

# Disease for Control Elimination & Eradication





CONTROL

ELIMINATION

ERADICATION

# CONTROL

- Reduction in the incidence, prevalence, morbidity or mortality of an infectious disease to a locally acceptable level

Dowdle 1998

- Routine intervention measures essential

# ELIMINATION

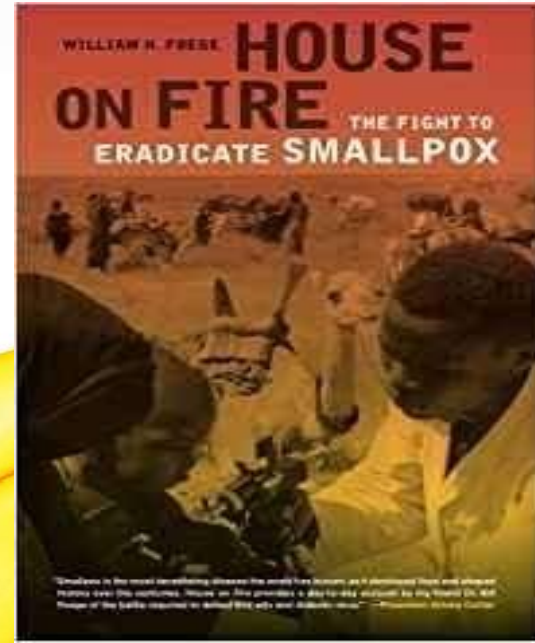
- Elimination as reduction to zero of the incidence of disease or infection in a defined geographical area
- Continued intervention measure are needed to prevent re-emergence & re-establishment of transmission of disease.

# ERADICATION

- Permanent reduction to 'zero' of the worldwide incidence of infection
- Routine intervention measure are no longer needed once interruption of transmission has been certified worldwide

# SMALL POX

- World has eradicated only one disease till date
- Last case reported in Somalia...26<sup>th</sup> Oct 1977.
- 2 years before in India, Bihar ..17<sup>th</sup> May1975
- **Declared eradicated in 8<sup>th</sup> May 1980**
- India declared Small pox free in July 1977.





## *3 diseases planning for eradication in world*

- *Poliomyelitis*
- *Measles*
- *Guinea worm infection*

# DISEASES ERADICTED FROM INDIA

- ✓ Small Pox
- ✓ Guinea worm
- ✓ Yaws /Endemic treponematosiis
- ✓ Poliomyelitis



# Guinea worm

- Infection spread via stagnant water
- In India eradication project launched in 1983-84
- Two third of cases was reported in MP& Rajasthan
- Last case reported in 1996
- India declared disease free in 2000, by WHO



# Yaws

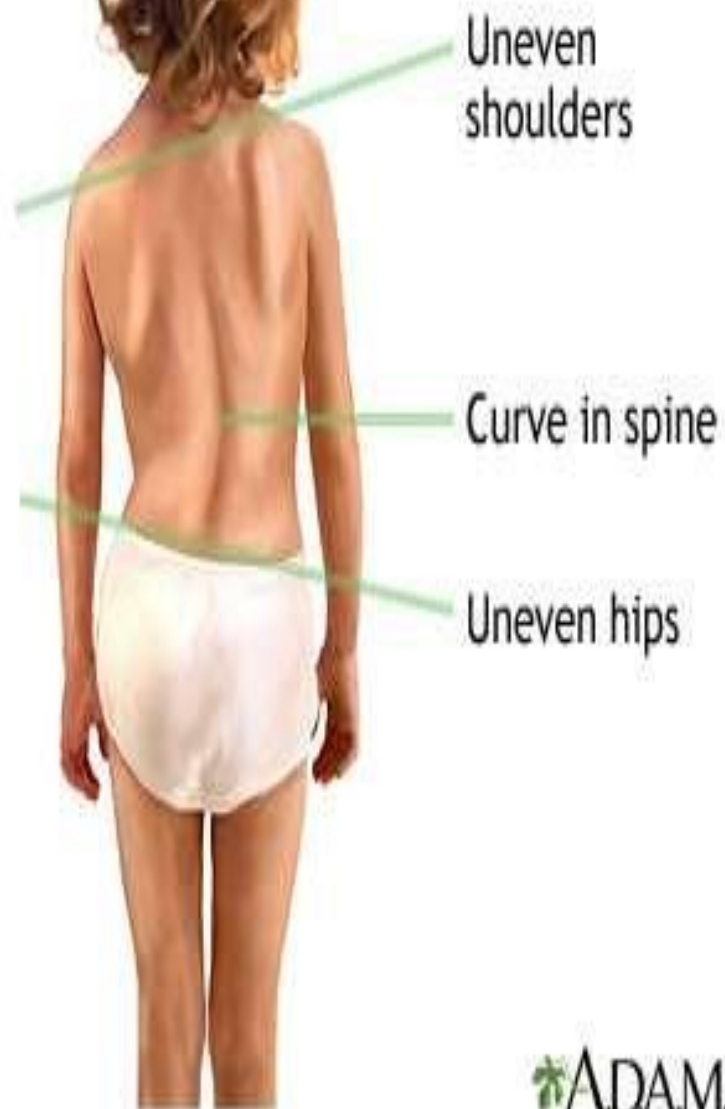
- Bacterial infection of skin, bone & joints
- 1<sup>st</sup> country to be eradicated
- Between 1952-64, 0.2 million death occurred in Odisha, MP, Maharashtra, Andhara, TN
- Eradication program launched...1996-97
- Last cases in India...Oct 2003 in tribal groups
- Elimination...Sept 2006
- Eradication..July 2016



