

# Productive collaboration of national institutes

Largest pediatric hospital in Bangladesh

State of the art laboratory

Combination of services to the patient and research

Generating evidence on Vaccine Preventable Diseases (VPD) using limited resources.



# Impact of pneumococcal meningitis

Impaired

Disabled

Handicapped

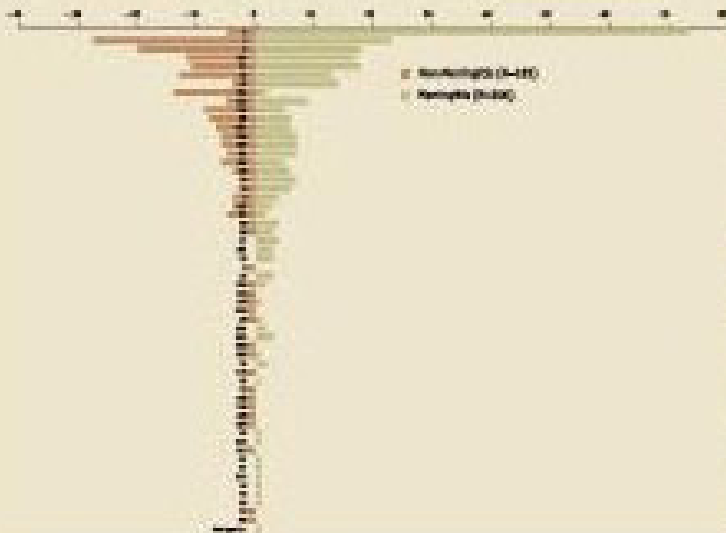
Bigger Impact on Family > Society > National Resources

## Human Face of Pneumococcal Meningitis



Contrasted quadriplegic child with vision and hearing impairment due to Pneumococcal meningitis with his active twin sister.

Diverse pneumococcal serotype:  
Possible challenge for vaccine introduction



## Awareness and Advocacy



World Pneumonia Day

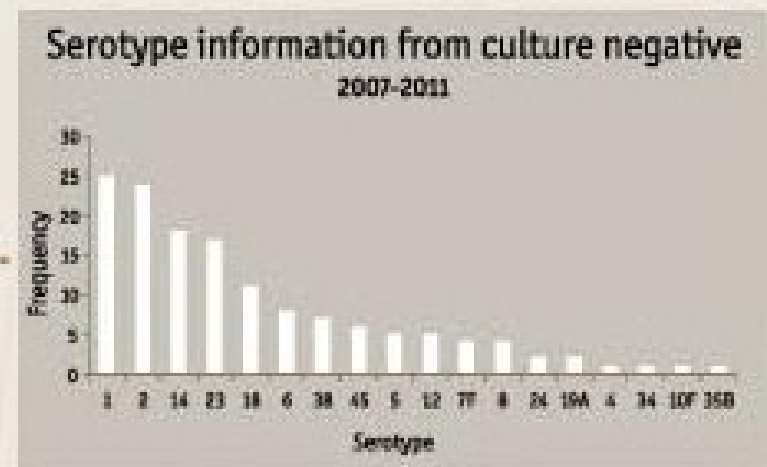
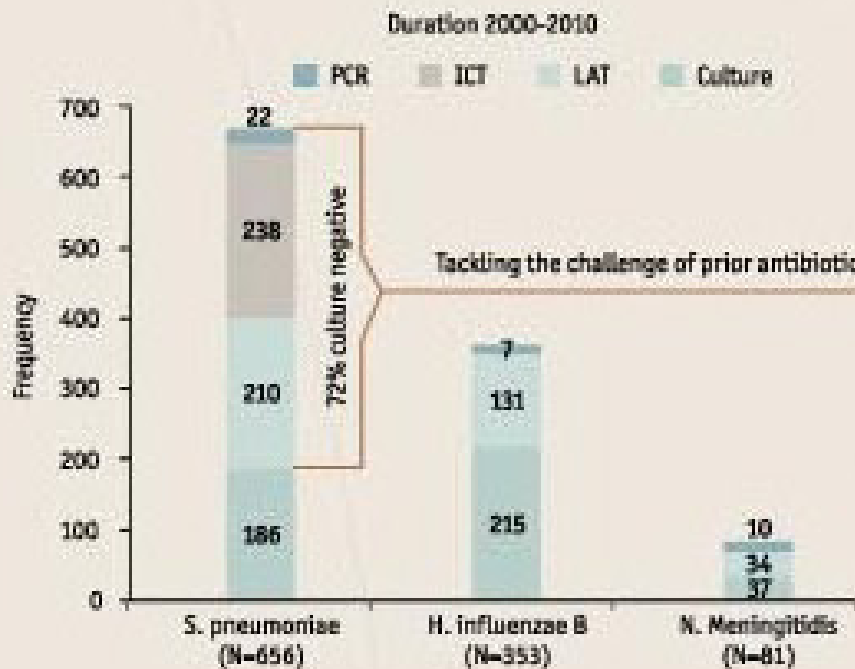


