

SESSION 5: ADVANCING PUBLIC
HEALTH – STRENGTHENING
COLLABORATION FOR SURVEILLANCE
AND RESPONSE

Moderated by Dr. Johanna Hanefeld
& Dr. Natalie Mayet

IANPHI

ANNUAL MEETING

FEBRUARY 7-8, 2024 | KIGALI, RWANDA

HOSTED BY



Dr. Johanna Hanefeld, Vice
President, RKI, Germany,
& Dr. Natalie Mayet,
Deputy Director, NICD,
South Africa

INTRODUCTORY SPEECHES

IANPHI

ANNUAL MEETING

FEBRUARY 7-8, 2024 | KIGALI, RWANDA

HOSTED BY



Sara Hersey, Director of
Collaborative Intelligence,
Division of Health
Emergency Intelligence and
Surveillance Systems (WSE)

STRENGTHENING COLLABORATION FOR SURVEILLANCE AND RESPONSE

IANPHI

ANNUAL MEETING

FEBRUARY 7-8, 2024 | KIGALI, RWANDA

HOSTED BY



Dr. Scott Dowell, Senior
Advisor of the Global
Health Emergency Corps,
WHO

BUILDING EMERGENCY RESPONSE CAPACITY – THE GLOBAL HEALTH EMERGENCY CORPS (GHEC)

A health emergency workforce centered in countries



Connected leaders

- Connect senior national health emergency leaders in a trusted network.



Surge capacities

- Standardize quality and enhance interoperability between national, regional and global rapid response capacities.



Emergency workforce

- Strengthen local and national health emergency preparedness and response workforce.

There is no global health security without local and national health security.

Dr Tedros Adhanom Ghebreyesus
WHO Director-General



IANPHI

ANNUAL MEETING

FEBRUARY 7-8, 2024 | KIGALI, RWANDA

HOSTED BY



Dr. Raji Tajudeen, Head of
Division Public Health
Institutes and Research,
Africa CDC

REGIONAL SUPPORT TO BUILD SURVEILLANCE AND EMERGENCY RESPONSE CAPACITY IN AFRICA

IANPHI

ANNUAL MEETING

FEBRUARY 7-8, 2024 | KIGALI, RWANDA

HOSTED BY



Dr. Joy St. John, Executive
Director, Caribbean Public
Health Agency (CARPHA),
Trinidad and Tobago

PREPARING FOR
FUTURE THREATS –
HOW CARPHA PLANS
TO USE ITS PANDEMIC
FUNDS TO SUPPORT
COUNTRIES IN THE
CARIBBEAN PREPARE
FOR FUTURE PANDEMIC
THREATS

Vision

**Healthy People,
Healthy Spaces,
Healthy Caribbean**

Mission

As a professional organisation to build Member States capacity to prevent disease and promote health and wellness through leadership, partnership and innovations in Public Health

- A CARICOM Institution with responsibility for Public Health, one of 3 multinational PHIs
- Merger of former 5 Regional Health Institutions
- Established by CARICOM Inter-Governmental Agreement 2nd July 2011
- Operational 1st January 2013; Headquartered in Trinidad and Tobago with campuses in St. Lucia and Jamaica
- Officially launched 2nd July 2013



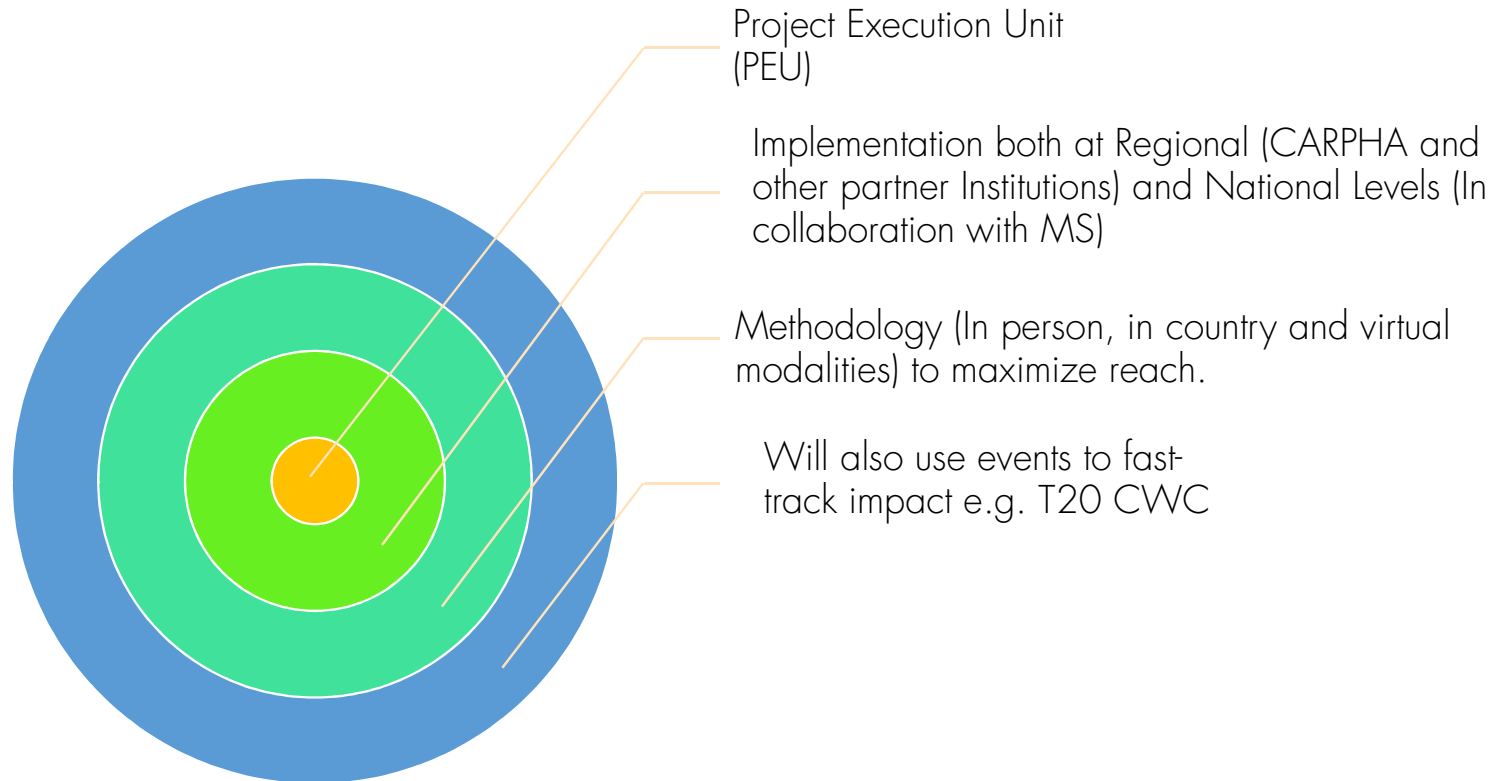
CCH IV

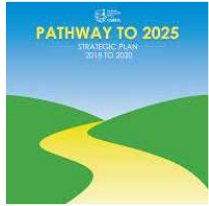
CCH is the governing philosophy for health in the Caribbean Community (CARICOM). This regional framework seeks to enhance functional cooperation in health among CARICOM Member States, regional institutions and development partners.