# Poliomyelitis

- Polio virus2/wild poliovirus has been eliminated in India
- Polio eradication campaign ...1995  
by the help of live polio vaccine
- Efforts to eradicate global polio began at...1998
- Globally, polio cases reduced by 99%
- Last case in India...13<sup>th</sup> Jan 2011
- Polio eradicated In India...20<sup>th</sup> Sep 2016

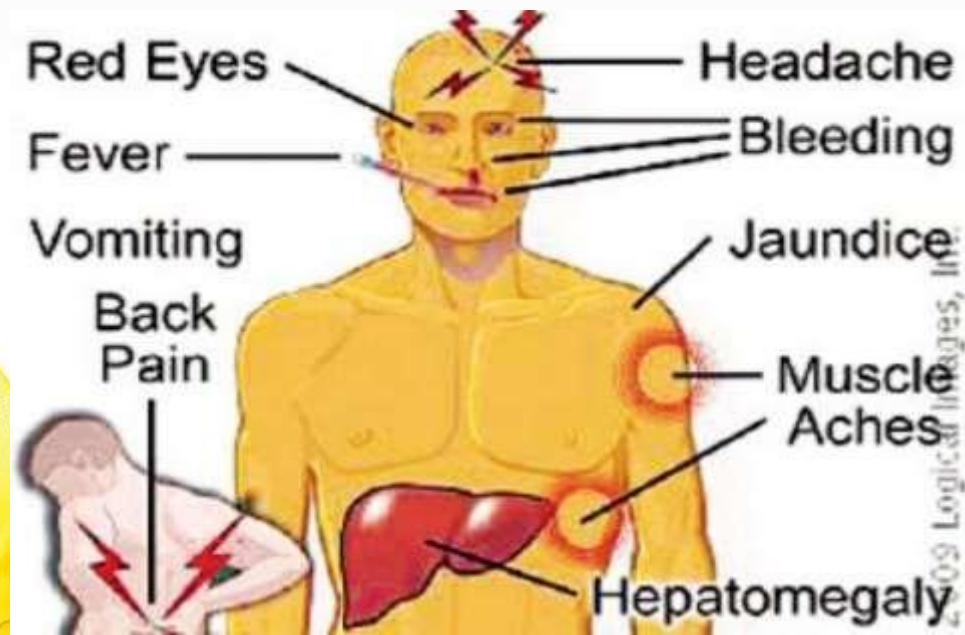
## Signs of scoliosis





# Yellow fever

- Transmitted through mosquito
- Two types based on clinical & etiological factor... Urban and Jungle
- Vaccination available
- Not present in India