BBC documentary on Hib diseases

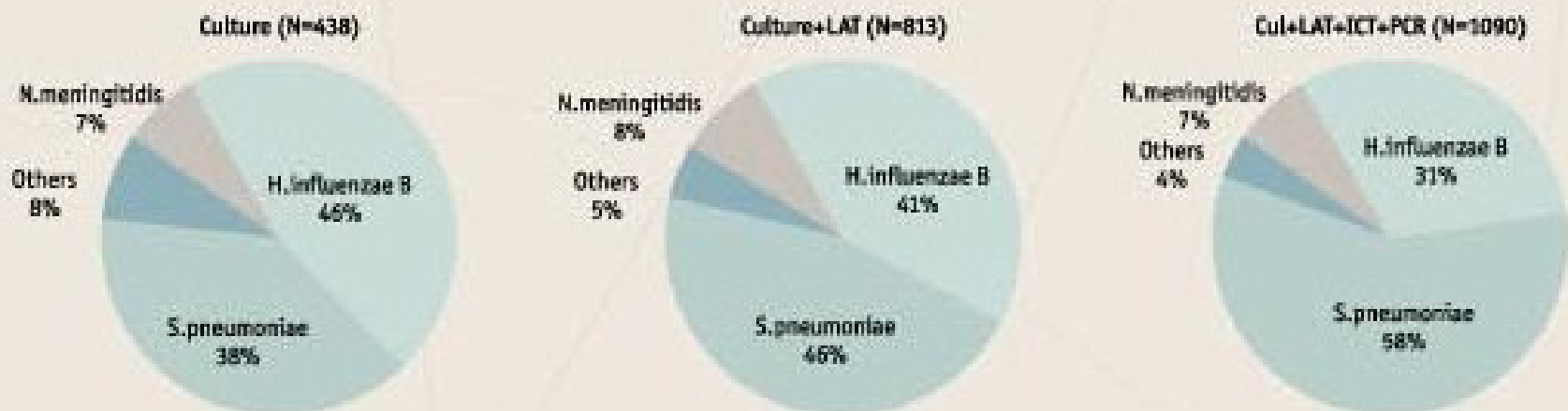


Working with the policy makers

# Appropriate use of diagnostics: Quality surveillance with minimal heterogeneity



## Change of aetiological scenarios with the use of diagnostics



## Multiple surveillance modalities

Network of four hospitals  
Rural and urban population based sites

### Hospitals

Total number of Pediatric beds: ~ 975

Total admission of <5 children per year 40,592

Total Number of OPD per year 513,201

### Field sites (Rural)

Total Population 129,715

Total <5 children 12,003

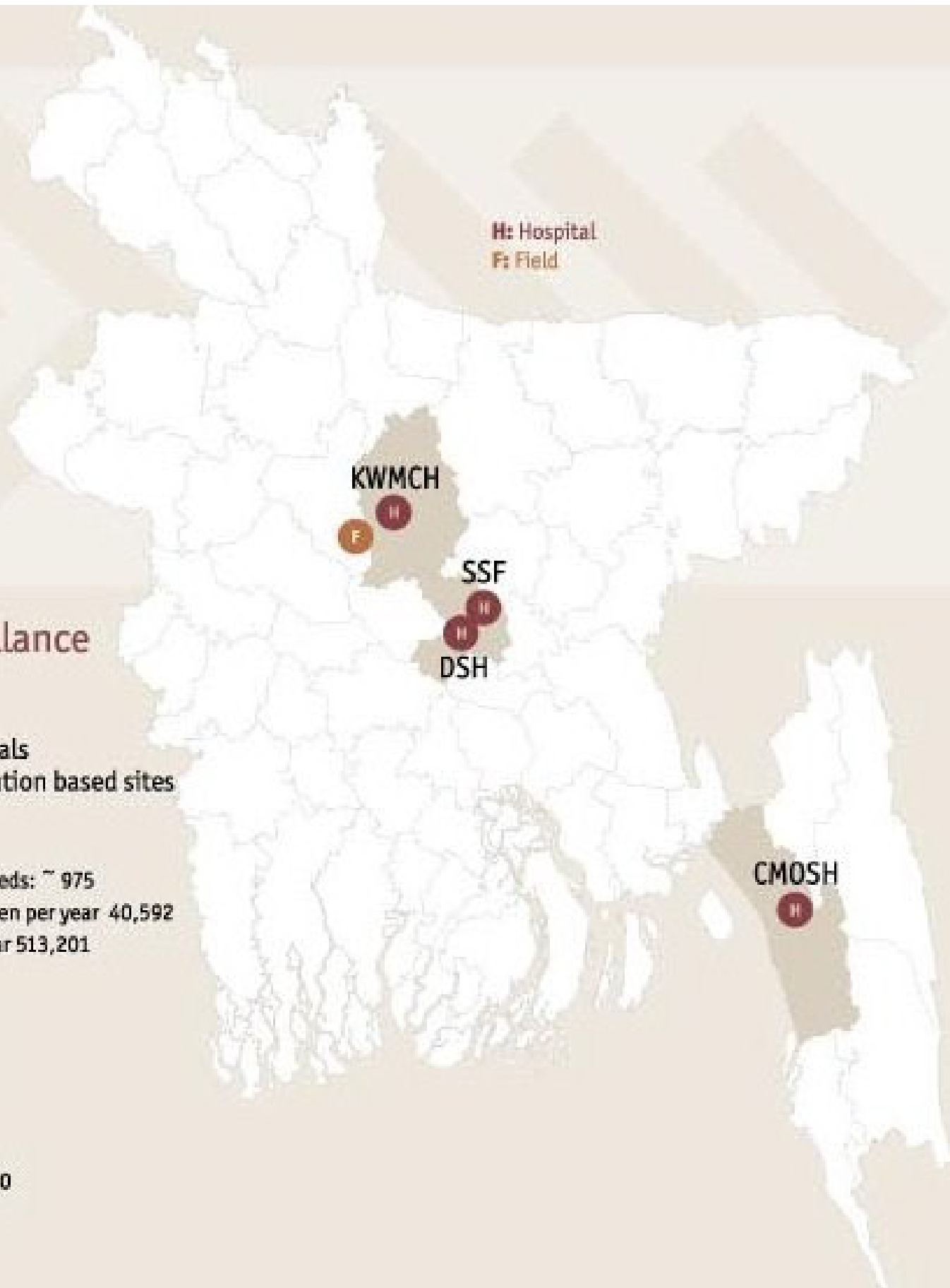
Birth cohort 2,985

### Field sites (Urban)

Total Population ~ 2,533,500

Total <5 children 180,500

Birth cohort 27,000