Regional Public Goods for Sustainable Health Development

EXECUTION OF CARPHA'S PRODUCTS AND SERVICES





CARPHA's Strategic Plan

- 6 strategic priorities
- Consultation with Member States and multiple stakeholders in the development of the plan
- SP Approval granted by the Ministers of Health and AWP approval recommended by the TAC to the CARPHA Executive Board



Integrated Surveillance Strategy

- **Vision**
 - To establish a functional, integrated, and outputs-based surveillance strategy that informs public health policy and practice.
- **Aim**
 - To provide integrated surveillance services that will promote healthy people, healthy spaces, and a healthy Caribbean by CARPHA Member States and other stakeholders.
- **One comprehensive report**
- Provide right info at the right time in the right place to Member States



Regional Health Security Agenda

- A subset of the Global Health Security Agenda

CARPHA'S EXPERIENCE – PPR PROPOSAL

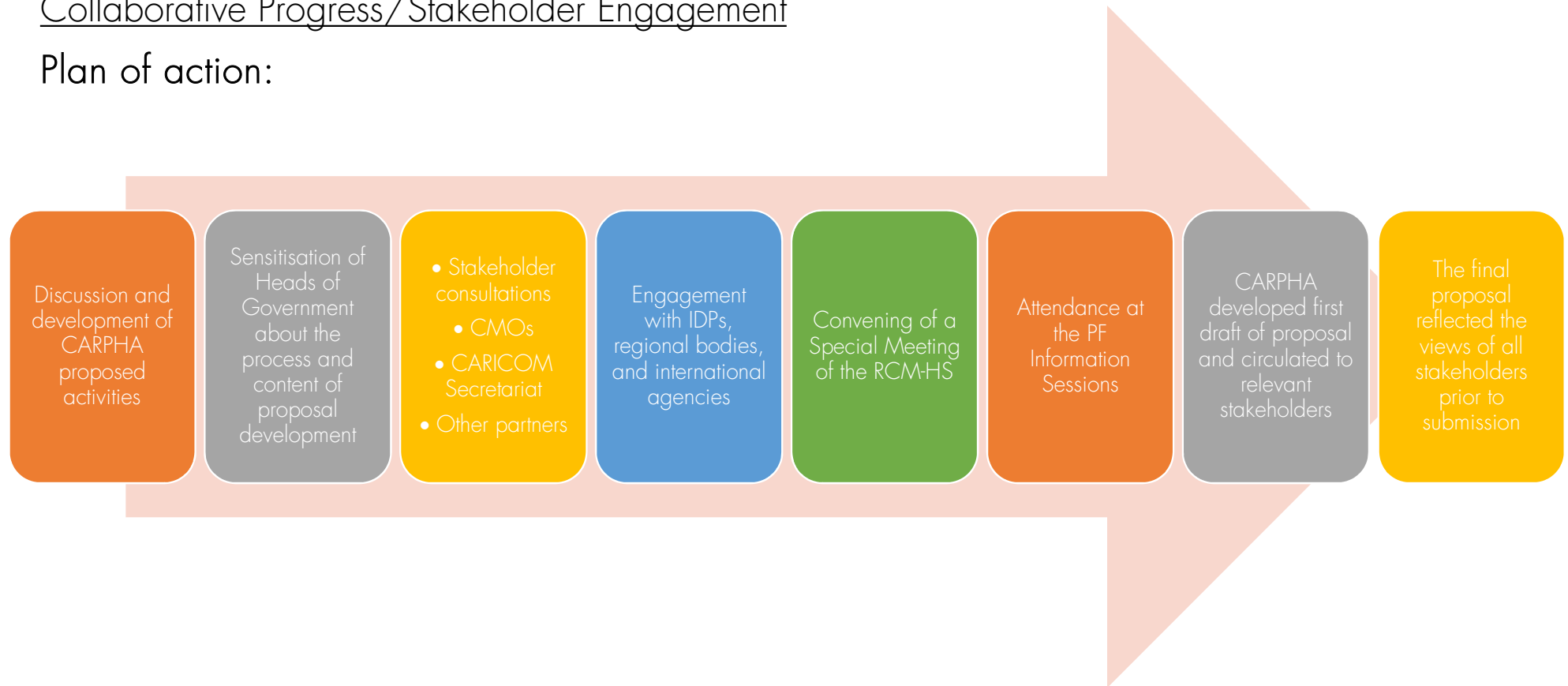
Overall Goal :To improve regional and national PPR in the Caribbean to protect and improve health and global health security through strengthening and building core capacities in surveillance and early warning systems (EWS), laboratory systems, human resources, workforce development and the integrated one health approach.

It is a project that spans regional and national (country) level capacities and results.

CARPHA'S PF: METHODOLOGY

Collaborative Progress/Stakeholder Engagement

Plan of action:



PF CAPACITY BUILDING/WORKFORCE DEVELOPMENT

Outcome :

Strengthened human resource capacity for PPR at the national and regional levels.

Results:

Improved surveillance and emergency response capacity through the:

- Roll out of FELTP's Frontline and Intermediate training for a larger cadre of public health workforce;
- Addition of One Health approach, Climate Change & Health in training;
- Improved data collection and analysis at the frontline level;
- Establishing a Regional Deployment Network;
- Trainings in Rapid team deployment & Emergency Response, prevention and control of outbreaks; and
- Health communications training and (vii) multisectoral workforce strategy

IANPHI

ANNUAL MEETING

FEBRUARY 7-8, 2024 | KIGALI, RWANDA

HOSTED BY



Prof. Aamer Ikram, IANPHI
EB Strategic Adviser,
Pakistan

PAKISTAN'S STRENGTHENING OF INTEGRATED DISEASE SURVEILLANCE (IDS) - CASE STUDY OF KEY STEPS TAKEN BY PAKISTAN TO STRENGTHEN IDS AND LESSONS

INTERNATIONAL HEALTH REGULATION - 2005

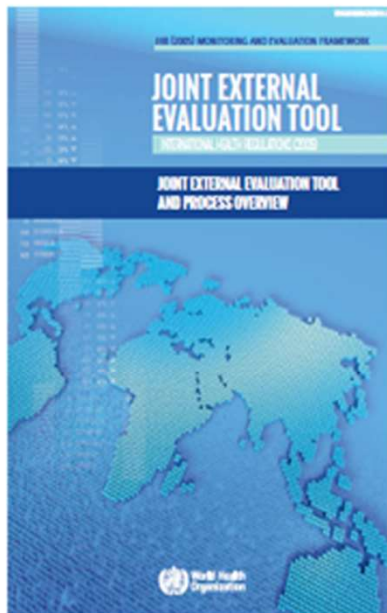
Global instrument for protection against international spread of diseases

Encourages the nations to establish effective surveillance and built capacity at country level

