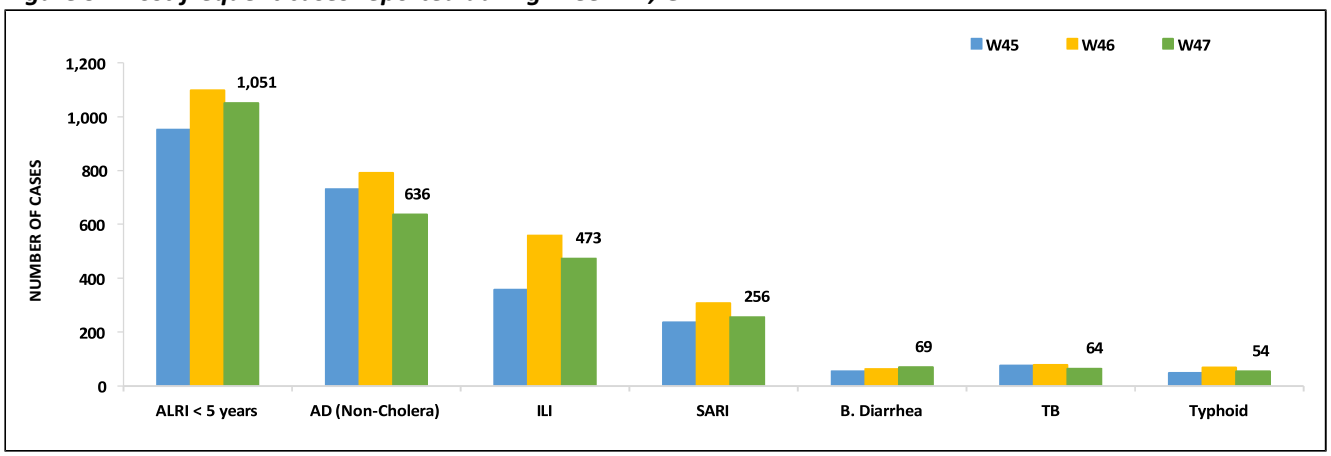
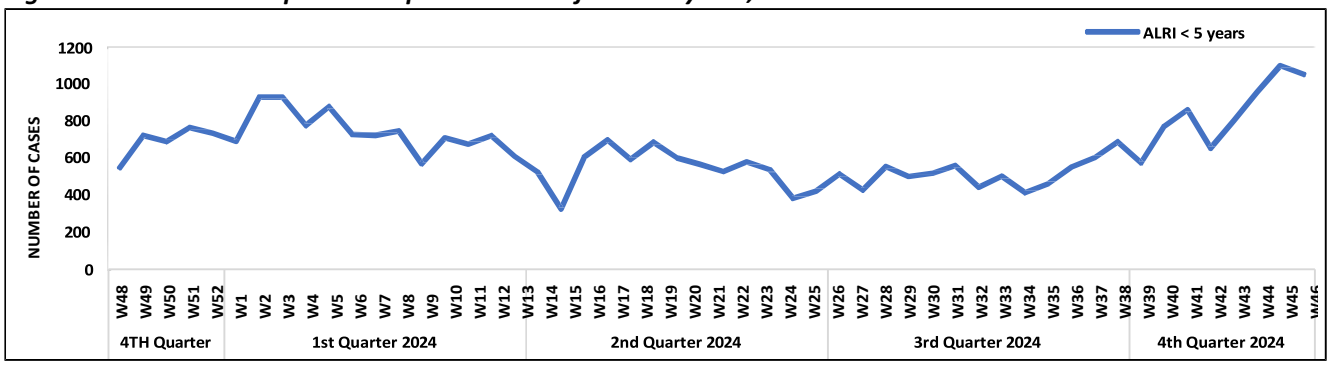



*Figure 10: Week wise reported suspected cases of ALRI <5 years, GB*



## *Punjab*

- AD (Non-Cholera) cases were maximum followed by TB, dog bite, Malaria, Typhoid, ALRI<5 Years,B.Diarrhea , AWD (S. Cholera) and Measles cases.
- Seventeen cases of AFP, Sixteen suspected cases of HIV/ AIDS reported from Punjab. All are suspected cases and need field verification.

