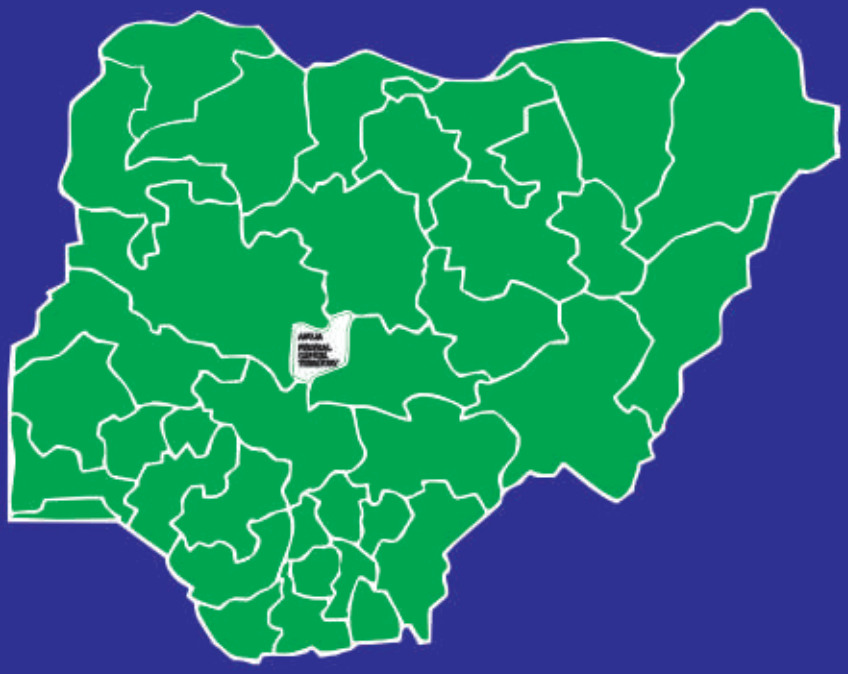
THE NIGERIAN ACADEMY OF SCIENCE

INTEGRATED DISEASE SURVEILLANCE AND RESPONSE (IDSR)

STAKEHOLDERS' AWARENESS CREATION WORKSHOP



WORKSHOP SUMMARY

THE NIGERIAN ACADEMY OF SCIENCE

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STAKEHOLDERS' AWARENESS CREATION WORKSHOP

WORKSHOP SUMMARY

Editors:

■ Oyewale Tomori, FAS ■ M. Oladoyin Odubanjo ■ Scholastica M. Lan ■ Anjola O. Olanipekun

THE NIGERIAN ACADEMY OF SCIENCE

Academy House
8A, Ransome Kuti Road,
University of Lagos,
Lagos,
Nigeria.
Tel: (+234) 1-8508381
Website: www.nas.org.ng
Email: admin@nas.org.ng

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Preface

This document is a summary of the Integrated Disease Surveillance and Response (IDSR) Stakeholders' Awareness Creation Workshop which took place on Tuesday the 9th of October 2012 in Abuja, Nigeria. This workshop was organized by the Nigerian Academy of Science (NAS) in collaboration with the Federal Ministry of Health (FMOH), the Federal Ministry of Agriculture and Rural Development (FMARD), and the National Veterinary Research Institute (NVRI).

Acknowledgement

The Nigerian Academy of Science (NAS) acknowledges the contributions of the individuals whose support made this workshop possible and enhanced the quality of this report.

We are grateful to the workshop participants and speakers for honouring the Academy's invitation and their contributions to the meeting's discussions.

We would like to appreciate Professor Oyewale Tomori FAS, the Project Adviser for his guidance and support throughout the course of this endeavour.

We would also like to thank the following for their review of this report:

- Professor Olusoga Sofola FAS- Professor of Physiology, College of Medicine University of Lagos
- Dr. Sani Ahmed- Executive Director, NVRI
- Mrs. Elsie Ilori- Assistant Director, IDSR Data Management, FMOH
- Mr. Ipoade Omilaju- Director, Capacity Building / Programme Manager (Health), Action Aid Nigeria
- Dr. Yusuf Quudus- Director of Public Health, Ogun State Ministry of Health
- Dr. Peju Esimai- Consultant Public Health Physician, Department of Comminuty Medicine, Obafemi Awolowo University

Although the reviewers provided constructive comments and suggestions, they were not asked to endorse the final draft of this report.

Financial support for this project was provided through grant BEP-CRDF-22059, from the Biosecurity Engagement Program of the U.S. Department of State.

Opening Address

On behalf of the Honourable Minister of Health, I welcome you all to this Stakeholders' Awareness Creation Workshop on Integrated Disease Surveillance and Response (IDSR), organized by the Nigerian Academy of Science (NAS) in collaboration with the Federal Ministry of Health.

Nigeria and other African countries adopted the IDSR strategy in September 1998 at the 48th World Health Organization African Regional Committee meeting in Harare, Zimbabwe, through a resolution (AFRO/RC48/R2). In Nigeria, implementation of the strategy commenced in 2003, the strategy was adopted by the National Council on Health in 2005, and approved by the Federal Executive Council in 2006.

The IDSR tool is a comprehensive strategy for strengthening disease surveillance and response to epidemics at all levels (i.e. community, heath facility, local government area, state, and national) through rational use of resources. Since the introduction of the IDSR strategy, disease reporting and response to epidemics have relatively improved, but there is still a lot to be done.

At a two-day bilingual workshop on IDSR for stakeholders in the West African region organized by NAS in August 2010, one of the recommendations made was the need to raise awareness of policymakers at the highest level so as to obtain financial and political commitment towards the implementation of IDSR. It is on this note that we are here today and I believe that before the end of the day we would have all been better educated on the importance of the IDSR tool as an effective disease control strategy.

I must commend the Nigerian Academy of Science for this initiative. This is the first time that the Commissioners of Health and Directors of Public Health are gathering to discuss a singular pertinent national health issue. I will recommend to the Honourable Minister that the Ministry should regularly host such a meeting.