Ensures prompt notification of events that may constitute public health emergency of international concern to WHO within 24 hours

Provide appropriate public health response

REAL TIME SURVEILLANCE - JEE 2016



To establish National Surveillance System with an integrated approach



Use of electronic reporting systems for surveillance



Strengthening & Extension of existing PH labs & integration with surv. programs



Capacity building



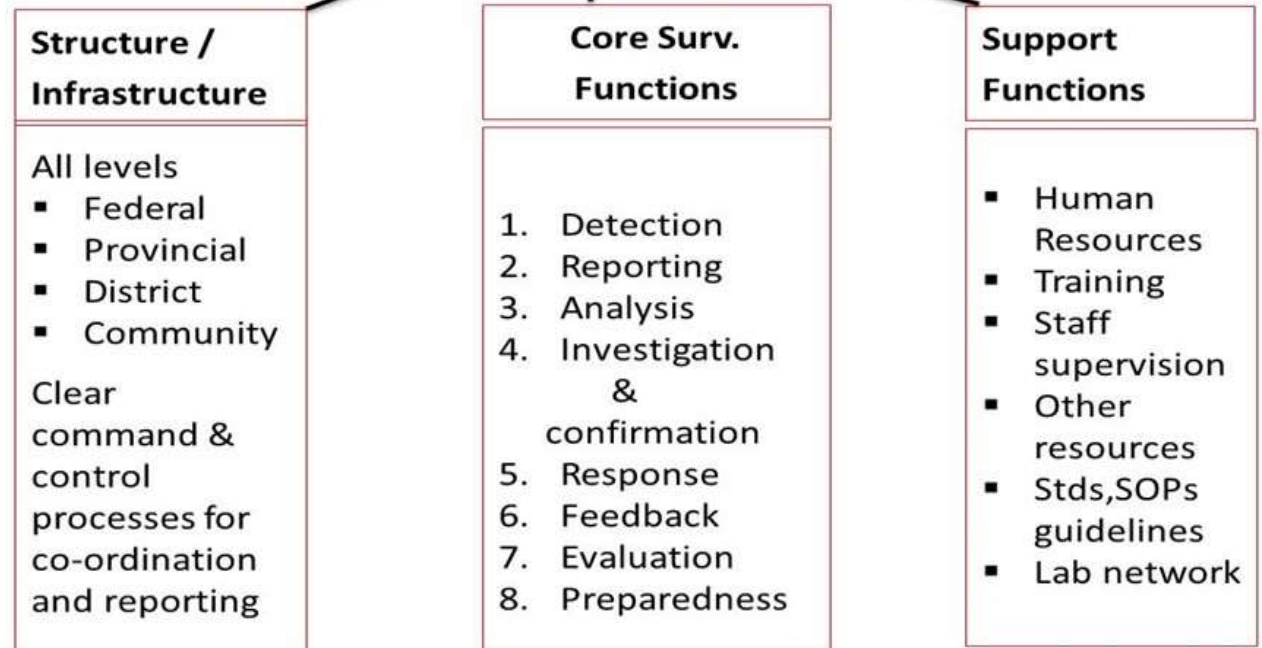
Surveillance reports availability for decision makers



Disease prioritization and Management

Integrated Disease Surveillance (IDSR)

For effective control of communicable diseases, IDSR was initiated in 2016 with the following three pillar approach.



DEDICATED IDSR TEAMS

Federal/NIH

Team Lead
IT team
Data Team
Surveillance/Coordination
Team

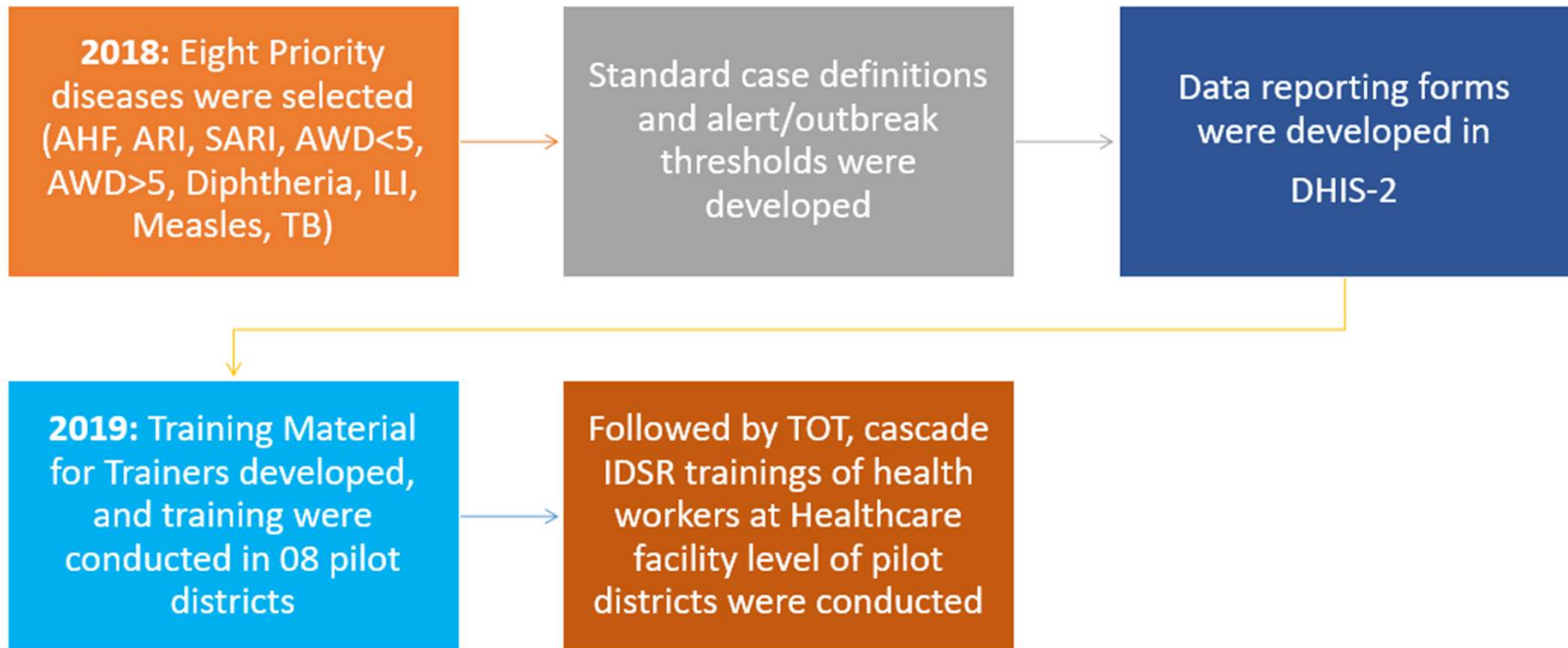
Provinces/
Regions

Provincial Focal Persons
District Focal Persons
Health Care Facilities

IDSR PROGRESS - PAKISTAN



IDSR PROGRESS - PAKISTAN



IDSR PROGRESS - PAKISTAN

IANPHI Peer-to-Peer Review

- **Monitoring and evaluation** of the IDSR implementation through weekly data review meetings/monthly meetings/annual review meetings
- **Expansion and linkage** of provincial public health laboratories, sentinel sites for respiratory diseases
- **Improved Coordination:** IDSR Federal, Provincial and district level focal persons, multi-sector involvement in outbreak response; **One-Health** concept
- **Development and dissemination** of weekly epidemiological bulletin and alert/outbreak analysis with all stakeholders