***Figure 11: Most frequently reported suspected cases during Week 47, Punjab.***

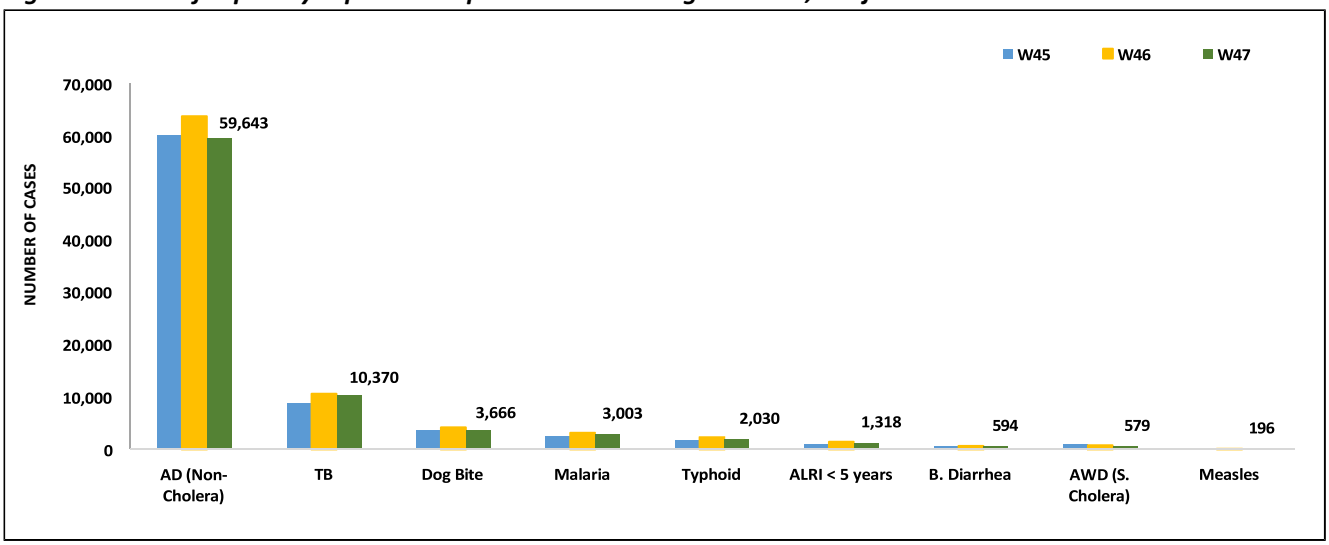



***Figure 12: Week wise reported suspected cases of AD (Non-Cholera), Punjab.***

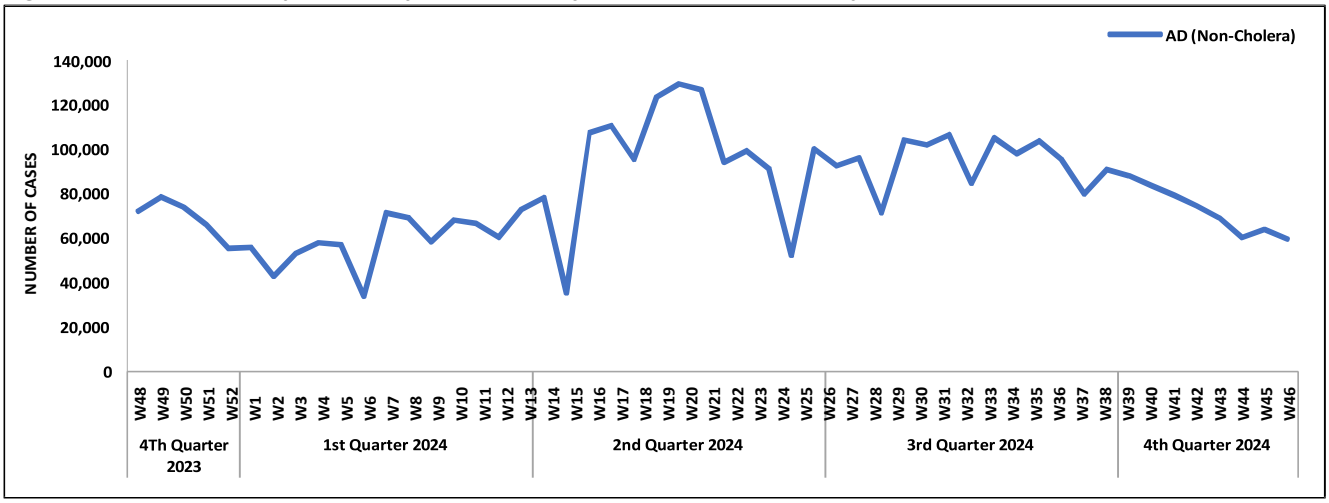


***Table 5: Public Health Laboratories confirmed cases of IDSR Priority Diseases during Epid Week 47***

| Diseases | | Sindh | | Balochistan | | KPK | | ISL | | GB | | Punjab | | AJK | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Total Test | Total Pos | Total Test | Total Pos | Total Test | Total Pos | Total Test | Total Pos | Total Test | Total Pos | Total Test | Total Pos | Total Test | Total Pos |
| AWD (S. Cholera) | | 14 | 0 | - | - | 3 | 0 | - | - | - | - | - | - | 14 | 0 |
| AD (Non-Cholera) | | 83 | 1 | - | - | - | - | - | - | - | - | - | - | 25 | 0 |
| Malaria | | 1,018 | 65 | - | - | - | - | - | - | - | - | - | - | 224 | 5 |
| CCHF | | - | - | 1 | 0 | 1 | 0 | 4 | 0 | - | - | - | - | 0 | 0 |
| Dengue | | 876 | 22 | 0 | 0 | | | 35 | 11 | - | - | - | - | 135 | 9 |
| VH (B) | | 3,026 | 111 | 0 | 0 | - | - | - | - | 219 | 8 | - | - | 1,652 | 15 |
| VH (C) | | 3,025 | 324 | 0 | 0 | - | - | - | - | 180 | 0 | - | - | 1,655 | 28 |
| Covid-19 | | - | - | 8 | 0 | - | - | 1 | 0 | - | - | - | - | 40 | 0 |
| Chikungunya | | - | - | 0 | 0 | - | - | 6 | 1 | - | - | - | - | 0 | 0 |
| TB | | - | - | - | - | - | - | - | - | - | - | - | - | 152 | 7 |