Distinguished ladies and gentlemen, once again, I welcome you on behalf of the Honorable Minster of Health, Professor Onyebuchi Chukwu, and wish you a successful deliberation.

Thank you and God bless.

Dr. Mansur Kabir,
Director,
Department of Public Health,
Federal Ministry of Health.

Summary

This document is a summary of the discussions at the IDSR Stakeholders' Awareness Creation Workshop which took place in the Conference Hall at Reiz Continental Hotel, Abuja. This workshop was a follow-up to the IDSR workshop convened by the Academy in 2010 tagged *IDSR in West Africa –Bridging the Gaps.*

Given its mandate to bring problems of significance to the attention of relevant stakeholders, NAS, in collaboration with the FMOH, West African Health Organization (WAHO), and the World Health Organization (WHO), convened a workshop for stakeholders across West Africa on the 3rd and 4th of August 2010. In attendance were 139 delegates including representatives of Ministries of Health and Agriculture, Medical and Veterinary practitioners, Non-Governmental Organizations, researchers, and the media. The workshop created a forum for the exchange of information on the state of surveillance activities in the region, as well as identified challenges preventing effective IDSR implementation. Challenges identified as inimical to the successful implementation of IDSR during the 2010 workshop included a **low level of political commitment to IDSR, unclear IDSR implementation frameworks, lack of adequate surveillance infrastructure, as well as insufficient skilled manpower.** The participants agreed that for IDSR to work in the region, there must be proper monitoring and evaluation, manpower capacity building, increased budgetary allocation for surveillance activities, and awareness creation [1].

To address this need for political support for IDSR, the Academy convened a one-day Stakeholders' Awareness Creation Workshop for Commissioners of Health and Directors of Public Health/Disease Control from the 36 states and the Federal Capital Territory (FCT) of Nigeria. These stakeholders were targeted because Commissioners of Health are responsible for determining the health agenda and implementing programmes according to identified government priorities, while the Directors of Public Health/Disease Control are the technocrats responsible for disease surveillance in the states.

The workshop was declared open by the Honourable Minister of Health, Professor Onyebuchi Chukwu represented by Dr. Mansur Kabir of the Federal Ministry of Health (FMOH). Dr Kabir commended the organization of the workshop by the Academy, saying it was the first time the Commissioners of Health and Directors of Public Health were meeting to discuss a singular pertinent health issue. Presentations were made by representatives of the FMOH, FMARD, NVRI and the National Primary Health Care Development Agency (NPHCDA).

Participants' recommendations for ensuring effective IDSR implementation in Nigeria include; the formulation of state-specific IDSR implementation plan, enhancement of diagnostic capabilities, and increased community participation in disease surveillance.

This report underlines the presentations and discussions at this meeting and is intended for all stakeholders in the implementation of IDSR in Nigeria.

[1] The Nigerian Academy of Science, 2010. Integrated Disease Surveillance and Response (IDSR)-Bridging the Gaps. Workshop Summary.

Table of Contents

Background and overview of Integrated Disease Surveillance and Response (IDSR) in Nigeria

Disease surveillance is one of the key components of public health. It involves the collection, analysis, and interpretation of data on diseases, which in turn informs the planning and implementation of health system interventions and policies. Without effective disease surveillance, it is difficult to generate health information that can be used to formulate evidence-based health policies which will improve the quality of life of any community. Data obtained through disease surveillance also facilitates preparation and response to disease outbreaks.

Over the years, several advancements have been made to improve the capacity of countries to identify, report, prepare, and respond to incidences of disease outbreaks. However, in some developing nations including Nigeria, effective disease surveillance still poses a challenge, and unfortunately, this inability to provide functional surveillance systems is exacerbated by high incidence rates of infectious diseases.

A national disease surveillance system was first introduced in Nigeria in 1988 following an outbreak of yellow fever which was attributed to ineffective surveillance systems in most states of the country. This system, termed the Disease Surveillance and Notification System (DSN), was inundated with problems including; the inability to generate information for prompt response, inadequate laboratory facilities for diagnosis, and the existence of multiple vertical surveillance programs which led to misuse of already limited resources. These problems were not unique to Nigeria but were replicated in many other African countries. Following a string of preventable outbreaks of infectious diseases in the 1990s, the World Health Organization Regional Office for Africa (WHO AFRO) proposed the adoption of a new strategy for disease surveillance by its member States [2]. This strategy, dubbed Integrated Disease Surveillance and Response (IDSR), was designed to provide a framework for a multi-tiered surveillance system with laid down activities at each level for the detection, reporting, analysis, preparedness, and response to disease outbreaks. Its major objective was to strengthen the capacity of countries to carry out effective disease surveillance while emphasizing the need for a single integrated system which maximizes human and material resources. Consequently, the IDSR tool was adopted by 44 of the 46 African countries. In Nigeria, the implementation process began in 2003.

Before IDSR was rolled out in Nigeria, the existing surveillance system was assessed to provide baseline information on surveillance activities in the country. This analysis identified gaps in response to the incidences of priority diseases, laboratory facilities, funding, and data management [3]. In formulating the IDSR policy for Nigeria, measures were put in place to rectify these problems so that IDSR implementation would avoid these pitfalls. However, nine years after IDSR was introduced in Nigeria, many of the problems which the adoption of IDSR was supposed to address are still under contention.

[2] WHO (1999) Integrated Disease Surveillance strategy, a regional strategy for communicable diseases 1999-2003. WHO-AFRO. Harare (AFR/RC48/8)

[3] Federal Ministry of Health, Nigeria (2005). National policy on Integrated Disease Surveillance and Response. FMOH Abuja.

In 2009, the Epidemiology Unit of the FMOH carried out a National IDSR Implementation Assessment. The objectives of this exercise were:

- To determine the extent to which national IDSR guidelines are being implemented in the field
- To identify opportunities and gaps in performing the core and support functions of IDSR
- To assess the resources available for IDSR implementation in Nigeria
- To determine country needs as regards strengthening IDSR
- To use findings as a guide to the development of an action plan for strengthening IDSR

IDSR core indicators in 12 states (2 from each geopolitical zone) were analyzed and the challenges to successful IDSR implementation identified include; deficiency in data collection tools, absence of IDSR trained manpower, improper data management, lack of functional Emergency Preparedness and Response (EPR) Committees, inadequate funds for response to disease outbreaks, and poor laboratory diagnostic capacity [4].