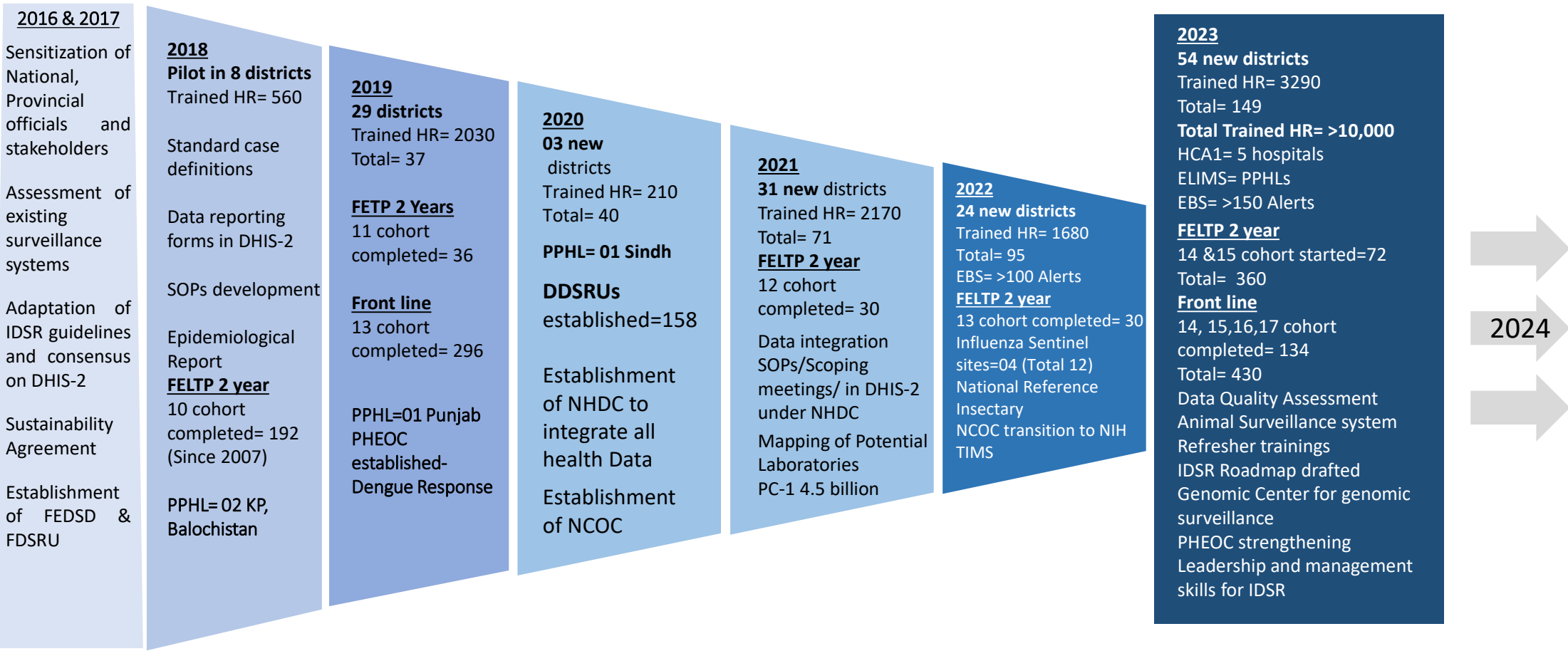
DEVELOPMENTS UNDER IDSR

- IDSR expanded up to 149 districts with 33 priority diseases
- Aggregated data reporting in the DHIS-2, Data server established at NIH
- Training of the >10,000 health care staff on data reporting, analysis, risk assessment and communication, samples collection and testing, Field investigations
- **Partner Support:** UKHSA, WHO, CDC, JSI, USAID, FF and others
- For sustainability PC1 of 4.5 billion approved for ICT, AJK and GB

PARTNER SUPPORT FOR THE IMPLEMENTATION OF IDSR

IDSR implementation support by Partners	No. of Districts	Reporting Sites	KP	Sindh	Balochistan	Punjab	AJK	ICT	GB
UKHSA	79	4403	14	12	13	29	10	1	0
JSI	25	1502	9	16	0	0	0	0	0
WHO	27	1754	10	2	15	0	0	0	0
CDC	10	420	0	0	0	0	0	0	10
JHPIEGO	6	233	0	0	6	0	0	0	0
IDSR PC-1 KP	2	148	2	0	0	0	0	0	0
<i>Total districts trained</i>	<i>149</i>	<i>8460</i>	<i>35</i>	<i>30</i>	<i>34</i>	<i>29</i>	<i>10</i>	<i>1</i>	<i>10</i>
<i>Total Districts</i>	<i>158</i>	<i>10020</i>	<i>36</i>	<i>30</i>	<i>35</i>	<i>36</i>	<i>10</i>	<i>1</i>	<i>10</i>
<i>Pending districts</i>	<i>9</i>	<i>1560</i>	<i>1</i>	<i>0</i>	<i>1</i>	<i>7</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>Implementation (%)</i>	<i>94%</i>	<i>84%</i>	<i>97%</i>	<i>100%</i>	<i>97%</i>	<i>80%</i>	<i>100%</i>	<i>100%</i>	<i>100%</i>

