

## IDSR Analysis Standards for the District Level

### Purposes:

1. Measure and track magnitude of disease burden (cases and deaths) in the district, detect outbreaks
2. Monitor and evaluate surveillance system performance indicators, identify areas needing strengthening, take appropriate action
3. Use data for planning (setting targets, planning interventions, evaluating interventions)
4. Share data with relevant stakeholders (produce feedback reports and summaries)

Measures of Disease Burden	Area	Description	Type of Analysis	Frequency	Data Source	Purpose
	1 Overall priority disease morbidity in all outpatient departments (OPDs) in district	Total number of cases reported (< & ≥ 5 years) for each priority disease (sum of all facility reports, OPD only)	Line graphs & bar charts	Monthly	IDSR district forms 2(a) & 2(b)	Measure magnitude and trend of disease; detect outbreaks; set targets; monitor changes; evaluate interventions
	2 Priority disease morbidity in each OPD in district	Number of OPD cases reported (< & ≥ 5 years) for each priority disease, by facility	Line graphs & bar charts	Monthly	IDSR district form 2(b)	Compare magnitude and trend of disease in OPDs across facilities in district; target interventions
	3 Overall priority disease morbidity and mortality in all in-patient departments (IPDs) in district	Number of cases & deaths reported (< & ≥ 5 years) for each priority disease (sum of all facility reports, IPD only)	Line graphs & bar charts	Monthly	IDSR district forms 2(a) & 2(b)	Measure magnitude of disease and deaths; detect outbreaks; set targets; monitor changes; evaluate interventions
	4 Priority disease morbidity and mortality in each IPD in district	Number of cases & deaths reported (< & ≥ 5 years) for each priority disease, in each facility with an IPD	Line graphs & bar charts	Monthly	IDSR district form 2(b)	Compare magnitude of disease and deaths across facilities in district; target interventions

Measures of IDSR performance (core indicators)	Area	Description	Type of Analysis	Frequency	Data Source	Purpose
	5 Completeness of facilities reporting to the districts	Proportion of expected weekly facility reports received by the district (all facilities)	Bar chart	Weekly and quarterly	IDSR facility form 3(b)	Monitor & evaluate overall district IDSR performance with respect to completeness of weekly reporting; monitor and evaluate changes over time
	6	Proportion of expected weekly facility reports received by the district (by facility)	Bar chart	Monthly	IDSR facility form 3(b)	Identify facilities requiring assistance to improve weekly reporting; monitor and evaluate changes over time
	7	Proportion of expected monthly facility reports received by the district (all facilities)	Bar chart	Monthly and quarterly	IDSR district form 2(b)	Monitor & evaluate overall district IDSR performance with respect to completeness of monthly reporting; monitor and evaluate changes over time
	8	Proportion of expected monthly facility reports received by the district (by facility)	Bar chart	Quarterly	IDSR district form 2(b)	Identify facilities requiring assistance to improve completeness of monthly reporting; monitor and evaluate changes over time
	9 Timeliness of facilities reporting to the district	Proportion of expected weekly facility reports received by the district on time (all facilities)	Bar chart	Weekly and quarterly	IDSR facility form 3(b)	Monitor & evaluate overall district IDSR performance with respect to timeliness of weekly reporting; monitor and evaluate changes over time
	10	Proportion of expected weekly facility reports received by the district on time (by facility)	Bar chart	Monthly	IDSR facility form 3(b)	Identify facilities requiring assistance to improve timeliness of weekly reporting; monitor and evaluate changes over time
	11	Proportion of expected monthly facility reports received by the district on time (all facilities)	Bar chart	Monthly and quarterly	IDSR district form 2(b)	Monitor & evaluate overall district IDSR performance with respect to timeliness of monthly reporting; monitor and evaluate changes over time
	12	Proportion of expected monthly facility reports received by the district on time (by facility)	Bar chart	Quarterly	IDSR district form 2(b)	Identify facilities requiring assistance to improve timeliness of monthly reporting; monitor and evaluate changes over time
	13 Reporting of priority diseases using Case Investigation Forms	Proportion of cases of epidemic diseases reported to the district using Case Investigation Form (AFP, cholera, measles, CSM, NNT, Plague, VHF, Yellow Fever)* *Refer to lab job aids to determine denominators	Bar chart	Quarterly and Annual	CIFs & IDSR district form 2(b); line lists	Measure appropriate reporting for epidemic diseases with data available for further analyses (leading to improved outbreak investigation and response)
	14 Feedback to health facilities on IDSR reports	Proportion of facilities that have received a feedback newsletter from the district in the last quarter	Bar chart	Quarterly	Based on reports from facilities and supervision reports	Monitor & evaluate district capacity to provide appropriate feedback on a quarterly basis
	15 Routine analysis of data in facilities	Proportion of facilities with all three of the following: 1) use of summary data sheet, 2) use of MTUHA book 2, and 3) presence of updated graphs of disease trends for malaria, diarrhoea < 5 years, and pneumonia < 5 years	Bar chart	Quarterly	Based on supervision reports	Determine whether health facilities are regularly analysing data collected; identify facilities needing assistance with data analysis