[4] Epidemiology Division, Federal Ministry of Health. Draft Report on the Assessment of the Integrated Disease Surveillance and Response (IDSR) implementation in Nigeria, July 2009. Federal Ministry of Health, 2009. p. 18-22.

Strategies for promoting effective IDSR implementation in Nigeria

ACTUALIZATION OF THE "ONE HEALTH" INITIATIVE IN NIGERIA

"Between animal and human medicine there is no dividing line-nor should there be. The object is different but the experience obtained constitutes the basis of all medicine."- Rulph Virchow, the Father of Comparative Pathology.

The indelible link between animal and human health has been recognized since the advent of modern medicine. At various times in history, the need for collaboration between human and animal health; which practitioners have since termed "One Health", has been deemed necessary. Despite this very important relationship, a great divide existed between stakeholders in these two fields. In recent years, with rising concern about zoonotic diseases (Figure 1) and increasing interaction between human and animal populations, the need for a collaborative effort between animal and human health practitioners has gained momentum.

To help bridge this gap and facilitate cooperation from all concerned parties for the benefit of man and animals, the One Health Initiative was revived. One Health involves the cooperation of stakeholders in human and animal health in education, communication, surveillance, research, diagnosis, and advocacy [5]. In Nigeria, zoonotic infections such as rabies, lassa fever, and yellow fever among others, still pose a threat to the human population [6]. In spite of this, there is limited interdisciplinary interaction between the veterinary and human arms of medicine. Presently human disease surveillance is regulated by the Federal Ministry of Health while animal disease surveillance is regulated by the Federal Ministry of Agriculture with limited interfacing between the two arms. It is essential that advocacy for the One Health Initiative be intensified in the country as most health professionals seem to be unaware of the need to subscribe to this initiative. Stakeholders at the state level, in both animal and human health, must work in tandem to consolidate their efforts in the prevention and control of zoonotic diseases of epidemiological concern.

When human and animal health practitioners are unaware of the each other's activities, efforts in disease surveillance may prove to be futile. It is counter-productive to eradicate human cases of a disease without taking steps to mitigate the spread of the same diseases in the animal population. This is clearly illustrated by the recent outbreak of rabies in Cross Rivers State where lack of collaboration between human and animal health practitioners resulted in an outbreak of rabies in the human population leading to a high number of fatalities [7].

Sharing of information between the veterinary and human surveillance systems is essential; stakeholders at all levels must create a forum through which ideas and strategies for the prevention and control of priority zoonotic infections can be exchanged.

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[5] The American Veterinary Medical Association. (2008). One Health: A New Professional Imperative.

[6] Yakubu, Y., Junaidu, A.U., Magaji, A.A., Salihu, M.D., Mahmuda, A. and Shehu, S. (2011). One Health - The Fate of Public Health in Nigeria. *Asian Journal of Medical Sciences.* **3**(1): 47-49.

[7] World Organization for Animal Health -World Animal Health Information System. October 2012. Immediate notification report; REF OIE 12364.

Figure 1: Global trend of emerging and reemerging zoonoses (Kahn, 2009)

COMMITMENT OF STATE STAKEHOLDERS TO THE IDSR TOOL

State stakeholders have a large role to play in the success of IDSR in Nigeria. The current health care system in Nigeria is three-tiered, with the state level being uniquely positioned as an intermediary between the federal and local government levels. Ideally, the state should coordinate and supervise the surveillance activities of all units under it including local governments and health facilities. States should also provide the policy makers at the federal level with information on all state-related surveillance activities. This information can then be used to inform health system policies. This particular niche occupied by the stakeholders at the state level puts them in the position to propel the success of the IDSR strategy. If states effectively monitor the activities of all surveillance branches in the region, making sure that every facet is functioning as effectively as possible, and holding all relevant stakeholders accountable for their roles in the IDSR policy, successful IDSR implementation at the state level will be achieved. Furthermore, if state stakeholders provide accurate surveillance information promptly and regularly to the federal level, it would in turn also be able to carry out its functions more effectively.

Highlighted roles of the stakeholders at the state level for effective IDSR implementation include the following:

1. Creation of state-specific frameworks for IDSR implementation.
IDSR is a strategy for effective disease surveillance; it is not a programme. It seeks to integrate surveillance data on all priority diseases so that there is a proper flow of information throughout the health care delivery system. Given that the health needs of states are diverse with resources and priority diseases varying from one geographical location to the next, it is necessary for each state to adapt the technical guidelines for IDSR implementation to suit its peculiarities. States need to identify the activities that must be carried out to ensure effective IDSR implementation and specify the roles and responsibilities of stakeholders at all levels of the state's health system. An IDSR budget for each state should be developed and this can be used to get improved funding for IDSR activities from the federal government. It is not enough to say that more financial commitment to IDSR is needed; stakeholders at the state level must be able to show the areas to which this funding will be directed.

2. Building-up adequate diagnostic capacity
The absence of laboratory facilities is a recurring issue in the discourse on disease surveillance in Nigeria. According to the national IDSR policy, each state Ministry of Health must "establish a public health laboratory to support surveillance activities". Despite this mandate, only very few states have suitable laboratory facilities. Most states send samples for diagnosis across the country and results maybe delayed, sometimes for as long as a year, by which time the disease epidemic would have run its course with high morbidity and mortality.

It is insufficient just to have buildings in place for laboratory purposes, these laboratories have to be furnished with necessary equipment to carry out diagnostic function. The assessment of IDSR implementation in Nigeria conducted in 2009 revealed an absence of critical laboratory equipment with some laboratories not even having the IDSR standard operating procedures for surveillance activities[8].