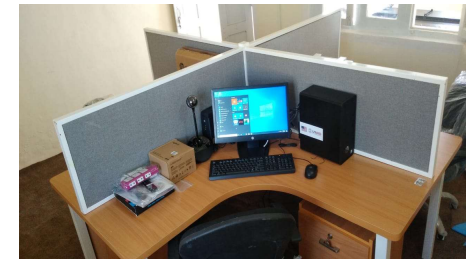
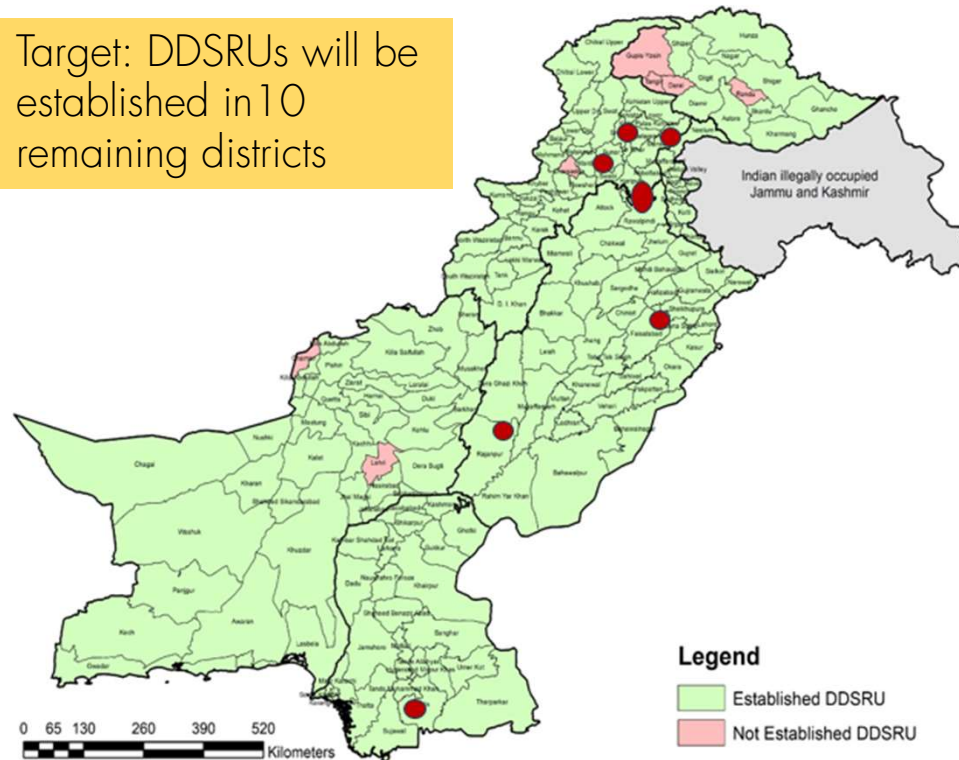
IDSR DEVELOPMENT WITH TIMELINE (INFRASTRUCTURE, CORE & SUPPORT FUNCTIONS)



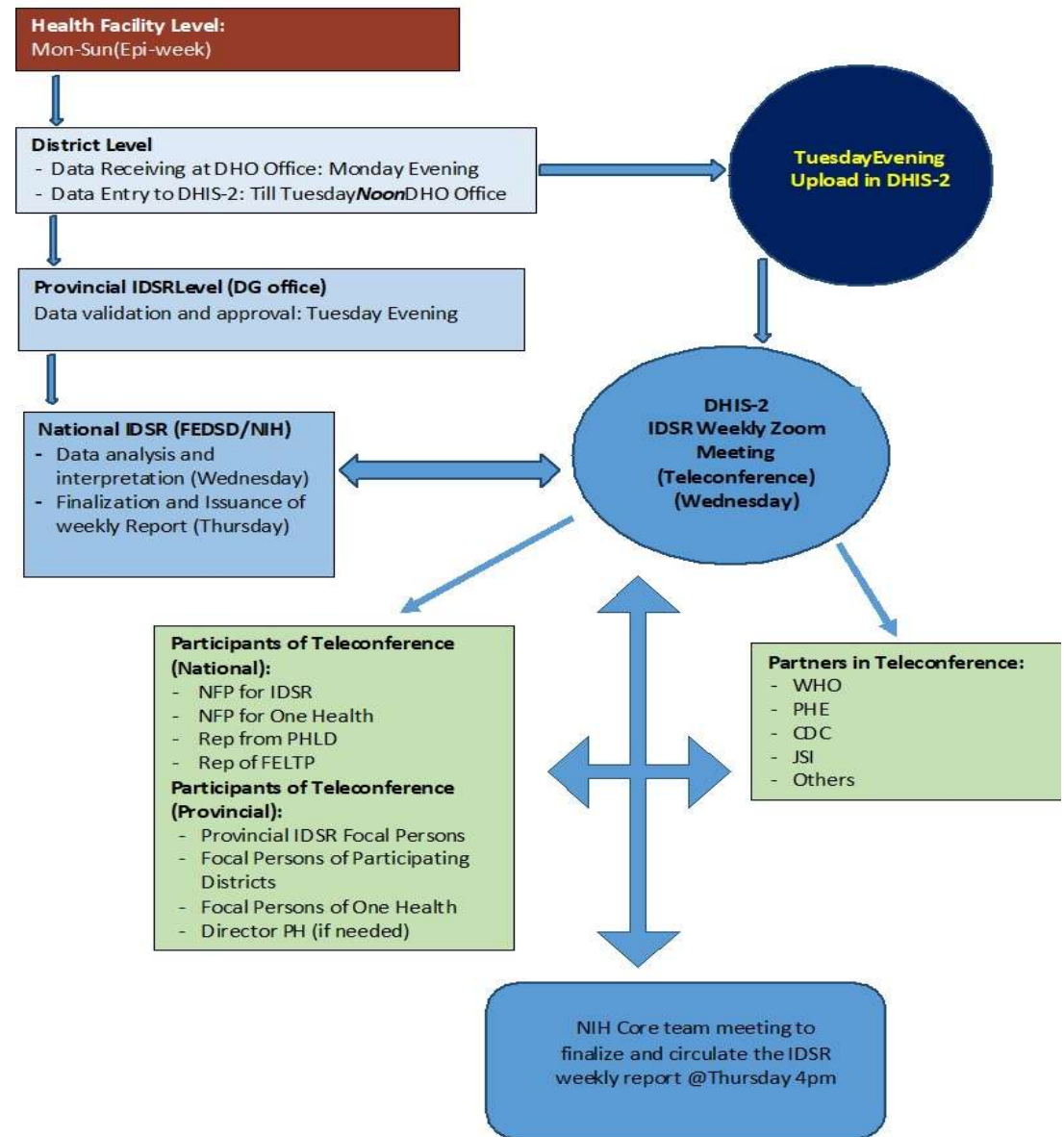
ESTABLISHMENT OF DISTRICT DISEASE SURVEILLANCE AND RESPONSE UNITS (DDSRUS)

Provinces	No of Districts
Punjab	36
Sindh	29
Balochistan	33
KP	36
GB	14
AJK	10
Islamabad	1
<i>Total</i>	<i>159</i>