| Syphilis | | - | - | - | - | - | - | - | - | - | - | - | - | 10 | 0 |
| B. Diarrhea | | - | - | - | - | - | - | - | - | - | - | - | - | 13 | 2 |
| Typhoid | | 528 | 5 | - | - | - | - | - | - | - | - | - | - | 34 | 2 |
| Diptheria (Probabale) | | - | - | - | - | 1 | 0 | - | - | - | - | - | - | 0 | 0 |
| Pertussis | | - | - | - | - | - | - | - | - | - | - | - | - | 0 | 0 |
| M-POX | | - | - | 0 | 0 | 2 | 0 | - | - | - | - | - | - | 8 | 0 |
| Cutaneous Leishmaniansis | | - | - | - | - | - | - | - | - | - | - | - | - | 2 | 0 |
| Visceral Leishmaniansis | | - | - | - | - | - | - | - | - | - | - | - | - | 3 | 0 |
| Covid-19 | Out of SARI | 3 | 0 | 0 | 0 | 0 | 0 | 37 | 0 | 0 | 0 | 62 | 0 | 0 | 0 |
| | Out of ILI | 0 | 0 | 0 | 0 | 0 | 0 | 42 | 0 | 0 | 0 | 50 | 0 | 0 | 0 |
| Influenza A | Out of SARI | 3 | 0 | 0 | 0 | 0 | 0 | 37 | 2 | 0 | 0 | 62 | 3 | 0 | 0 |
| | Out of ILI | 0 | 0 | 0 | 0 | 0 | 0 | 42 | 1 | 0 | 0 | 50 | 4 | 0 | 0 |
| Influenza B | Out of SARI | 3 | 0 | 0 | 0 | 0 | 0 | 37 | 0 | 0 | 0 | 62 | 0 | 0 | 0 |
| | Out of ILI | 0 | 0 | 0 | 0 | 0 | 0 | 42 | 0 | 0 | 0 | 50 | 0 | 0 | 0 |
| RSV | Out of SARI | 3 | 0 | 0 | 0 | 0 | 0 | 37 | 0 | 0 | 0 | 62 | 0 | 0 | 0 |
| | Out of ILI | 0 | 0 | 0 | 0 | 0 | 0 | 42 | 0 | 0 | 0 | 50 | 0 | 0 | 0 |

# IDSR Reports Compliance

- Out of 158 IDSR implemented districts, compliance is low from KP and Balochistan. Green color highlights >50% compliance while red color highlights <50% compliance