Every activity in the surveillance chain only serves as follow-up to the first and most critical step; the identification of cases of disease outbreak. For proper identification of a particular disease, there must be adequately trained laboratory personnel and appropriate laboratory facilities. Therefore, it is very difficult, or almost impossible, to conduct any form of surveillance without the capacity to diagnose priority diseases. Consequently, there is an urgent need for states to build up their laboratory capacity for disease surveillance. Lack of funds should not be a deterrent to this; in situations where funds are lacking to procure the most up-to-date diagnostic equipment, older but still effective techniques can be employed, provided the laboratory meets sufficient safety conditions.

3. Management of surveillance data
For IDSR to thrive in Nigeria, a functional reporting system is required. In the past, dissemination of surveillance data has been impeded by poor reporting habits of stakeholders at all levels, inadequate feedback, and nonexistent funding. Sufficient funding of the surveillance

[8] Ojo, O. Overview of IDSR implementation in Nigeria. Paper presented at the Nigerian Academy of Science IDSR awareness creation workshop, October 9th 2012, Abuja Nigeria.

data management system is crucial to sustaining proper information flow through all tiers of the IDSR structure. Secondary to funding, proper training and supervision of data managers is also required. State Commissioners of Health should ensure that surveillance data is collected regularly and properly. This will guarantee accountability among stakeholders at the local government and health facilities levels.

COMMUNITY PARTICIPATION IN DISEASE SURVIELLANCE

Community participation is defined as the process by which individuals and families assume responsibility for their own health and welfare as well as for that of the community. The need for the community's participation in all issues pertaining to its health has been recognized by several health organizations, and the WHO stated in 1978 that "people have the right and duty to participate individually and collectively in the planning and implementation of their healthcare" [9]. The WHO also recommended that "governments encourage and ensure full community participation". Community involvement in healthcare has been shown to be a successful tool in public health in various parts of the world including Nigeria. Every community has an important part to play in all aspects of its healthcare delivery system including surveillance. Members of communities have better knowledge of the problems prevalent in their environment. Thus, involving them in every aspect of health policy formulation and implementation will go a long way in ensuring the success of such policies. When people know the reason for a health intervention, understand the benefits, are involved in formulating an action plan for their community, and are part of the implementation process, they will not see such interventions as "government policy". Instead, it will ensure ownership and sustainability.

In every surveillance system, the community forms the foundation; they are at the frontline and can serve as a source of information, not just on the incidence of infectious diseases but also on other issues of public health concern. The community can also serve as a monitoring and evaluation tool by offering feedback on how effective the surveillance system is in mitigating the incidence of infectious diseases. Effective IDSR requires proper ownership at the community level.

Currently in Nigeria, the common practice is to involve communities at the tail end of implementing health interventions. Most community involvement is passive, i.e. interactions between health personnel and the community is limited to the community receiving some form of health interventions such as distribution of mosquito nets to prevent malaria and free screening exercises for diseases. For there to be a functional and effective surveillance system community participation must be ensured. It is only when the community is carried along at all stages of health policy that it will be successfully implemented. One of the barriers to effective IDSR implementation identified during this workshop was community misconceptions about the aetiology of infectious diseases. An incident was cited where an outbreak of cholera was believed to be of supernatural origins thereby preventing prompt notification and intervention. Each state must look at the priority diseases with high incidence rates and educate the populace at the community level on the aetiology of such diseases.

For IDSR to shift from theory to practice there is a need to effect change from the ground up. The capacity of the community to carry out surveillance functions must be built up.

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[9] World Health Organization.1978. International conference on Primary Health Care

Conclusion

Effective IDSR implementation in Nigeria is yet to be achieved. Despite the commencement of the implementation process in 2003, there are still several challenges that must be dealt with before the country can have a truly effective surveillance system.

Key strategies agreed upon by the participants to facilitate effective IDSR implementation in Nigeria are as follows:

- Critical analysis of the current status of IDSR in Nigeria and the formulation of a plan of action
- Regular meetings of stakeholders in the Nigerian health sector
- Strengthening of the existing IDSR framework
- Standardization of IDSR data collection tools
- Enhanced commitment to the IDSR tool at the federal level
- Increased interaction between animal and human surveillance to propel the One Health Initiative in Nigeria
- Involvement of the informal health sector in disease surveillance
- Improvement of laboratory capacity of states by the establishment of centralized reference laboratories and exploration of avenues of cooperation with the NVRI for diagnosis of zoonotic disease outbreaks
- Education of the general public on the aetiology of priority disease to foster the provision of prompt information on disease outbreaks
- IDSR awareness creation to all stakeholders at the state level
- Provision of transportation for surveillance teams where lacking
- Availability of contingency funds for disease outbreaks
- Establishment of functional epidemiology unit in each state
- Organization of public health interventions
- Provision of infrastructure to support public health activities and the establishment of incidence management centres by the Nigeria Centre for Disease Control (NCDC)

The state level in the IDSR framework plays a pivotal role in surveillance activities. Therefore, it is necessary for state stakeholders to take ownership of IDSR implementation. With the ongoing global trend of emerging and reemerging zoonotic infections, and in the light of the recent outbreak of zoonotic diseases in human populations in the country, it is critical that Nigeria fully embraces the One Health Initiative. Stakeholders in animal and human surveillance need to fully integrate their activities so as to encourage cooperation and sharing of vital surveillance data.