Target: DDSRUs will be established in 10 remaining districts



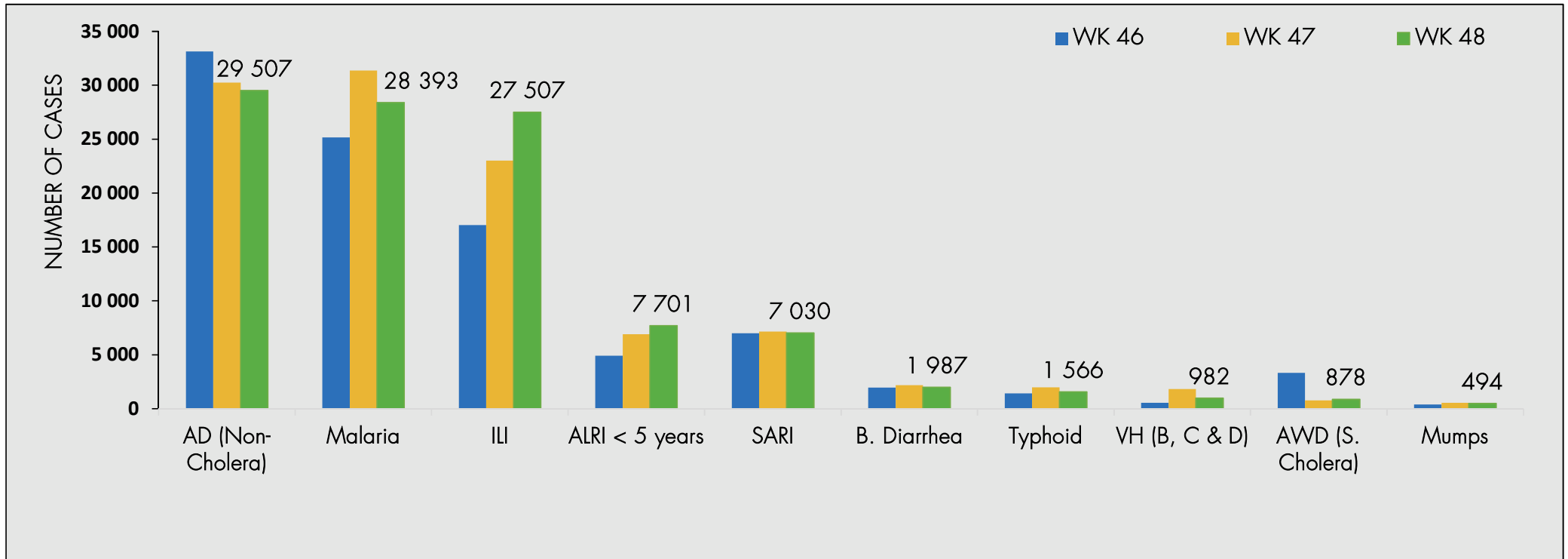
WEEKLY DATA FLOW MECHANISM FOR IDSR (DHIS-2)



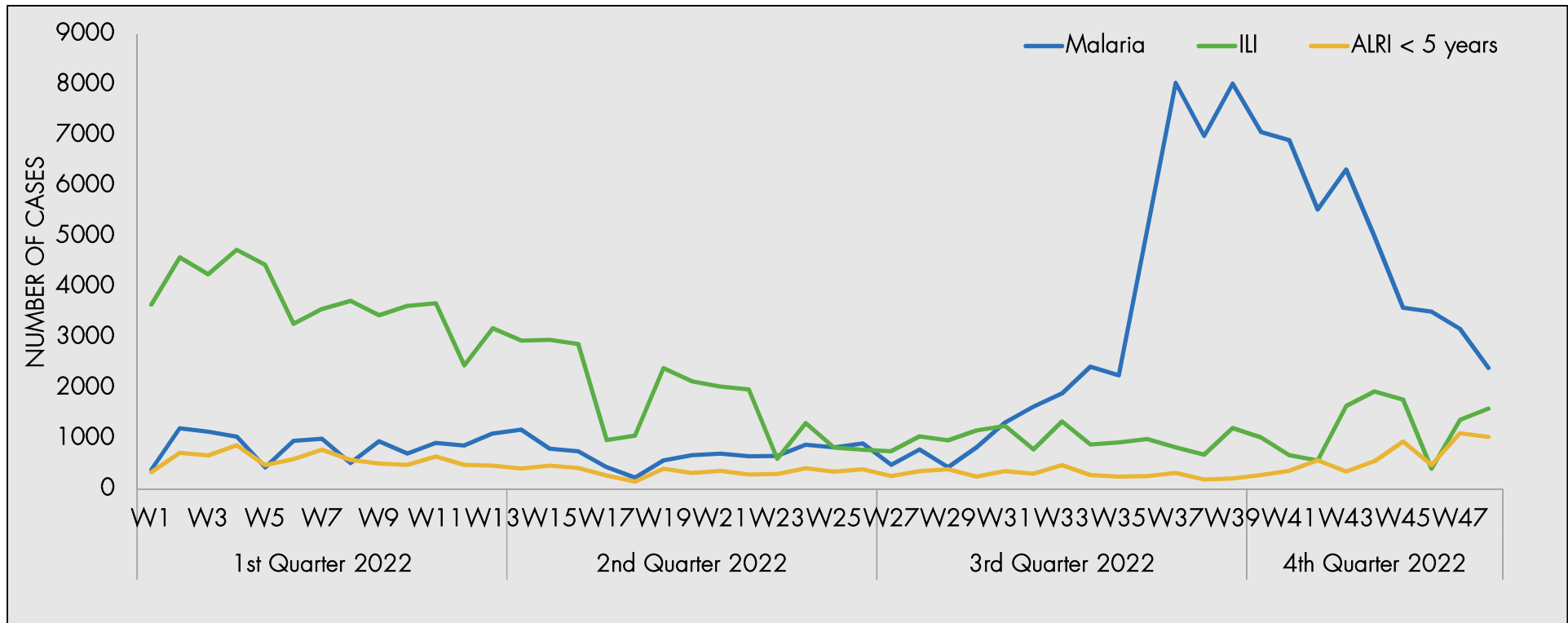
Sr#	Punjab	Partner	Total Sites	Trained Sites	Sindh	Partner	Total Sites	Trained Sites	KP	Partner	Total Sites	Trained Sites	Balochistan	Partner	Total Sites	Trained Sites	AJK	Partner	Total Sites	Trained Sites	GB	Partner	Total Sites	Trained Sites
1	Sahiwal	UKHSA	88	88	Umerkot	WHO	118	30	Abbottabad	WHO	110	110	Gwadar	WHO	24	24	Mirpur	UKHSA	37	37	Hunza	UKHSA, CDC	31	31
2	Okara	UKHSA	109	109	Tharparkar	WHO	100	95	Swat	WHO	77	77	Kech	WHO	78	44	Bhimber	UKHSA	40	40	Nagar	UKHSA, CDC	22	22
3	Gujranwala	UKHSA	104	104	Larkana	SI	67	67	Charsadda	SI	61	61	Killa Abdullah	WHO	50	32	Kotli	UKHSA	60	60	Ganche	CDC	17	17
4	Sialkot	UKHSA	79	79	Kamber Shadadkot	SI	101	101	Lakki Marwat	SI	49	49	Quetta	WHO	77	22	Muzaffarabad	UKHSA	72	72	Skardu	CDC	52	52
5	Layyah	UKHSA	48	48	Hyderabad	UKHSA	63	63	Hangu	SI	22	22	Khuzdar	WHO	136	20	Poonch	UKHSA	39	39	Shiggar	CDC	27	27
6	Toba Tek Singh	UKHSA	70	70	Ghotki	UKHSA	62	62	Haripur	UKHSA	69	69	Lasbella	UKHSA	85	85	Bagh	UKHSA	41	41	Kharmund	CDC	28	28
7	Sheikhupura	UKHSA	83	83	Naushahro Feroze	UKHSA	52	52	Kohat	UKHSA	59	59	Pishin	WHO	118	23	Neelum	UKHSA	24	24	Ghizar	CDC	62	62
8	Nankana Sahib	UKHSA	54	54	Shikarpur	UKHSA	32	32	Malakand	UKHSA	42	42	Sibi	UKHSA	42	42	Hattian/Jhelum	UKHSA	29	29	Gilgit	CDC	48	48
9	Chiniot	UKHSA	43	43	Thatta	UKHSA	50	50	Swabi	UKHSA	60	60	Zhob	UKHSA	37	37	Haveli	UKHSA	43	43	Astore	CDC	54	54
10	Pakpattan	UKHSA	62	62	Karachi-East	UKHSA	14	14	Khyber	UKHSA	40	40	Jaffarabad	UKHSA	48	48	Sudhnuti	UKHSA	27	27	Diamar	CDC	79	79
11	Hafizabad	UKHSA	40	40	Karachi-West	UKHSA	15	15	Mardan	UKHSA	84	84	Naserabad	UKHSA	45	45								
12	Gujrat	UKHSA	91	91	Karachi-Malir	UKHSA	43	43	Mansehra	UKHSA	133	133	Awaran	WHO	23	23								
13	Bhakkar	UKHSA	48	48	Karachi-Kemari	UKHSA	17	17	Peshawar	UKHSA	101	101	Barkhan	UKHSA	19	19								
14	Jhang	UKHSA	70	70	Karachi-Central	UKHSA	12	12	Upper Dir	UKHSA	55	55	Kachhi (Bolan)	WHO	35	35								
15	Kasur	UKHSA	97	97	Karachi-Korangi	UKHSA	18	15	Battagram	UKHSA	43	43	Chagai	UKHSA	35	35								
16	Lahore	UKHSA	74	74	Karachi-South	UKHSA	9	4	Tor Ghar	UKHSA	11	11	Dera Bugti	WHO	45	45								
17	Mandi Bahauddin	UKHSA	59	59	Sujawal	SI	31	31	Kohistan Upper	SI	20	20	Harnai	HPIEGO	18	18								
18	Narowal	UKHSA	59	59	Mirpur Khas	SI	104	104	Karak	SI	36	36	Jhal Magsi	WHO	39	39								
19	Attock	UKHSA	74	74	Badin	SI	144	144	Bannu	SI	92	92	Kalat	HPIEGO	65	65								
20	Chakwal	UKHSA	82	82	Sukkur	SI	64	64	Tank	SI	34	34	Kharan	UKHSA	32	32								
21	Faisalabad	UKHSA	190	190	Dadu	SI	90	90	Bajaur	WHO	44	44	Kohlu	UKHSA	75	75								
22	Jhelum	UKHSA	57	57	Sanghar	SI	101	101	Buner	DSRS, KP	34	34	Killa Saifullah	WHO	55	25								
23	Khushab	UKHSA	54	54	Jacobabad	SI	43	43	D.I.Khan	WHO	89	89	Loralai	UKHSA	33	33								
24	Multan	UKHSA	95	95	Khairpur	SI	168	168	Kolai Palas	SI	10	10	Mastung	HPIEGO	45	45								
25	Mianwali	UKHSA	56	56	Kashmore	SI	59	59	Kurram Lower and Central	WHO	40	40	Musakhel	UKHSA	68	68								
26	Rawalpindi	UKHSA	116	116	S.B.A./Nawabshah	SI	124	124	Lower Chitral	UKHSA	35	35	Nushki	HPIEGO	32	32								
27	Sargodha	UKHSA	154	154	Matiari	SI	42	42	Lower Dir	UKHSA	74	74	Panigur	WHO	38	38								
28	Bahawalnagar	UKHSA	118	118	Tando Allah Yar	SI	54	54	Mohmand	WHO	85	85	Sherani	UKHSA	32	32								
29	Bahawalpur	UKHSA	91	91	T. M. Khan	SI	41	41	North Waziristan	WHO	21	21	Washuk	WHO	25	25								
30	D.G Khan	UKHSA	64	64	Jomshoro	SI	70	70	S. Waziristan	WHO	58	58	Ziarat	HPIEGO	42	42								
31	Lodhran	UKHSA	55	55					Nowshera	WHO	52	52	Sohbatpur	WHO	25	25								
32	Vehari	UKHSA	91	91					Orakzai	WHO	22	22	Duki	HPIEGO	31	31								
33	Khanewal	UKHSA	94	94					Shangla	DSR, KP	36	36	Jsta Muhammad	UKHSA	50	50								
34	Muzaffargarh	UKHSA	91	91					Upper Chitral	UKHSA	35	35	Chaman	WHO	22	22								
35	Rahimyar Khan	UKHSA	126	126					Lower Kohistan	SI	11	11	S. Sikandarabad	UKHSA	50	50								
36	Rajanpur	UKHSA	42	42					Kurram Upper	WHO	42	42												