## *Table 6: IDSR reporting districts Week 47, 2024*

| Provinces/Regions | Districts | Total Number of Reporting Sites | Number of Reported Sites for current week | Compliance Rate (%) |
|---|---|---|---|---|
| Khyber Pakhtunkhwa | Abbottabad | 111 | 100 | 90% |
| | Bannu | 238 | 137 | 58% |
| | Battagram | 63 | 31 | 49% |
| | Buner | 34 | 33 | 97% |
| | Bajaur | 44 | 39 | 89% |
| | Charsadda | 59 | 59 | 100% |
| | Chitral Upper | 34 | 27 | 79% |
| | Chitral Lower | 35 | 35 | 100% |
| | D.I. Khan | 114 | 112 | 98% |
| | Dir Lower | 74 | 71 | 96% |
| | Dir Upper | 37 | 30 | 81% |
| | Hangu | 22 | 9 | 41% |
| | Haripur | 72 | 65 | 90% |
| | Karak | 35 | 35 | 100% |
| | Khyber | 52 | 19 | 37% |
| | Kohat | 61 | 61 | 100% |
| | Kohistan Lower | 11 | 11 | 100% |
| | Kohistan Upper | 20 | 20 | 100% |
| | Kolai Palas | 10 | 10 | 100% |
| | Lakki Marwat | 70 | 69 | 99% |
| | Lower & Central Kurram | 42 | 1 | 2% |
| | Upper Kurram | 41 | 6 | 15% |
| | Malakand | 42 | 30 | 71% |
| | Mansehra | 136 | 114 | 84% |
| | Mardan | 80 | 75 | 94% |
| | Nowshera | 55 | 52 | 95% |
| | North Waziristan | 13 | 5 | 38% |
| | Peshawar | 153 | 127 | 83% |
| | Shangla | 37 | 35 | 95% |
| | Swabi | 64 | 60 | 94% |
| | Swat | 77 | 72 | 94% |
| | South Waziristan | 135 | 55 | 41% |
| | Tank | 34 | 31 | 91% |
| | Torghar | 14 | 14 | 100% |
| | Mohmand | 68 | 65 | 96% |
| | SD Peshawar | 5 | 0 | 0% |
| | SD Tank | 58 | 6 | 10% |
| | Orakzai | 69 | 9 | 13% |
| | Mirpur | 37 | 37 | 100% |
| | Bhimber | 42 | 20 | 48% |
| | Kotli | 60 | 60 | 100% |

| | | | | |
|---|---|---|---|---|
| **Azad Jammu Kashmir** | Muzaffarabad | 45 | 40 | 89% |
| | Poonch | 46 | 46 | 100% |
| | Haveli | 40 | 40 | 100% |
| | Bagh | 40 | 40 | 100% |
| | Neelum | 39 | 39 | 100% |
| | Jhelum Vellay | 29 | 28 | 97% |
| | Sudhnooti | 27 | 27 | 100% |
| **Islamabad Capital Territory** | ICT | 21 | 21 | 100% |
| | CDA | 15 | 8 | 53% |
| **Balochistan** | Gwadar | 25 | 1 | 4% |
| | Kech | 44 | 0 | 0% |
| | Khuzdar | 74 | 58 | 78% |
| | Killa Abdullah | 26 | 0 | 0% |
| | Lasbella | 55 | 55 | 100% |
| | Pishin | 69 | 0 | 0% |
| | Quetta | 55 | 26 | 47% |
| | Sibi | 36 | 35 | 97% |
| | Zhob | 39 | 22 | 56% |
| | Jaffarabad | 16 | 0 | 0% |
| | Naserabad | 32 | 32 | 100% |
| | Kharan | 30 | 30 | 100% |
| | Sherani | 15 | 0 | 0% |
| | Kohlu | 75 | 45 | 60% |
| | Chagi | 36 | 15 | 42% |
| | Kalat | 41 | 40 | 98% |
| | Harnai | 17 | 0 | 0% |
| | Kachhi (Bolan) | 35 | 0 | 0% |
| | Jhal Magsi | 28 | 28 | 100% |
| | Sohbat pur | 25 | 0 | 0% |
| | Surab | 32 | 25 | 78% |
| | Mastung | 45 | 45 | 100% |
| | Loralai | 33 | 26 | 79% |
| | Killa Saifullah | 28 | 0 | 0% |
| | Ziarat | 29 | 6 | 21% |
| | Duki | 31 | 11 | 35% |
| | Nushki | 32 | 29 | 91% |
| | Dera Bugti | 45 | 27 | 60% |
| | Washuk | 46 | 32 | 70% |
| | Panjgur | 38 | 18 | 47% |
| | Awaran | 23 | 0 | 0% |
| | Chaman | 24 | 0 | 0% |
| | Barkhan | 20 | 17 | 85% |
| | Hub | 33 | 13 | 39% |
| | Musakhel | 41 | 19 | 46% |
| | Usta Muhammad | 34 | 34 | 100% |
| **Gilgit Baltistan** | Hunza | 32 | 31 | 97% |
| | Nagar | 25 | 20 | 80% |
| | Ghizer | 40 | 40 | 100% |
| | Gilgit | 40 | 39 | 98% |