Appendix 1
Tables and Figures

Table 1: List of Priority Diseases and Events in Nigeria

Epidemic prone	**International Health Regulations (IHR) recommended**
1. Cholera 2. Diarrhoea with blood (Shigella {Sd1}) 3. Measles 4. Meningitis 5. Viral hemorrhagic fevers (Lassa fever) 6. Human influenza (caused by a new Subtype) 7. Yellow Fever	8. SARS 9. Smallpox 10. Dengue 11. Anthrax 12. SARI
Diseases targeted for Elimination or Eradication	
1. Poliomyelitis 2. Dracunculiasis 3. Leprosy 4. Neonatal tetanus 5. Lymphatic Filariasis 6. Tuberculosis	
Other diseases of public health importance	
Communicable	**Non-Communicable**
1. Diarrhoea (children <5 years) 2. Pneumonia (children <5 years) 3. HIV/AID 4. Malaria 5. Onchocerciasis 6. Sexually transmitted infections (STIs) 7. Trypanosomiasis 8. Buruli ulcer 9. Plague 10. Trachoma 11. Typhoid	17. Asthma 18. Diabetes mellitus 19. Epilepsy 20. High blood pressure 21. Sickle cell disease 22. Malnutrition

12. Hepatitis –B 13. Pertussis 14. Human Rabies 15. Schistomiasis 16. Noma	

Table 2: IDSR Core Indicators (2005)

IDSR Activity	Indicators
Routine reporting (IDSR 002, 003 forms)	Proportion of health facilities submitting weekly or monthly surveillance reports on time to the LGA.
Reporting out breaks from the LGA to National level	Proportion of reported outbreaks of epidemic prone diseases notified to the next higher level within 2 days of surpassing the epidemic threshold.
Case-based reporting	Proportion of cases of diseases targeted for elimination/ eradication and any other diseases of public health importance, which were reported using case-based forms or line list
Case-based data Analysis	Proportion of reports of investigated outbreaks that include analyzed case-based data
Data analysis	Proportion of health facilities/LGAs that have current trend analysis (line graphs) for selected priority diseases.
Laboratory support	Proportion of reported outbreaks of epidemic prone diseases that occurred in the past year with laboratory confirmation of results
Outbreak response	Proportion of confirmed outbreak with appropriate and timely response (48-72 hours) at the LGA level during the last 12 months.
Case fatality rate-CFR	Number of Deaths X 100% Number of Cases
Attack rate	Total No of Cases x 100% Total Population exposed

Table 3: Results of 2010 State level IDSR Implementation Assessment

Area of Assessment	**Findings** N = 12
Existence of National Technical Guideline on IDSR	11 (91.7%)
Surveillance Staff trained on IDSR	7 (58.3%)
Receiving weekly surveillance reports	6 (50%)
Receiving monthly surveillance reports	2 (16.7%)
Analysis of surveillance data by time	6 (50%)

Table 4: Results of 2010 State level IDSR Implementation Assessment

Area of Assessment	**Finding** N = 12
Percentage with functional EPR Committee	2 (16.7%)
Availability of IDSR forms (003) in the last 6 months	5 (41.7%)
Provision of written feedback	4 (33%)
Percentage with budget line for EPR	3 (25%)

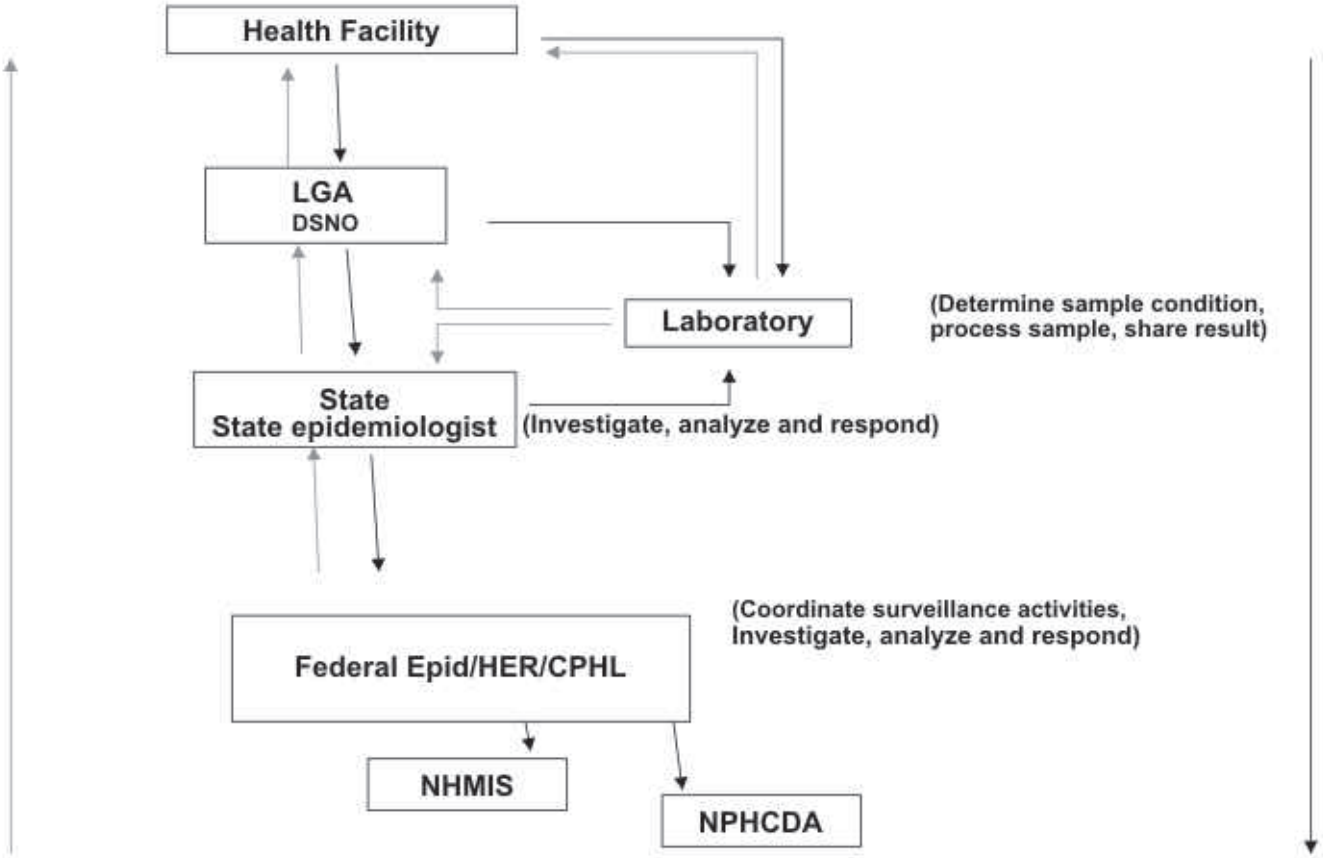

Figure 2: Flow of IDSR Information in Nigeria (Epidemiology Unit, FMOH 2012)

Appendix 2
Workshop Objectives, Agenda and Planning Committee

Workshop Objectives

a) To raise awareness on the IDSR tool and its potential impact in mitigating public health disasters.
b) To lobby for increased political commitment and budgetary allocation/appropriation of funds for effective disease surveillance.
c) To promote the use of community-based surveillance systems.

