The African regional office of the World Health Organization (WHO AFRO) convened the fourth annual meeting of the Integrated Disease Surveillance and Response (IDSR) task force in Bamako, Mali on May 28 – 30, 2003. Representatives from WHO, partner agencies, and 13 member states gathered to share the past year’s experiences and progress with IDSR implementation.

One of the key accomplishments this past year was the establishment of national public health laboratory networks in member states. The networks will strengthen the capacity of laboratories at the national, sub-national, and district levels to confirm outbreaks of priority diseases. So far, 14 countries in the western block of Africa have established networks, while three countries have developed networking plans. WHO AFRO finalized the selection and accreditation of reference laboratories for sub-regional and regional networks at the end of 2003. Such regional laboratories will provide technical reference and training services to the national public health laboratories.

WHO AFRO noted continued progress of the member states in implementing IDSR (see table). Since the IDSR strategy was adopted in 1998, 40 of the 46 member states have initiated IDSR implementation by conducting sensitization activities and national assessments of surveillance and response systems. In some countries that implemented IDSR early, WHO AFRO observed a positive impact of the early detection of epidemics and of the sharing of information.

During the next year, WHO AFRO will accelerate IDSR implementation in the member states using IDSR core indicators to measure results. 

Contributing editor:
Wondi Alemu, MD, MPH

### Progress with IDSR implementation

<table>
<thead>
<tr>
<th>IDSR Activities</th>
<th>Countries No. (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sensitized MOH officials and stakeholders on IDSR</td>
<td>22 (48) 35 (76) 36 (78)</td>
</tr>
<tr>
<td>Assessed the national surveillance and response system, including laboratory</td>
<td>22 (48) 35 (76) 36 (78)</td>
</tr>
<tr>
<td>Developed an IDSR plan of action</td>
<td>13 (28) 31 (67) 32 (70)</td>
</tr>
<tr>
<td>Adapted the generic IDSR technical guidelines*</td>
<td>1 (2) 26 (57) 35 (76)</td>
</tr>
<tr>
<td>Established a national IDSR committee</td>
<td>6 (13) 6 (13) 21 (46)</td>
</tr>
<tr>
<td>Adapted generic IDSR training materials*</td>
<td>- 1 (2) 20 (43)</td>
</tr>
</tbody>
</table>

*Materials were developed by WHO AFRO and CDC.
Documentation of IDSR Implementation in the African and Eastern Mediterranean Regions

In 2002, the World Health Organization (WHO) headquarters and the WHO African and Eastern Mediterranean regional offices initiated an effort to document IDSR implementation in six selected countries (see table). WHO, the Centers for Disease Control and Prevention (CDC), and the Support for Analysis and Research in Africa (SARA) project developed a protocol to document experiences with implementation of IDSR in the African and Eastern Mediterranean regions. From November to December 2002, teams from WHO, CDC, and SARA visited six selected countries in the African and Eastern Mediterranean regions. They conducted focus group discussions, key informant interviews, and document reviews at the national, regional and district levels. Progress with IDSR implementation in the countries was observed in several areas:

**IDSR activities**
- All six countries conducted sensitization activities and assessments of national surveillance and response systems, and adapted the IDSR technical guidelines and training materials.

**Reporting surveillance data**
- The timeliness and completeness of reporting surveillance data improved in all six countries. In Uganda, the completeness of reporting improved from 2% in 1998 to 65% in 2002. Reports of suspected cases of yellow fever in Ghana increased by eight-fold in the second half of 2002, following IDSR sensitization of clinicians.

**Action thresholds**
- The use of action thresholds to trigger early detection and response was observed during recent outbreaks of meningitis in Burkina Faso, Ethiopia and Ghana; Ebola in Uganda; and relapsing fever, suspected viral hemorrhagic fever, and Buruli ulcer in Sudan.

**Laboratory confirmation**
- Laboratories are becoming increasingly involved in outbreak investigations, resulting in early detection and response to outbreaks. In Uganda, 80% of outbreaks in 2001 and 2002 were laboratory confirmed. In the Upper West region of Ghana, the timeliness of specimen collection for acute flaccid paralysis (AFP) surveillance improved from 68% in 2000 to 100% in 2002.

**Integration**
- In some countries, disease control programs for polio/AFP, malaria, and tuberculosis share data, resources, transportation, and communication facilities. In Southern Sudan, training of polio/AFP field staff on surveillance and response has contributed to timely detection and investigation of outbreaks of other communicable diseases. In Ethiopia, the AFP/Expanded Program on Immunization (EPI) integrated IDSR into their bulletin.

This documentation of IDSR implementation was sponsored by the United States Agency for International Development and the United Nations Fund for International Partnerships, a consortium of the Rockefeller, Gates, and United Nations Foundations.

For more information on the findings of the documentation exercise see:


**Contributing Editor:**
Stella Chungong, MD, MPH

Continued page 3, Documentation
**Updates**

**District Analysis Book**
WHO and CDC developed a District Analysis Book for plotting line graphs of selected priority diseases and disease conditions. The proportion of health facilities and districts with current trend analysis based on these line graphs will be measured as one of the IDSR Core Indicators. The District Analysis Book has been translated to French.

**Achievement:**
- The District Analysis Book was pretested in Mali in March 2004.

**Next steps:**
- Revision of District Analysis Book and translation to Portuguese.

**IDSR Core Indicators**
The joint WHO and CDC working group has developed guidelines and tools for using the IDSR Core Indicators in the African region. These guidelines and tools are intended for national programs to use to measure the progress with IDSR implementation in their country.