# History of surveillance

**Surveillance**

During 80's Minimal or No evidence on Vaccine Preventable Diseases (VPD)

At the same time enormous evidences on Diarrhoeal diseases generated by ICDDR,B

**VPD overshadowed**

In addition to ICDDR,B & others

Proactive national institutes

DSH  
CHRF

Rational use of limited resources

Initiation of Surveillance on VPD

Generation Of Data

Extended collaboration

Hospital Management

Clinician

Laboratory

Expansion of the Surveillance network

PneumoADIP

More Evidence

Dissemination through Journal

Working with media & stakeholders

Created awareness among the professional bodies

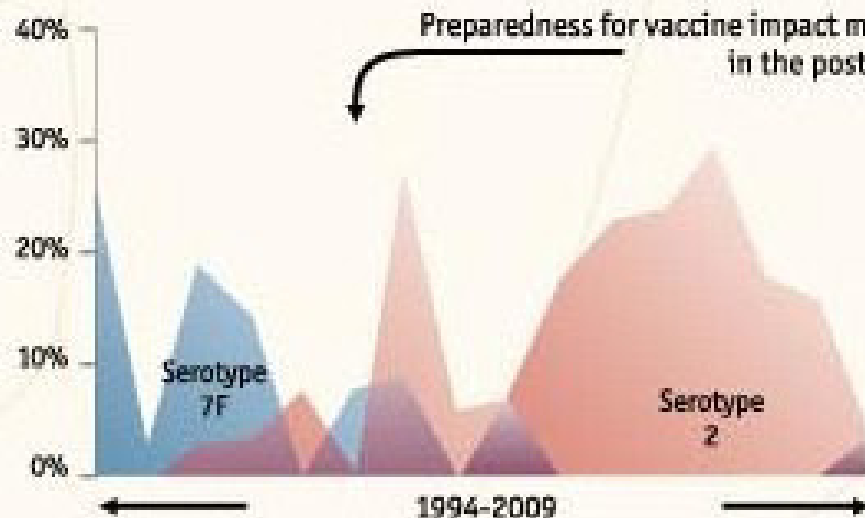
Presentation at British Parliament  
Observing World Pneumonia Day  
BBC Documentary on Hib Diseases