Workshop Agenda

Time	Activity	Anchor
08.00-09.00	**ARRIVAL AND REGISTRATION**	
SESSION ONE	**WELCOME AND OPENING**	
09:00-09:30	Welcome remarks • Prof O. Tomori, FAS- Chairman Planning Committee • Prof Oye Ibidapo Obe, FAS - President NAS • Dr. Akinwunmi Adesina- Hon. Minister of Agriculture and Rural Development • Prof. C. Onyebuchi Chukwu- Hon. Minister of Health ***Joint declaration to open the workshop by both Ministers***	
9:30- 10:10	**TEA BREAK**	
SESSION TWO	**INTRODUCTION TO IDSR**	
10:10-10:20	IDSR follow-up stakeholder awareness creation: workshop objectives	Dr. Oladoyin Odubanjo *Executive Secretary NAS*
10:20-10:40	Summary of the "IDSR in West Africa- Bridging the gaps" 2010 workshop	Prof. Oyewale Tomori FAS *Chairman, Planning Committee*
10:40-11:00	Overview and significance of IDSR	Dr. Emmanuel Musa *World Health Organization (WHO) Nigeria Office*

11:00-11:20	IDSR in Nigeria; history and challenges	Mrs. Olubunmi Ojo *Epidemiology Unit Federal Ministry of Health (FMOH)*
11:20-11:40	**DISCUSSION**	
SESSION THREE	**STRATEGIES FOR PROMPTING EFFECTIVE IDSR IMPLEMENTATION IN NIGERIA**	
11:40-12:00	Risk Analysis and Evidence Generation for Policy	Dr. Columba Teru Vakuru *Federal Livestock Department (FLD)*
12:00-12:20	Coordinating veterinary and human disease surveillance	Dr. Mohammed Sani Ahmed *The Executive Director, National Veterinary Research Institute (NVRI)*
12:20-12:40	Role and Responsibilities of states in IDSR	Dr. M. Mahmoud *Director of Public Health, Kano State Ministry of Health*
12:40-13:00	Role of community based surveillance in IDSR	Dr. Emmanuel Abanida *Director, Disease Control, National Primary Health Care Development Agency (NPHCDA)*
13:00-13:20	**DISCUSSION**	
13:20-14:00	**LUNCH**	
SESSION FOUR	**MANPOWER AND CAPACITY BUILDING FOR IDSR**	
14:00-14:20	Manpower capacity building and stakeholders' responsibilities for successful IDSR	Dr. Akin Oyemakinde *Director Epid. Unit/ Head, Nigeria Field Epidemiology and Laboratory Training Program (NFELTP)/NCDC*
14:20-14:40	Improving the flow of surveillance data throughout the health system	Dr. Aderemi Azeez *Head of Research & Statistics Division Department of Health Policy Research and Statistics , FMOH*
14:40-15:00	Monitoring and evaluation of the IDSR surveillance system	Dr. Akin Oyemakinde *Director Epid. Unit/ Head, Nigeria Field Epidemiology and Laboratory Training Program (NFELTP)/NCDC*

SESSION FIVE	CONCLUSION AND CLOSING
15.00-16.00	• General discussion • Next steps • The way forward for IDSR adoption in States • Recommendations • Conclusion **Anchor- Dr. Shuaib Belgore**

Workshop Planning Committee

Prof. Oyewale Tomori, FAS	Project Adviser/ Chairman, Planning Committee
Dr. Akin Oyemakinde	Chief Epidemiologist/ Director, Epidemiology Unit FMOH
Dr. Shuaib Belgore	Deputy Director, FMOH
Mrs. Elsie Ilori	Assistant Director, IDSR Data Management, FMOH.
Dr. Mohammed Sani Ahmed	The Executive Director, NVRI
Dr. Columba Teru Vakuru	Veterinary Public Health Division, FMARD
Dr. Oladoyin Odubanjo	Executive Secretary, NAS.
Mrs. Scholatica Mnena Lan	Program Manager, NAS
Ms. Anjola Olanipekun	Project Associate, NAS

Appendix 3
Workshop Participants List

1.	DR SULE IBRAHIM BABAMININ	Niger State Ministry of Health / Commissioner for Health
2.	DR USMAN MOHAMMED BEZHI	Niger State Ministry of Health / Director of Public Health
3.	DR AC OKEJI	Imo State Ministry of Health / Director of Disease Control
4.	DR AHMED HAMZA	Katsina State Primary Health Care Development Agency / Director Of Epidemiology
5.	DR AYODELE SELUWA	Ekiti State Ministry of Health Director of Disease Control
6.	DR(MRS) FABODE OLUBISI OYEYEMI	Oyo State Ministry of Health / Director of Primary Health Care
7.	DR DAKWAK FOM	Plateau State Ministry of Health/ Commissioner for Health
8.	DR Y ELIAS PEDE	Plateau State Ministry of Health Director of Public Health
9.	ALHAJI ABDULISSA KAYODE	Kwara State Ministry of Health / Commissioner for Health
10.	DR MICHAEL S OGUNTOYE	Kwara State Ministry of Health / Director of Primary Health Care
11.	DR SUNDAY Z NWANGELE	Ebonyi State Ministry of Health / Commissioner for Health
12.	DR ONWE FRANCIS IDENYI	Ebonyi State Ministry of Health / Director of Disease Control
13.	ADEYEYE S ADEYEMI	Osun State Ministry of Health
14.	DR OMOWUNMI QUBRAT BAKARE	Lagos State Ministry of Health / Director of Public Health
15.	DR ORDUEN ABUNKU	Benue State Ministry of Health / Commissioner for Health
16.	DR JOSEPH KUMBA	Benue State Ministry of Health / Director of Public Health
17.	DR IDRIS OMEDE	Kogi State Ministry of Health / Commissioner for Health
18.	DR FUNMILAYO BALOGUN	Kogi State Ministry of Health / Director of Disease Control
19.	DR I.A.I. ADU	Ekiti State Ministry of Health /Director Of Medical Services
20.	OLADIPO FOLAYAN ABUBAKAR	Osun State Ministry of Health
21.	DR FIDELIA AKPA	Enugu State Ministry of Health / Commissioner for Health
22.	DR CHUCKWUMA IGWEAGU	Enugu State Ministry of Health / Director of Public Health