**Achievement:**
- A technical meeting on the implementation of IDSR Core Indicators in the African region was convened in March 2004, in Atlanta. The objectives of the meeting were to present country experiences with the indicators and to identify ways to improve implementation.

**Next steps:**
- Finalize the indicator guidelines and tools with the findings of the IDSR Indicator Meeting.
- Share country reports on IDSR Core Indicators at the IDSR Taskforce Meeting in June 2004, in Zimbabwe.

**Job Aids for Laboratory Confirmation**
The Tanzania MOH, the National Institutes for Medical Research (NIMR), CDC, and Partners for Health Reformplus (PHRplus) are developing job aids for laboratory confirmation of eight priority diseases. These job aids are based on national protocols developed by the Tanzania MOH, NIMR, WHO AFRO, and CDC. The job aids are intended for health facilities, districts and referral laboratories to use when processing specimens during an outbreak.

**Achievements:**
- The job aids were introduced as part of training for outbreak management in selected Tanzania districts in February 2004.

**Next steps:**
- Pilot test the job aids in four districts in Tanzania in 2004.

---

**Recommendations from documentation team**

**To the Ministries of Health**
- Strengthen links between central, regional, and district laboratories through laboratory networking, regular on-site formative supervision, quality control, and bio-safety improvement.
- Promote the development of integrated plans of action at the country level to facilitate synergy and coordination of IDSR activity implementation.
- Involve vertical programs throughout IDSR implementation.
- Set targets and monitor national IDSR core indicators.
- Ensure regular and frequent follow-up of the IDSR implementation process.
- Harmonize surveillance data collection tools.
- Distribute data collection tools to peripheral levels.
- Produce monthly and quarterly bulletins.

**To health partners**
- Provide the national counterparts with technical, logistic, and financial support to speed-up IDSR implementation.
- Monitor, review, and evaluate implementation status, document experiences and lessons, and use the outputs to address gaps in resources and process.
Laboratory strengthening is a priority of the Integrated Disease Surveillance and Response (IDSR) strategy of the African regional office of the World Health Organization (WHO AFRO). In the past year, national laboratories from 29 African countries participated in the External Quality Assessment (EQA) programme, which was started by the National Health Laboratory Services (NHLS) of South Africa in 2002. The EQA programme helps laboratories assess their capabilities and guides WHO AFRO in developing activities targeted to address the laboratories’ needs. Programme results from the first year showed good laboratory capacities in pathogen identification, but indicated gaps in skills in antibiotic susceptibility testing (AST).

In September 2003, WHO AFRO organized training on microbiology and AST in Johannesburg, South Africa. The NHLS, WHO Collaborative Centre, and the WHO Department of Communicable Disease Surveillance and Response (CSR) in Lyon, France collaborated to train laboratory technicians, microbiologists, physicians, and high level personnel from approximately 30 English, French, and Portuguese speaking-countries. The national bacteriology laboratories of these countries participate in the EQA programme.

Main aspects of the training were:

**Theoretical component**
- Roles and responsibilities of public health laboratories
- Norms and standards for AST
- Quality control/quality assurance
- Example of AST techniques standardization used in Algeria
- Epidemiological characteristics of selected agents

**Practical component**
- Identification and isolation of pathogens
- Standardized inoculation of AST media
- Technical constraints and problems
- Quality control procedures; AST validation

The Centers for Disease Control and Prevention provides technical assistance for IDSR laboratory strengthening activities.

**Contributing editor:**
Antoine Pierson, MD
WHO Department of Communicable Disease Surveillance and Response, Lyon, France

---

**Achievements**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>November 10 - 14, 2003</td>
<td>Pre-test of Job Aids for Laboratory Confirmation by district-level and regional health workers, Tanzania</td>
</tr>
<tr>
<td>December 3 - 5, 2003</td>
<td>Review Meeting of the UNF Project on Strengthening Surveillance and Control of Vaccine Preventable and Epidemic Prone Diseases, Luxor, Egypt</td>
</tr>
<tr>
<td>December 3 - 5, 2003</td>
<td>Workshop on Advocacy for National Public Health Laboratory developed essential elements of national strategy for advocating for national public health laboratory capacity, Lyons, France</td>
</tr>
<tr>
<td>January 9 - 19, 2004</td>
<td>Development of Bacterial Meningitis Surveillance Guidelines for the WHO EMRO Region, Cairo, Egypt</td>
</tr>
<tr>
<td>January 19 - 22, 2004</td>
<td>Bacterial Meningitis Surveillance Workshop, Cairo, Egypt</td>
</tr>
<tr>
<td>February 9 - 10, 2004</td>
<td>Consultative meeting on External Quality Assessment programme in Africa reviewed progress and established a regional advisory group, Johannesburg, South Africa</td>
</tr>
<tr>
<td>March 15 - 17, 2004</td>
<td>Technical meeting on the implementation of core indicators for IDSR in the Africa region, Atlanta, Georgia, USA</td>
</tr>
</tbody>
</table>

---

**Websites**

- **WHO AFRO**: [www.afro.who.int](http://www.afro.who.int/)
- **WHO HQ**: [www.who.int](http://www.who.int)
- **UN Foundation**: [www.unfoundation.org/](http://www.unfoundation.org/)
- **WHO Lyon**: [www.who.int/emc/lyon](http://www.who.int/emc/lyon)