| | | | | |
|---|---|---|---|---|
| | Diamer | 62 | 61 | 98% |
| | Astore | 54 | 53 | 98% |
| | Shigar | 27 | 25 | 93% |
| | Skardu | 52 | 52 | 100% |
| | Ganche | 29 | 29 | 100% |
| | Kharmang | 46 | 25 | 54% |
| **Sindh** | Hyderabad | 74 | 69 | 93% |
| | Ghotki | 64 | 63 | 98% |
| | Umerkot | 43 | 43 | 100% |
| | Naushahro Feroze | 107 | 96 | 90% |
| | Tharparkar | 276 | 234 | 85% |
| | Shikarpur | 60 | 59 | 98% |
| | Thatta | 52 | 48 | 92% |
| | Larkana | 67 | 66 | 99% |
| | Kamber Shadadkot | 71 | 71 | 100% |
| | Karachi-East | 23 | 19 | 83% |
| | Karachi-West | 20 | 20 | 100% |
| | Karachi-Malir | 37 | 27 | 73% |
| | Karachi-Kemari | 18 | 18 | 100% |
| | Karachi-Central | 11 | 6 | 55% |
| | Karachi-Korangi | 18 | 15 | 83% |
| | Karachi-South | 4 | 3 | 75% |
| | Sujawal | 55 | 53 | 96% |
| | Mirpur Khas | 106 | 102 | 96% |
| | Badin | 125 | 124 | 99% |
| | Sukkur | 64 | 63 | 98% |
| | Dadu | 90 | 88 | 98% |
| | Sanghar | 100 | 100 | 100% |
| | Jacobabad | 44 | 44 | 100% |
| | Khairpur | 170 | 166 | 98% |
| | Kashmore | 59 | 59 | 100% |
| | Matiari | 42 | 42 | 100% |
| | Jamshoro | 75 | 73 | 97% |
| | Tando Allahyar | 54 | 54 | 100% |
| | Tando Muhammad Khan | 41 | 41 | 100% |
| | Shaheed Benazirabad | 125 | 122 | 98% |

*Table 7: IDSR reporting Tertiary care hospital Week 47, 2024*

| Provinces/Regions | Districts | Total Number of Reporting Sites | Number of Reported Sites for current week | Compliance Rate (%) |
|---|---|---|---|---|
| AJK | Mirpur | 2 | 2 | 100% |
| | Bhimber | 1 | 1 | 100% |
| | Kotli | 1 | 1 | 100% |
| | Muzaffarabad | 2 | 2 | 100% |
| | Poonch | 2 | 2 | 100% |
| | Haveli | 1 | 1 | 100% |
| | Bagh | 1 | 1 | 100% |
| | Neelum | 1 | 1 | 100% |
| | Jhelum Vellay | 1 | 1 | 100% |
| | Sudhnooti | 1 | 1 | 100% |
| Sindh | Karachi-South | 1 | 0 | 0% |
| | Sukkur | 1 | 0 | 0% |
| | Shaheed Benazirabad | 1 | 1 | 100% |
| | Karachi-East | 1 | 1 | 100% |
| | Karachi-Central | 1 | 0 | 0% |

# National Multi-Stakeholder Consultative Meeting on Gender Equity in the Fight against Antimicrobial Resistance (AMR)

The National Institute of Health (NIH), in collaboration with Jhpiego and the Fleming Fund, recently organized a significant national multi-stakeholder consultative meeting aimed at addressing gender equity in the battle against Antimicrobial Resistance (AMR). This event marks a pivotal step in recognizing the importance of gender inclusion in public health interventions and strategies.