23.	DR BUTAWA NUHU	Kaduna State Ministry of Health
24.	MR MOLOGE GESIBINA	Bayelsa State Ministry of Health / Deputy Director Of Epidemiology
25.	DR KEN MADIEBO	Nigeria Center for Disease Control (NCDC), FMOH
26.	DR FOLASHADE MOMOH	Human and Health Services Secretariat (HHSS), Federal Capital Development Agency (FCDA)/ Director of Public Health
27.	PROF TEKENA HARRY	Nigeria Center for Disease Control (NCDC)
28.	DR T. C. ABAYOMI	FMOH
29.	DR OKECHUKWU S. OGAR	Abia State Ministry of Health / Commissioner for Health
30.	DR JOHN IHEBEREME	Imo State Ministry of Health / Commissioner for Health
31.	DR ANGELA OYO-ITA	Cross River State Ministry of Health / Commissioner for Health
32.	DR AKABE EMMANUEL	Nasarawa State Ministry of Health / Commissioner for Health
33.	DR USMAN ABE	Nasarawa State Ministry of Health / Director of Public Health
34.	ALHAJI BUKAR DAPCHI	Yobe State Ministry of Health / Commissioner for Health
35.	DR MOHAMMED LAWAN GANA	Yobe State Ministry of Health / Director of Public Health
36.	DR OLAOKUN SOYINKA	Ogun State Ministry of Health / Commissioner for Health
37.	DR YUSUFF QUUDUS	Ogun State Ministry of Health / Director of Public Health
38.	COLETTE OSU-EZUMAH	NCDC, FMOH
39.	DR ADEREMI AZEEZ	Department of Health Planning Research and Statistics, FMOH
40.	DR C.T. VAKURU	FMARD
41.	DR AUGUSTINE I NNALUE	Anambra State Ministry of Health / Permanent Secretary
42.	DR CHUKWUDI OKOYE	Anambra State Ministry of Health / Director of Public Health
43.	DR E MUSA	WHO NG office/ IDSR Desk Officer
44.	DR ADO MOHAMMED	Kaduna State Ministry of Health Director of Primary Health Care
45.	DR LIMAN M.U.	Nasarawa State Ministry of Health

46.	DR MAUSUR KABIR	Director of Public Health, FMOH
47.	ONYEAGHALA CHINYERE	AFRICASTI
48.	DR OLADOYIN ODUBANJO	Executive Secretary, NAS
49.	DR IBRAHIM LAWANI	Nasarawa State Ministry of Health
50.	DR C.P UKPAKA	NCDC, FMOH
51.	CHRIS ELEMUWA	NPHCDA /Deputy Director Lab And Surveillance
52.	MRS R.T. DAHUNSI	Ondo State Ministry of Health
53.	IFERE ADIAHA O.U	Cross River State Ministry of Health / Director of Disease Control
54.	DR EA ABANIDA	NPHCDA/Director Disease Control And Immunization
55.	PROF ADDULSALAM NASIDI	NCDC, FMOH
56.	SHITTU ABDULHAQI	NAS
57.	DR O.E. BENNEDICT	FMOH
58.	ABDUL SAMBO	NPHCDA
59.	ALEX ABUTU	AFRICASTI
60.	DR O.C. EJEZIE	FMOH/Epidemiologist
61.	MRS OLUBUNMI OJO	FMOH
62.	DR AKIN OYEMAKINDE	FMOH/ Director /Chief Epidemiologist
63.	PROF OYEWALE TOMORI, FAS	NAS/Project Adviser
64.	SCHOLASTICA LAN	NAS/Programme Manager
65.	EDAWOLE IFEOLUWA	NAS/Admin Officer
66.	DR M.S. AHMED	NVRI /Executive Director
67.	DR M.N. MAHMOUD	Kano State Ministry of Health / Director of Primary Health Care
68.	DR SHUAIB BELGORE	FMOH
69.	MOBOLAJI DASAOLU	NAS
70.	OLANIPEKUN ANJOLA	NAS

Appendix 4
Workshop Communiqué

Background
Disease surveillance is one of the key components of public health interventions in the prevention and control of health emergencies and disease outbreaks. It involves the collection, analysis and interpretation of data on disease and health emergencies. Without effective disease surveillance, it is difficult to generate health information that can be used to formulate evidence based health policies which will improve the quality of health of the populace. Data obtained through disease surveillance also helps in preparation for and response to disease outbreaks and other public health emergencies.

Over the years, several advancements have been made to improve the capacity of countries to identify, report, prepare and respond to disease outbreaks. For most developed countries, disease surveillance systems are effective and responses to threats are promptly implemented. In some developing nations, including Nigeria, effective disease surveillance still poses a challenge and unfortunately, this inability to manage a functional surveillance system is exacerbated by high incidence and prevalence of preventable infectious and non-communicable diseases.

