Early Warning and Response System (EWAR) in Tunisia

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Missions of the Tunisian Observatory of new and emergent deseases (ONMNE)

◦ Since 2008
◦ implementation of an early warning system according to **« New and Emerging diseases »** :
  • Detect public health events requiring rapid investigation and response
  • Reinforce surveillance and response system of the national surveillance system :
    • Risk assessment
    • Identify effective prevention measures
    • Training in field epidemiology
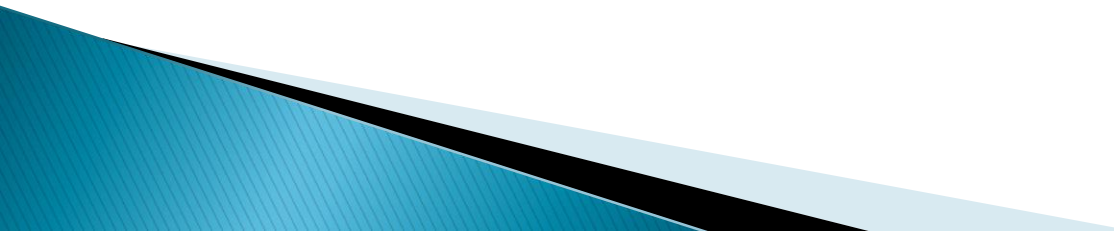   • Research activities
    • National surveys

Health Surveillance Mission

- **Scientific monitoring:** Collect and analyze available data on new and emerging diseases to identify potential threats

- **Epidemiological surveillance:** Promote the ability of the national epidemiological surveillance system in the areas of early detection, rapid response and investigation

- **Microbiological monitoring:** Rapid identification of microbial strains responsible for new and emerging diseases

- **International surveillance:** Collect data on the situation of new and emerging diseases worldwide, including those with epidemic potential
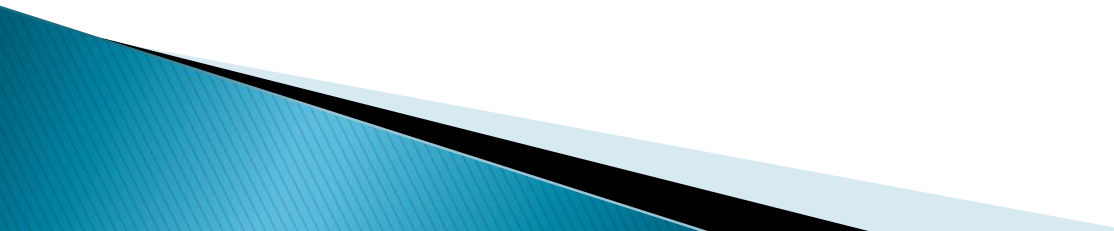
Environmental surveillance Mission

- **Climate monitoring:** Integrating monitoring of climatic factors with health effects

- **GIS:** Implement geographic information systems integrating environmental and climate data

- **Sociological monitoring:** Collect data and conduct studies on the habits, the emerging social determinants of behavior

- **Entomological monitoring:** Collect data on emerging vectors and develop a risk mapping

Communication-training mission

- Contribute to enhancing training in the field of Epidemiology, assessment and risk management

- Contribute to the dissemination of valid and relevant information in the field of new and emerging diseases

