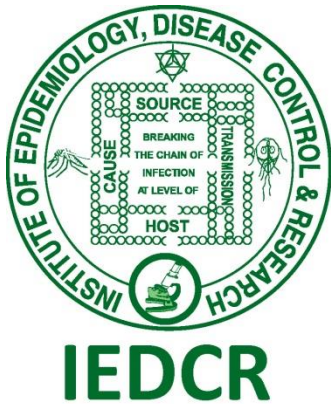


# Foodborne illness surveillance (FBIS) in Bangladesh



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# Outline

- Overview of existing surveillance platforms
- Objectives of FBIS
- Activities
- Partners and collaborators

# Epidemiological Surveillance

# National disease surveillance systems

1. Routine Disease Surveillance
2. EPI Disease Surveillance
3. Priority Communicable Disease Surveillance  
(Web Based Integrated Disease Surveillance)
4. Surveillance through Outbreak Investigation  
(Event Based Surveillance)
  - 24/7 hotline
  - Media Monitoring
  - Any informal reporting

# Disease Specific Surveillance

- Nipah Surveillance in 5 sites in collaboration with ICDDR,B – US CDC support
- Acute Meningo- Encephalitis Surveillance (AMES) in collaboration with IPH, WHO and ICDDR,B
- Hospital based Influenza surveillance in 12 centres in Bangladesh in collaboration with ICDDR,B –US CDC support
- Hospital based Influenza surveillance in 14 centres functioning with funding from HPNSDP

## Other Surveillance activities (cont..)

- Community Based Influenza Surveillance in Kamalapur and Mirpur in collaboration with ICDDR
- Avian Influenza Surveillance among High Risk Groups
  - Among personnel in direct contact during culling
  - Wet Market live bird handler (started on 23<sup>rd</sup> Feb'09)
- Salmonella Surveillance with IANPHI support
- Dengue Surveillance with support from Rockefeller Foundation
- Behavioral Risk Factor Surveillance System (BRFSS), Bangladesh using telephonic interviews – IANPHI and US -CDC support

# **Web-based Integrated Disease Surveillance**

# Objectives of FBIS

- To establish FBIS in Bangladesh
- To strengthen food safety emergency response capacity
- To strengthen human resource & lab capacity
- To generate data for risk analysis on food safety
- To provide information on performance of food safety and quality control programmes in the country
- To develop a platform for expanding FBIS in the future





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Pathogen-specific  
surveillance: FBIS

# Sentinel sites

- Habiganj district hospital
- Narshingdi district hospital
- Cox's Bazar district hospital
- Naogoan district hospital
- Patuakhali district hospital
- Thakurgaon district hospital
- Satkihra district hospital
- Dhaka Medical College Hospital
- Uttara Adhunic Medical College Hospital
- Bangladesh Institute of Tropical and Infectious Disease



# Key partners

- Sentinel sites
  - ideSHi
  - icddr,b
  - CDC, USA
  - Laboratories in IPH/IPHN

# Activities

- Strengthen laboratory capacity in IEDCR
- Establishing surveillance using 10 sentinel sites
- Strengthening of laboratory network
- Strengthen human resource and laboratory capacity of sentinel sites
- Laboratory networking and sharing of specimens among partners including icddr,b, IPH, IPHN, BSTI

# Pathogens to be tested-IEDCR/icddr,b

- *V. cholerae*
- *Salmonella*
- *Shigella*
- *Escherichia coli* subtypes
- Viruses (Hepatitis A/E)
- *Leptospira monocytis*

To generate data for risk  
analysis on food safety

# Activities

- Strengthening Web-based IDS to generate nationally representative data on foodborne illness using hospital-based platforms
- Using the BRFSS platform to generate community based data
- Objective: To assess the national trends of acute diarrhoeal illness/food poisoning rapidly





Strengthen FSER capacity and  
outbreak response

# Objectives of FSER

- Identify and assess food safety emergencies
- Manage/mitigate food safety emergencies
- Timely and effective risk communication
- Post-emergency response, recommendation and implementation of corrective actions
- Facilitate collaboration and co-ordination among national and international agencies, e.g., INFOSAN, IHR bodies

# Activities

- Capacity development
- Develop collaboration and cooperation with national, international and UN agencies
- Validation/simulation of the food safety emergency response plan in Bangladesh
- Develop and educational toolkits (guidelines, protocols, SOPs, manuals) on foodborne outbreak investigations and response

Capacity building

# Activities

- Training NFSECC technical committee members to respond effectively to national food-safety issues
- Training RRT members to respond effectively to national food-safety issues
- Advocate FSEs with policymakers, implementers, and media
- Strengthening Lab infrastructure- IEDCR and sentinel sites

Information platforms on food  
safety issues

# Activities Contd.

- Publish newsletter on foodborne illness
- Develop and maintenance of website for food safety emergency, including blog for interaction
- Formation of an internal team to oversee the implementation and monitoring and evaluation (Internal IME team) of the activities

# Interactive website

- A multi dimensional common platform for the people who need to know about food safety
- Objective: to link experts of different stakeholders of food safety issues
- Secured option to exchange the views and ask for answers among the experts
- Integration with different social communication sites

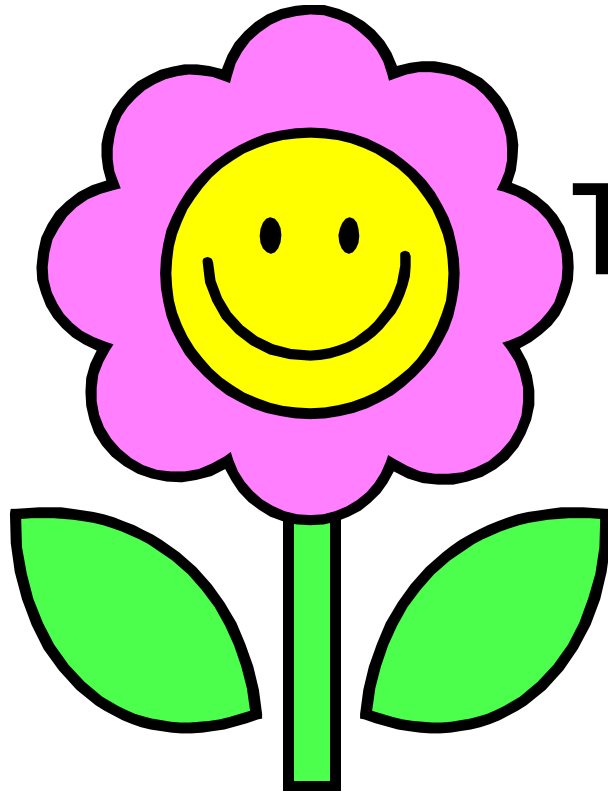


# Fostering collaboration and partnerships

- Participating hospitals
- icddr,b
- IPH/IPHN/BSTI
- ideSHi for including BITID
- Utilizing the FETP,B residents
- BTRC/AMTOB
- DGHS/DLS/NNS
- Technical assistance:
  - FAO
  - US CDC
  - WHO

# Conclusion

- A holistic approach starting with improving disease surveillance, establishing database infrastructure, to building capacity and nurturing collaboration and networking
- The project will be sustainable in the long run - integrated in the governmental program in the future
- The project is conducted collaboratively with existing surveillances



Thank You