A national disease surveillance system was first introduced in Nigeria between 1988 and 1989 following an outbreak of yellow fever which was attributed to ineffective surveillance systems in most states of the country. This system, termed the Disease surveillance and Notification System (DSN), was plagued by problems including inability to generate information for prompt response, inadequate laboratory facilities for diagnosis, and the existence of multiple vertical surveillance programs which led to misuse of resources. These problems were not unique to Nigeria but were replicated all over Africa. Following a string of preventable outbreaks of infectious diseases in the 1990s, the World Health Organization Regional Office for Africa (WHO AFRO) proposed the adoption of a new strategy for disease surveillance in its member states called Integrated Disease Surveillance and Response (IDSR).

The need for national disease surveillance and response
Given its mandate to bring problems of national interest to the attention of relevant stakeholders, the Nigerian Academy of Science (with support from the US Department of State, and in collaboration with the Federal Ministry of Health [FMOH], West African Health Organization [WAHO] and the World Health Organization [WHO]) convened a workshop for stakeholders from around West Africa on the 3rd and 4th of August 2010. This workshop sought to understand the problems undermining effective implementation of IDSR in West Africa. Challenges identified as inimical to the successful implementation of IDSR included **low levels of political commitment to IDSR, unclear IDSR implementation frameworks, low awareness and understanding of IDSR among health workers, shortage of tools, equipment and supplies, poor laboratory services, deficient communication and IT infrastructure, as well as insufficient skilled manpower for data analysis, data interpretation, outbreak investigation and response.** One of the major recommendations from the workshop was the need to find ways to raise awareness at the highest national policy levels in order to secure the

necessary support for IDSR implementation, because political and financial backing would address most of the challenges being experienced in IDSR implementation.

To address this need for political and financial support in Nigeria, the Academy convened a one-day stakeholder awareness creation meeting for State Commissioners of Health and Directors of Public Health/Disease Control from the 36 states and the Federal Capital Territory. These stakeholders were targeted particularly because Commissioners of Health are responsible for determining/promoting the health agenda and implementing programmes according to identified government priorities while the Directors of Public Health/Disease Control are the technocrats responsible for public healthcare planning and implementation in the states. In attendance were Commissioners of Heath (14), Directors of Public Health (22), officials of the FMOH (11), Representatives of the National Primary Health Care Development Agency (NPHCDA) (4), Representatives of the Federal Ministry of Agriculture and Rural Development (FMARD) (2), other relevant stakeholders, and members of the press. The expected attendance was not fully achieved due to the absence of those Commissioners who were attending to the flooding crisis and disease outbreaks in certain states in the country at the time of the meeting. The meeting was declared open by Dr M. Kabir, the Director of the Department of Public health, FMOH on behalf of the Honourable Minister of Health, Professor Onyebuchi Chukwu. The Minister assured all of his commitment to IDSR and commended NAS for convening the workshop. The discussions at the meeting highlighted the current status of IDSR implementation in the country, the importance of IDSR in ensuring the country has improved developmental indices, the roles that stakeholders at the state level play in achieving disease free communities, and what is expected by governments and agencies in ensuring that the IDSR strategy is fully adopted in the country.

The following recommendations were made by the workshop participants:

Immediate

i. Advocacy to other stakeholders such as the Governors Forum, National Council on Health, Federal Executive Council (FEC), the parliament for commitment and budgetary allocation for IDSR
ii. Provision of infrastructure and equipment especially mobility for all surveillance teams
iii. Setting-up of contingency funds to enhance response to outbreaks
iv. Formulation and actualization of state specific IDSR implementation plan
v. Proactive responses by state Ministries of Health during emergencies; states should set up Health Care Services points, partner with the Red Cross, and Ministries of Works, Environment, Agriculture, Housing etc for rapid responses
vi. Incorporation of Health Care Services in the emergency plans of the National Emergency Management Agency /State Emergency Management Agencies.

Long term

i. Establishment of centralized/zonal reference laboratories
ii. Establishment of functional epidemiology units in each state
iii. Systematization of state public health interventions
iv. Manpower capacity building for effective surveillance
v. Provision of infrastructure to support public health activities by the Nigerian Centre for Disease Control (NCDC) especially for preparedness and control

vi. Establishment of incidence management centres by the NCDC.
vii. Revision of curricular for training health workers to ensure that IDSR and other emergency response mechanisms are taught.

Conclusion

This workshop came at a time when Nigeria was facing serious health and disaster challenges due to the effects of flooding and outbreaks of polio and rabies. These underscored the merits of having effective IDSR in place. With effective IDSR implementation, the country will be prepared to handle emergencies, and not only provide *ad hoc* responses.

The meeting was highly appreciated by the participants who agreed to take the key messages of the workshop and ensure implementation of the highlighted resolutions/recommendations. The Academy was given due recognition as a proponent of effective policy change and advice on topical national issues.

Appendix 5
About the Nigerian Academy of Science

The Nigerian Academy of Science was inaugurated on the 8th of January 1977 at the Conference Centre, University of Ibadan. Its inauguration marked the climax of five years of effort by concerned scientists under the auspices of the Science Association of Nigeria (SAN) to overcome the obstacles that had plagued previous efforts of about twenty years to establish an academy of science. The main antecedent to the founding of the Academy was the formation of a committee of fellows of SAN, to prepare a paper on the formation of the Nigeria Academy of Science. On 22nd March 1975, the committee adopted the draft statutes and also approved the list of forty-five Foundation fellows of the Academy. The committee also appointed a steering committee to prepare for the inauguration.

Today, the initial group of forty-five Foundation Fellows has grown to one hundred and forty-one, covering all areas of science, biological and physical.

Aims and objectives of the Academy

The aims and objectives of the Academy are to promote growth, acquisition, and dissemination of scientific knowledge and to facilitate its use in solving major problems of national interest.

The Academy strives to do this by:

- Providing advice on specific problems of scientific or technological nature presented to it by the government and its agencies, as well as private organizations.
- Bringing to the attention of the government and its agencies problems of national interest that science and technology can help to solve.
- Establishing and maintaining the highest standards of scientific endeavour and achievement in Nigeria, through the publication of journals, organization of conferences, seminars, workshops and symposia, recognition of outstanding contributions to science in Nigeria, and the development of a working relationship with other national and international scientific bodies and academies.