- Develop a proactive partnership with the media and communication specialists
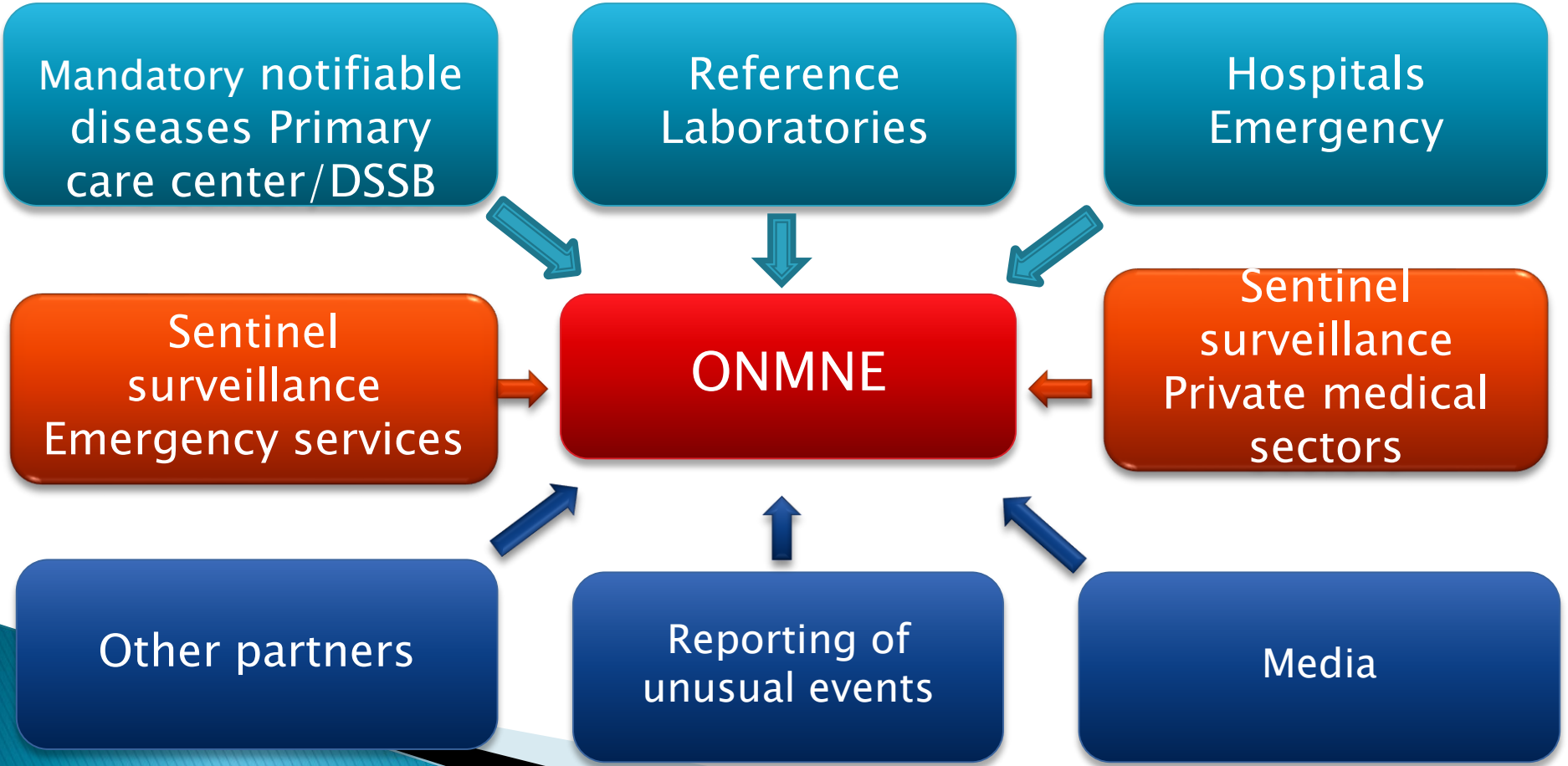
First Priority

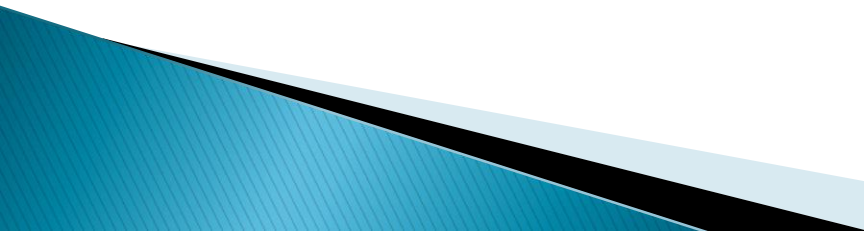**Establishment of Early Warning System**