### A Unified Approach to Combat AMR

The event was inaugurated by the CEO of NIH, who underscored the critical importance of collaborative efforts in tackling the growing challenge of AMR. The Director-General of Health, also delivered remarks, reinforcing the need for a holistic approach that integrates gender considerations into all levels of AMR action.

The consultative meeting was organized in response to a key recommendation from the World Health Organization (WHO) to incorporate a gender perspective into national health policies, especially those addressing AMR. This recommendation is pivotal, given that gender disparities in health and access to medical resources can significantly influence the effectiveness of AMR strategies.

### Moving Forward: Gender-Sensitive AMR Action Plans

The meeting concluded with a commitment to incorporate the insights and recommendations gathered during the discussions into the upcoming AMR National Action Plan 2.0. This revised plan will serve as a blueprint for Pakistan's strategy to combat AMR, with an enhanced focus on ensuring gender equity in all aspects of its implementation.

As the AMR challenge continues to grow, the need for inclusive, gender-sensitive approaches becomes ever more critical. By recognizing the different roles and needs of men, women, and marginalized groups, Pakistan can build a more comprehensive, effective, and equitable response to AMR.

This meeting underscores the importance of not only addressing AMR as a health issue but also ensuring that gender equity is firmly embedded in all aspects of the national response. By doing so, Pakistan will not only strengthen its fight against AMR but also promote a more inclusive and just healthcare system for all its citizens.

# Notes from the field: Outbreak investigation of Typhoid Fever in in Killi Mughtian, District Pishin, Balochistan May 2024.

**Dr. Ahmad Shah Kakar, MO Pishin**

**Mentor: Dr. Ehsan Larik**

### Introduction:

Typhoid fever, a serious bacterial infection caused by Salmonella Typhi, is prevalent in areas with poor sanitation and hygiene. It spreads through the fecal-oral route, affecting people with poor hygiene and

limited access to clean water. Globally, the World Health Organization (WHO) estimates that approximately 11 million cases and over 60,000 deaths occur annually.

On May 21, 2024, a cluster of 11 suspected typhoid fever cases emerged from BHU Mughtian, located in the district of Pishin. Following confirmation by the District Health Officer (DHO) of Pishin and the in-charge of BHU Mughtian, an investigation was initiated on May 23, 2024, to assess the extent of the outbreak and identify potential risk factors.

Mughtian village, with a population of approximately 3583 individuals, is characterized by over 300 households, primarily constructed with mud. The low socioeconomic status of the community, coupled with a literacy rate of only 34%, further exacerbates the challenges in implementing effective public health measures.

### Objectives:

- To Identify and confirm typhoid cases
- To determine the magnitude of the outbreak.
- To identify risk factors

### Methods:

A descriptive cross-sectional study was conducted in Mughtian village, Pishin district, Balochistan, to investigate the typhoid fever outbreak. Data was collected through structured interviews using a modified CDC standard questionnaire. A case of typhoid fever was defined as any individual residing in Killi Mughtian between May 5th and June 5th, 2024, who presented with acute febrile illness (temperature ≥ 38°C) for three or more days, accompanied by abdominal discomfort, fatigue, diarrhea, or constipation. Five Samples from suspected cases were collected and sent to a laboratory for culture and sensitivity testing to confirm the diagnosis of typhoid fever. Data analysis was performed using Microsoft Excel. Descriptive statistics, including frequencies, percentages, attack rate, and case fatality rate, were calculated to summarize the findings.

### Results:

A total of 25 cases of typhoid fever were identified during the outbreak investigation in Mughtian village. The median age of the affected individuals was 3 years, (range 2-10 years). Children under the age of 5 years were disproportionately affected (68%). The male-to-female ratio was 2:3, with a higher proportion of female cases (60%). The most common symptoms reported by the affected individuals were fever (60%), abdominal discomfort (40%), diarrhea (40%), and body ache (20%). Out of the collected samples, three returned positive for Salmonella Typhi. The attack rate was calculated to be 6 per 1000 population. Unhygienic practices (70%), lack of clean water (40%), street food consumption (30%), and overcrowding (20%) were the most common risk factors.

### Discussion:

The outbreak investigation in Mughtian village revealed a significant number of typhoid fever cases, primarily affecting young children. This finding aligns with previous studies that have highlighted the vulnerability of children to typhoid fever, especially in low-resource settings with poor sanitation and hygiene (World Health Organization, 2023). The predominance of cases in the under-5 age group underscores the importance of targeted interventions to protect young children.