Advocacy

Hib Vaccine Introduction  
Application for Pneumo-Vaccine

Working with Policy makers

Preparedness for vaccine impact measurement in the post vaccine era

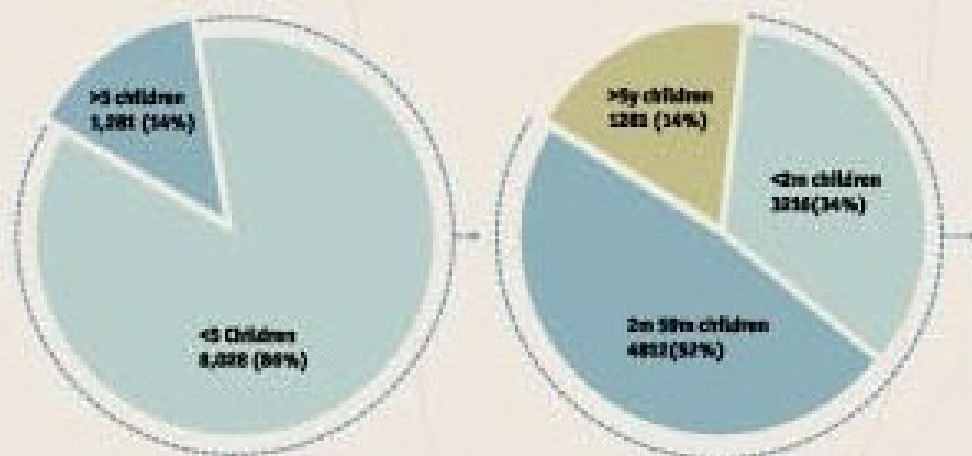


# DHAKA SHISHU HOSPITAL

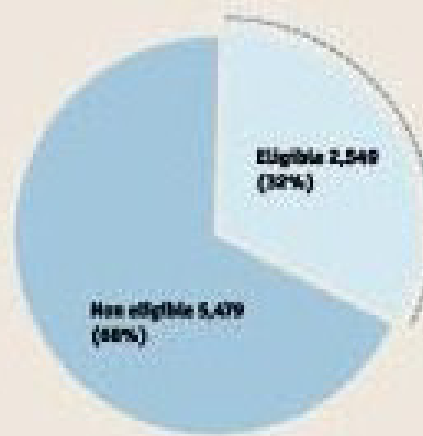
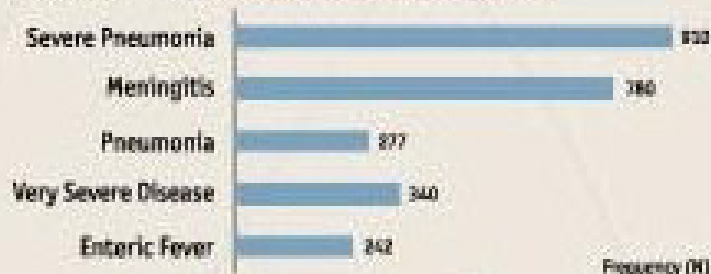
## Sentinel site

### Admitted patient at DSH from Apr-Sept'11

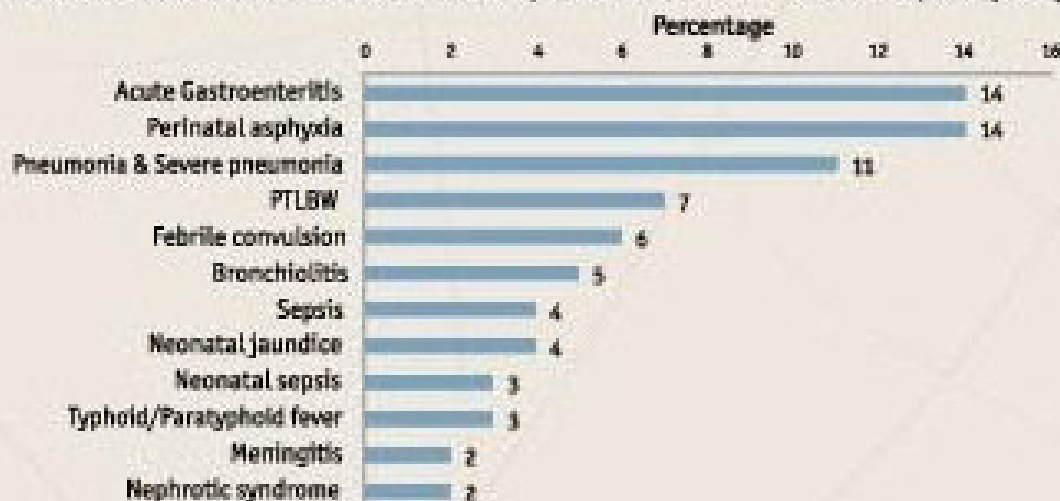
Total Admission  
**9,309**



### Disease burden of eligible children at DSH



### Disease burden of under 5 children hospitalized at Dhaka Shishu Hospital (DSH)



### Prevalence of Vaccine preventable aetiological agents at DSH