> 1900 HCFs Reporting from Sindh

MOST FREQUENTLY REPORTED SUSPECTED CASES DURING WEEK 48, PAKISTAN



WEEK-WISE REPORTED SUSPECTED CASES OF AD (NON-CHOLERA), MALARIA & TYPHOID, BALOCHISTAN



IDSR reporting districts

Provinces/Regions	Districts	Total Number of Reporting Sites	Number of Agreed Reporting Sites	Number of Reported Sites for current week	Compliance Rate (%)
Khyber Pakhtunkhwa	<u>Haripur</u>	69	69	66	96%
	<u>Kohat</u>	59	59	51	86%
	<u>Abbottabad</u>	110	110	89	81%
	<u>Charsadda</u>	61	61	58	95%
	<u>Lakki Marwat</u>	49	49	49	100%
	<u>Swat</u>	77	77	68	88%
	<u>Malakand</u>	42	42	32	76%
	<u>Swabi</u>	60	60	60	100%
	<u>Khyber</u>	40	40	25	63%
	<u>Mardan</u>	84	84	66	79%
	<u>Mansehra</u>	133	133	110	83%
	<u>Peshawar</u>	101	101	73	72%
	<u>Upper Dir</u>	55	55	51	93%
	<u>Battagram</u>	43	43	38	88%
	<u>Tor Ghar</u>	11	11	9	82%
<u>Hangu</u>	24	24	17	71%	
Azad Jammu Kashmir	<u>Mirpur</u>	37	37	33	89%
	<u>Bhimber</u>	40	40	9	23%
	<u>Kotli</u>	60	60	55	92%
	<u>Muzaffarabad</u>	72	72	43	60%
	<u>Poonch</u>	39	39	35	90%



Field Epidemiology and Disease Surveillance Division (FEDSD)
National Institute of Health (NIH), Islamabad

Phone: 051- 9255237, Email: idsr-pak@nih.org.pk



Weekly Bulletin: Integrated Disease Surveillance and Response (IDSR)
9th December 2022

Epi Week-48 (28th November – 4th December 2022)

Highlights:

- During week 48, most frequent reported cases were of Acute Diarrhea (Non-Cholera) followed by Malaria, ILI, SARI, ALRI <5 years, SARI, B. Diarrhea, Typhoid, Dengue, and Rabies
- Increase in cases observed for AD, SARI and Dog bite cases whereas cases of Malaria, ILI, ALRI < 5 years and AWD (S. Cholera) showed a downward trend this week
- Rise in cases of AD is noted from KPK and Sindh mainly from flood affected areas however, cases of AWD though reported but decreasing over the time. All are suspected cases and need verification
- AFP cases are reported from KPK (18) and Sindh (02). Field investigation is required to confirm / reject the cases.