Several risk factors contributed to the outbreak, including unhygienic practices, lack of clean water, street food consumption, and overcrowding. These findings align with the importance of sanitation and hygiene in preventing typhoid fever [1, 2].

The male-to-female ratio of 2:3 indicates a higher prevalence among females, which may be attributed to various sociocultural factors influencing hygiene practices and exposure to risk factors. The limited number of laboratory tests conducted highlights the need for improved access to diagnostic services in rural areas.

### Conclusion:

In conclusion, this outbreak investigation highlights the ongoing challenge of typhoid fever in the district. Addressing the identified risk factors through improved sanitation, access to clean water, and public health education is crucial to prevent future outbreaks and protect public health.

### Recommendations:

**Surveillance and outbreak response:** Establishing a robust surveillance system to detect and respond to outbreaks promptly.

**Improved sanitation and hygiene:** Promoting hand washing with soap, safe disposal of feces, and proper food hygiene.

**Access to safe water:** Ensuring access to clean and safe drinking water through the provision of water treatment and storage facilities.

**Vaccination:** Enhancement of acquired immunity through typhoid vaccination campaigns in the affected areas by the District/provincial EPI

**Health education**: Conducting health education campaigns to raise awareness about typhoid fever, its transmission, and prevention measures.

### References:


1. Farooqui A, Khan A, Kazmi SU. Investigation of a community outbreak of typhoid fever associated with drinking water. BMC Public Health. 2009;9(1):1-6.
2. Khan A, Farooqui A, Kazmi SU. Typhoid fever in Pakistan: Challenges, Efforts, and Recommendations. PMC. 2021;15:1-11.
3. WHO. Typhoid fever. World Health Organization. [Accessed 2023 June 10].


# Knowledge Hub

## Understanding Mumps and Its Impact on Public Health

### Introduction

Mumps is a highly contagious viral infection primarily affecting children, though it can occur at any age. The infection is caused by the mumps virus, which leads to inflammation of the salivary glands, particularly the parotid glands. While mumps was once a common childhood illness, its incidence has drastically reduced due to widespread vaccination. However, recent outbreaks have reminded us of the ongoing need for vigilance and immunization efforts to control this disease.

### What is Mumps?

Mumps is a viral infection that typically presents with swelling of the salivary glands, fever, headache, and muscle aches. The mumps virus is transmitted through respiratory droplets when an infected person coughs, sneezes, or talks, and it can also spread through direct contact with saliva or contaminated surfaces.

### Symptoms of Mumps

- Swelling of one or both parotid glands (located near the jaw)
- Fever
- Headache
- Fatigue
- Loss of appetite

While mumps is generally a mild illness, complications can occur, including viral meningitis, encephalitis, hearing loss, and in rare cases, infertility in males.

### Preventing Mumps: The Role of Vaccination

The most effective method of preventing mumps is vaccination, primarily through the **Measles, Mumps, and Rubella (MMR)** vaccine. The introduction of the MMR vaccine has drastically reduced the number of mumps cases worldwide, including in Pakistan.

- **MMR Vaccine Coverage**: In Pakistan, the routine childhood immunization schedule includes the MMR vaccine, which is administered to children at 9 months and again at 18 months of age. Ensuring high coverage of this vaccine is critical for maintaining herd immunity and preventing outbreaks.
- **Vaccine Hesitancy**: Despite the availability of vaccines, some areas in Pakistan continue to face vaccine hesitancy due to misinformation, cultural beliefs, or lack of awareness. Addressing these concerns through community outreach and education is essential to increase vaccine acceptance and prevent future outbreaks.

### Key Takeaways

While mumps has become less common due to the success of the MMR vaccine, the risk of outbreaks remains, particularly in areas with lower immunization coverage. Continued efforts to educate the public, improve vaccine coverage, and strengthen surveillance are essential to controlling mumps and protecting public health in Pakistan.

## Public Health Resources

For additional information and updates, the following organizations provide valuable resources:

- **Centers for Disease Control and Prevention (CDC)**: https://www.cdc.gov/
- **World Health Organization (WHO)**: https://www.who.int/
- **Public Health Agency of Canada (PHAC)**: https://www.canada.ca/en/public-health.html


https://www.cdc.gov/mumps/infographics/mumps-protect-yourself.jpg