Outbreak-related indicators	Area	Description	Type of Analysis	Frequency	Data Source	Purpose
	16 Timely notification of outbreaks	Proportion of suspected outbreaks of epidemic-prone diseases that are notified to the district within 24 hours of surpassing the epidemic threshold	Proportion (bar chart over time)	Quarterly	Outbreak reports at district level	Monitor & evaluate whether facilities are monitoring IDSR diseases and taking appropriate actions (notifying the district) in a timely manner
	17 Effective laboratory confirmation process	Proportion of suspected outbreaks of epidemic-prone diseases in which specimen collection and lab confirmation are completed according to guidelines (Receive score of 6/6 on checklist)	Proportion (bar chart over time)	Quarterly or annually, as appropriate	Outbreak reports, laboratory reports, and checklists	Monitor & evaluate whether laboratory network is functioning and has capacity to confirm diagnoses; identify areas for improvement
	18 Appropriate investigation of suspected outbreaks	Proportion of suspected outbreaks of epidemic-prone diseases that are investigated according to guidelines (Receive score of 7/7 on checklist)	Proportion (bar chart over time)	Quarterly or annually, as appropriate	Outbreak reports and checklists	Measure capacity of district to investigate outbreaks; identify areas for improvement
	19 Appropriate response to confirmed outbreaks	Proportion of confirmed outbreaks of epidemic-prone diseases with appropriate response according to guidelines (Receive score of 5/5 on checklist)	Proportion (bar chart over time)	Quarterly or annually, as appropriate	Outbreak reports and checklists	Measure capacity of district to respond to outbreaks; identify areas for improvement
	20 Quality of case management and surveillance activities	Case fatality rate for each epidemic-prone disease (cerebral spinal meningitis, cholera, plague and rabies) and non-epidemic prone disease (pneumonia, malaria, and diarrhoea) reported in a confirmed outbreak	Proportion (bar chart over time)	Quarterly or annually, as appropriate	Outbreak reports; case investigation forms from outbreaks; line lists IDSR form 2(a)	Measure quality of case management; identify areas for improvement
21 Appropriate analysis of data during outbreaks	Proportion of confirmed outbreak reports that include case-based data both recorded and analysed	Proportion (bar chart over time)	Quarterly or annually, as appropriate	Outbreak reports	Monitor & evaluate district ability to collect, analyze and use case-based data for decision-making during outbreaks	

Feedback reports	Area	Description	Type of Analysis	Frequency	Data Source	Purpose
	22 Epidemiological data	Summary (graph and tables) of trend of each priority disease for each facility and summary for entire district (by age group and total)	Line graphs/bar charts	To be sent from district to health facilities quarterly	District IDSR database; based on IDSR district forms 2(b)	Monitor & evaluate magnitude of disease burden in district over time; evaluate changes over time and differences between facilities; detect outbreaks; identify groups/areas at risk; plan and evaluate interventions
	23 Indicators	Results of the performance of each "Measures of IDSR performance" indicator (# 5 - # 15) calculated above at district level	Line graphs, bar charts, tables	Quarterly	District IDSR database; based on IDSR district forms 2(b)	Monitor & evaluate overall district IDSR performance; identify areas for improvement; compare facility performance and target interventions
24 IDSR reports	Quarterly summary report to be sent to the regional level, facilities, and other stakeholders	Line graphs, bar charts, tables	Quarterly	District IDSR database; based on IDSR district forms 2(b) & 3(b)	Communicate district data to next level; provide timely data so region can take appropriate actions and plan effectively; share with stakeholders; share with facilities.	