- Improve the monitoring of potentially epidemic diseases
- Implementation of a specific monitoring system
- Reinforce International surveillance
- Strengthening Field Epidemiology Training
- Emerging risks Assessment

Early Warning System Conceptual framework

Director Scheme of potentially epidemic diseases surveillance

Mandatory notifiable diseases Primary care center/DSSB

Reference Laboratories

Hospitals Emergency

Sentinel surveillance Emergency services

ONMNE

Sentinel surveillance Private medical sectors

Other partners

Reporting of unusual events

Media

Strengths and weaknesses

1. What EWAR functions are well implemented
    1. Public health sector reporting : not integrated
        1. Mandatory system (IBS annual reporting)
        2. Specific diseases vertical program
    2. International surveillance
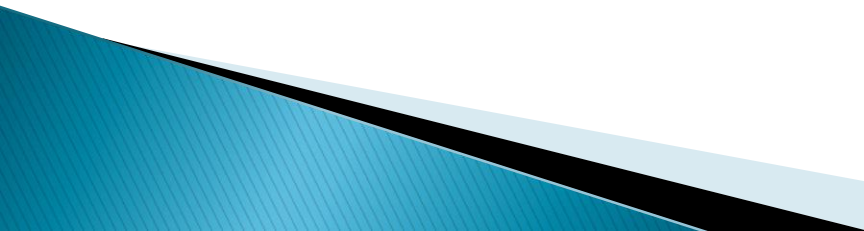   3. National Health Warning Unit

Strengths and weaknesses

3. What EWAR functions missing
    ◦ Creation of a Regional Health Warning Unit
    ◦ Establishment of partners networks
    ◦ Establishment of an online information system
        • Electronic reporting
        • Commune data base
        • National alert data base
        • National alert platform
        • Partners network
        • Mapping of risk
        • Community reporting
    ◦ Coordination with neighbor countries