# Disease eliminated from India

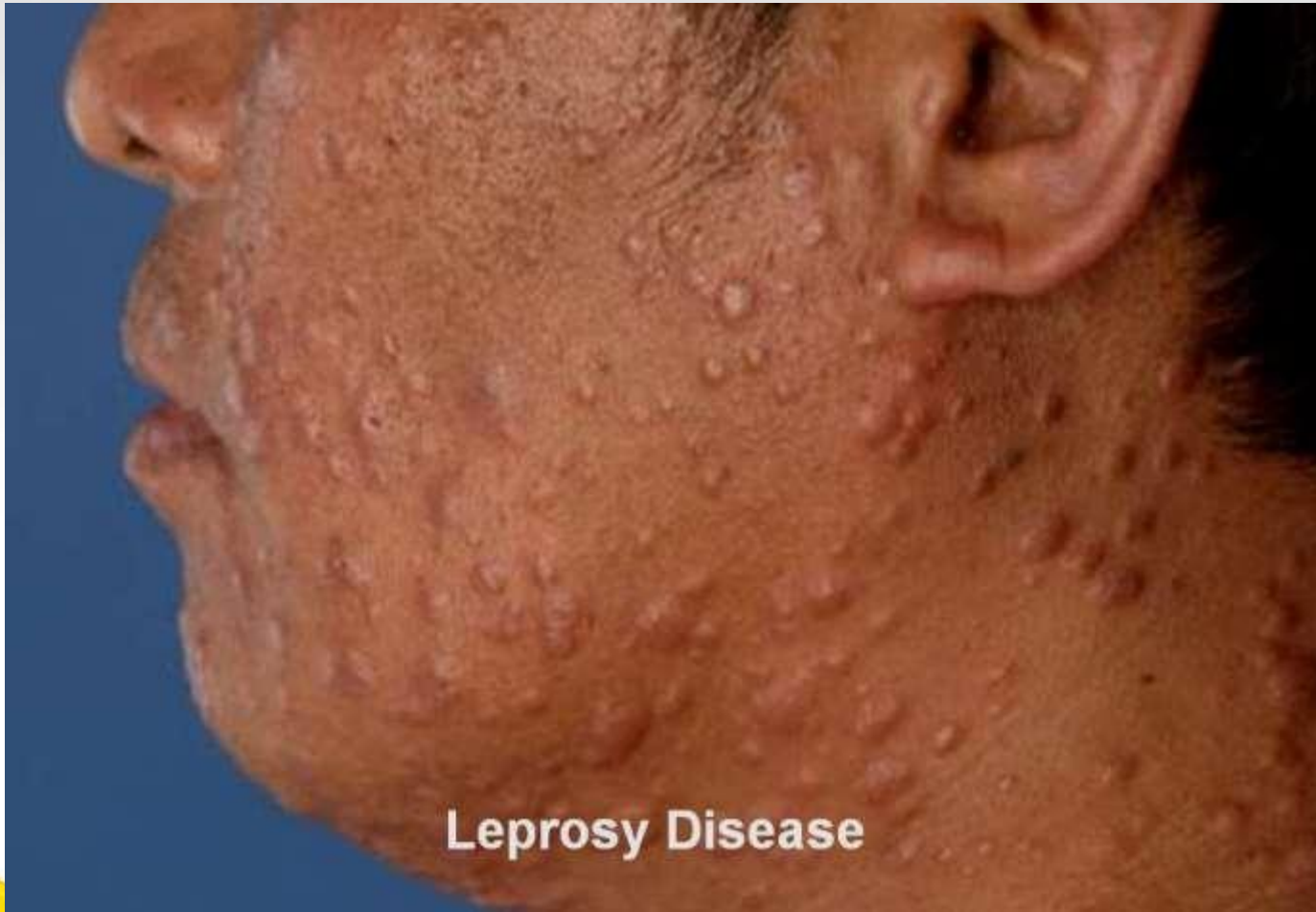
Below is the list of diseases which India officially declared itself free from all mentioned

- ✓ *Small pox*
- ✓ *Guinea worm*
- ✓ *Yaws*
- ✓ *Polio*
- 5. *Leprosy*
- 6. *Tetanus*
- 7. *Avian influenza*

# Leprosy

- Infectious disease causing skin lesions and nerve damage
- Important cause of global chronic neurological disability
- National leprosy control program launched in 1955
- Elimination criteria for leprosy- less than one case of leprosy per 10,000 population
- Elimination at National level – **Dec 2005**
- 2016, ICMR did sample study, almost same as of 2005
- Eradication program- 'SPARSH' Leprosy awareness campaign...launched on **30<sup>th</sup> Jan 2017**

**WORLD LEPROSY DAY**



**Leprosy Disease**

# Tetanus (Maternal & Neonatal)

- Increased coverage of maternal tetanus immunization (TT)
- **Aug 2015**, eliminated in India
- 14<sup>th</sup> July 2016 'Janani Suraksha Yojana' encouraged women to give birth in a health facility



## India Eliminates Maternal and Neonatal Tetanus

WHO confirms neonatal tetanus  
reduced to less than 1 case/1000  
live births in all 675 districts



# Avian Influenza

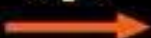
- Outbreak in India...Oct2016 – Feb 17  
Many states, including Kerala (allapuzha & kottayam)....H5N1 & H5N8
- India declared itself free from Avian influenza (H5N1 and H5N8) from June 6<sup>th</sup> 2017....notified to WHO for animal health

# AVIAN INFLUENZA : BIRDS TO HUMANS

Migratory  
water birds

Domestic birds

Humans



- Hong Kong 1997, H5N1
- HK, China 1999, H9N2
- Netherlands 2003, H7N7
- Hong Kong 2003, H5N1
- Vietnam & Thailand 2004, H5N1



# India National Centre for Disease Control

Assist states with infectious disease control through assistance multidisciplinary outbreak investigation, communicable disease surveillance, networking of public health lab and capacity building.

# National Control Program



National Centre for Disease Control  
(formerly National Institute of Communicable Diseases)

Directorate General of Health Services, Ministry of Health & Family Welfare  
Government of India



- National program for family planning & primary healthcare
- National vector born disease control program
- Acute respiratory infection program
- Expanded program for immunization
- National malaria control program
- National diarrheal control program
- National tuberculosis control program

# National Control Program

- National nutritional program
- Women health project
- National maternal, neonatal & child health program
- National program for prevention & control of hepatitis
- National program for prevention & control of blindness
- National program on non-communicable disease
- National program on mental health & injuries
- National dengue fever control program

**Thank you**