Figure 1: Most frequently reported suspected cases during week 48, Pakistan



Table 1: Province/Area wise distribution of most frequently reported cases during week 48, Pakistan

Diseases	AJK	Balochistan	GB	ICT	KP	Punjab	Sindh	Total
AD (Non-Cholera)	262	896	2	225	13,828	3126	11,168	29,507
Malaria	14	2,394	0	0	6,017	146	19,822	28,393
ILI	1241	1589	0	2,325	12,753	2,219	7,380	27,507
ALRI < 5 years	590	1029	15	10	3481	0	2576	7,701
SARI	768	355	5	0	5335	0	567	7,030
B. Diarrhea	23	136	0	6	892	0	930	1,987
Typhoid	27	78	0	1	785	3	672	1,566
VH (B, C & D)	2	15	0	0	195	NR	770	982
AWD (S. Cholera)	4	32	0	0	829	0	13	878
Mumps	45	32	0	17	345	NR	55	494
AVH (A & E)	0	9	0	1	445	0	29	484



National Health Data Centre



IDSR

Integrated Disease Surveillance
and Response System



EBS

Event based Surveillance
System



ELIMS

Electronic Laboratory
Information Management



HCIA

Health Care Associated
Infections



ADSS

Animal Disease Surveillance
System



EHSS

Environment Health
Surveillance System



TIMS

Training Information
Management System



SSSS

Sentinel Site Surveillance
System



NCR

National Cancer Registry

WAYS FORWARD

Activities	Timeline
IDSR 100% coverage in Pakistan (Primary Level)	Nov 2023-March 2024
Expansion of IDSR to Tertiary care level in Sindh, KP and Balochistan (First Phase)	Nov 2023- Nov 2024
Development of monitoring and evaluation plan for IDSR	Nov 2023- Nov 2024
Capacity building (Front line), Punjab, KP and Balochistan	Nov 2023- Nov 2024
Statistical data analysis capacity at district level	Nov 2023 onward
Automated weekly epidemiological report writing at Provincial and district level	Nov 2023 onward
National strategic multi-hazard risk assessment (Last conducted in 2016)	Jan-June 2024
NHDC strengthening	Nov 2023 onward
Integration of vertical programs	Nov 2023 onward
Integration and strengthening of laboratories providing diagnostic services in IDSR implemented districts (Sindh, KP and Balochistan)	Nov 2023 onward

WAYS FORWARD

Activities	Timeline
E- Learning development for IDSR	Nov 2023-March 2024
DDSRUs establishment in the new districts and few old in Balochistan	Nov 2023-March 2024
Establishment of the Division Pubic Health Laboratories (7)	Nov 2023 onward
Strengthening of EBS and field support	Nov 2023 onward
Strengthening and expansion of HCAs surveillance	Nov 2023
Integration of Livestock data with IDSR (Balochistan & Sindh) phase 1, and Environmental health surveillance	Nov 2023- Nov 2024
Roadmaps development for One Health & PHEM	Nov-Dec 2023
Strengthening of Genomic Center, NIH (HR required), Genomic surveillance	Nov 2023 onward
Establishment of RRT program in Pakistan linking with NCOC	Nov 2023 onward
Capacity building of Provinces on PHEM	Nov 2023 onward
Annual Simulation exercise plan for IDSR	Nov 2023 onward

INTERNATIONAL RECOGNITION



CERTIFICATE OF RECOGNITION

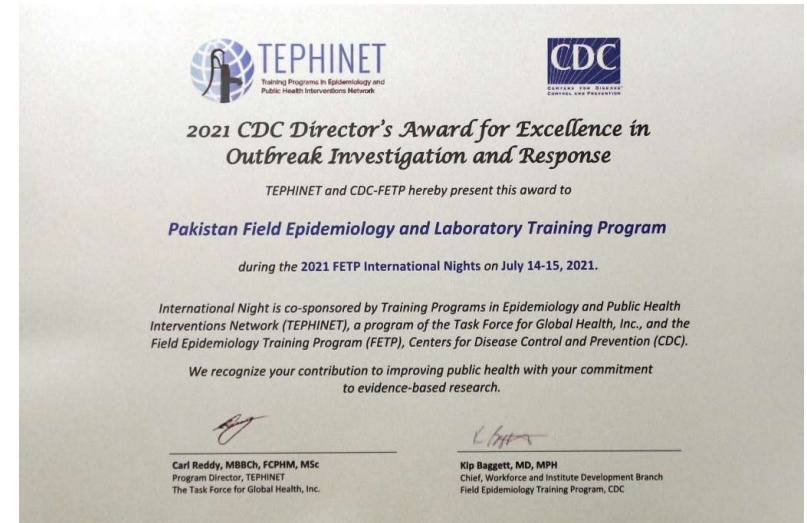
The IANPHI General Assembly recognizes the

National Institute of Health

for its outstanding success implementing
Integrated Disease Surveillance and Response in Pakistan

December 1, 2021

Prof. Duncan Selbie
President of IANPHI



TOGETHER WE SAIL...

Thanks.

IANPHI

ANNUAL MEETING

FEBRUARY 7-8, 2024 | KIGALI, RWANDA

HOSTED BY



Prof. Steven Riley, Director
General of Data, Analytics
and Surveillance, UKHSA,
United Kingdom England

THE UK'S DEVELOPMENT OF A CENTRE FOR PANDEMIC PREPAREDNESS AND THE LINK TO GLOBAL INITIATIVES

IANPHI

ANNUAL MEETING

FEBRUARY 7-8, 2024 | KIGALI, RWANDA

HOSTED BY



PANNEL DISCUSSION

IANPHI

ANNUAL MEETING

FEBRUARY 7-8, 2024 | KIGALI, RWANDA

HOSTED BY



Dr. Johanna Hanefeld, Vice
President, RKI, Germany
& Dr. Natalie Mayet,
Deputy Director, NICD,
South Africa

CLOSING THOUGHTS AND REMARKS

INTERCOLLABORATIVE SURVEILLANCE – WHO

INTENTION & AGENCY

NPHI's co-ordination agency
Legislative mandate

1. Communicable Diseases
2. Non-Communicable Diseases
3. Occupational Health and Safety
4. Cancer Surveillance
5. Injury and Violence Prevention
6. Environmental Health

Collaboration between :

- Individuals
- Community
- HCW – different cadres
- Information technology
- Epidemiologists
- Lab
- Developers
- Data analysts
- Policy & decision makers
- Media
- Public and Private
- NGO



- Continuous training building capacity
- Strengthen and redirect
- Trust
- New collaborations