Next steps for strengthening of EWAR

- Adoption of the strategic plan : political
  - Director scheme of different actors: organizational and regulatory aspects
  - National protocol of data sharing
- Elaboration of action plan (national and regional)
  - Development of standardized protocols
  - Preparation of records of data collection
  - Preparation procedures and guides
- Computerized monitoring system and electronic transmission of information : development of tools
- Training of different actors (MediPIET)
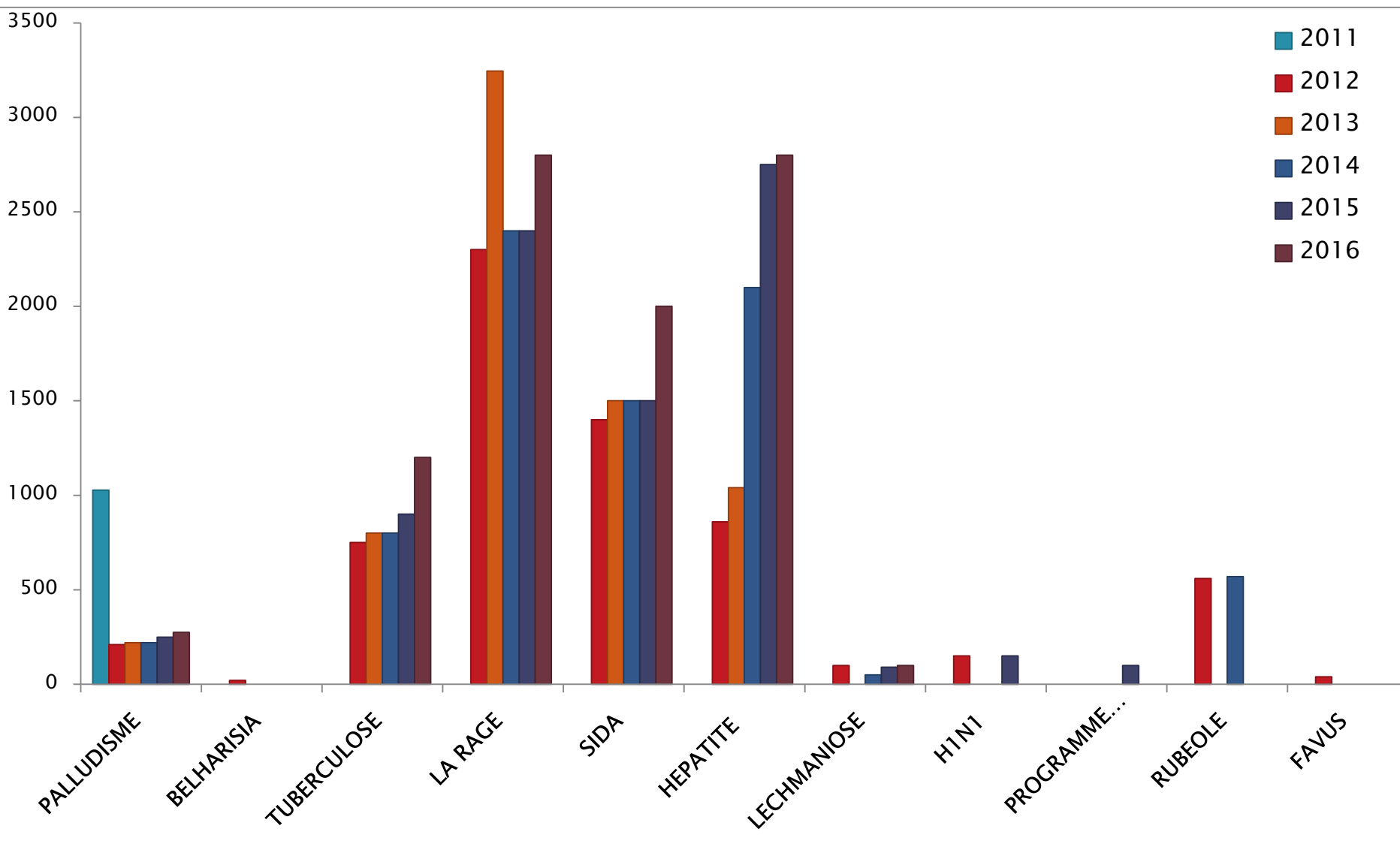- Conduct simulation exercise

Next steps for strengthening of EWAR

◦ Implementation of a sustainable health surveillance system based on private medical doctors
◦ Implementation of a sustainable health surveillance system based on hospital emergency departments
◦ Establish of microbiological laboratory network surveillance
◦ Implementation of a health surveillance system based on private laboratory
◦ establishment of an environmental warning system
  · Climate warning system
  · Animal and entomological system
◦ Connection to other partners (other administrative database)
  · Common WEB–SITE
◦ Human resources capacity development and training

FINANCEMENT DES PANDÉMIES

MD

ANNÉES	2011	2012	2013	2014	2015	2016
PALLUDISME	1028	210	220	220	250	275
BELHARISIA		20				
TUBERCULOSE		750	800	800	900	1200
LA RAGE		2300	3245	2400	2400	2800
SIDA		1400	1500	1500	1500	2000
HEPATITE		860	1040	2100	2750	2800
LECHMANIOSE		100		50	90	100
H1N1		150			150	
PROGRAMME NATIONAL POUR LA PREVENTION DES MALADIES NOUVELLES ET EMERGENTS					100	
RUBEOLE		560		570		
FAVUS		40				
TOTAL	1028	6390	6805	7640	8140	9175
EVOLUTION		521%	6,50%	12,20%	6,50%	12,70%

Financement des pandémies

THANK YOU FOR YOUR ATTENTION