

# Eradication of parasitic diseases

ICEID

26 Mar 2002

# Terms

- Elimination
- Eradication
- Extinction

# Elimination

Reduction to zero of the incidence.....*in a defined geographic area... continued measures to prevent reestablishment of transmission are required.*

Example: measles

Dahlem Workshop, Berlin, 1997

# Eradication

Reduction to zero...

*worldwide...intervention methods are  
no longer required.*

Example: smallpox

Dahlem Workshop, Berlin 1997

*“Elimination is an artificial term.”*

Conference on Global Disease Elimination/Eradication,  
Atlanta, 1998

# Eradication

The absence of a disease agent in nature in a  
*defined geographic area ....*

Control measures can be discontinued when the  
*risk of disease importation is no longer  
present.*

Example: smallpox

Conference on Global Disease Elimination/Eradication, Atlanta, 1998

# Extinction

*The specific disease agent no longer exists in nature or the laboratory.*

Example: Not smallpox

Conference on Global Disease Elimination/Eradication,  
Atlanta, 1998

# Previous Eradication Programs

- Hookworm
- Yellow fever
- Malaria
- Yaws



# Biological criteria for eradication of human infectious diseases

- Interventions are available to interrupt transmission
- Tools are available for diagnosis and agent detection
- Humans are essential for agent life cycle

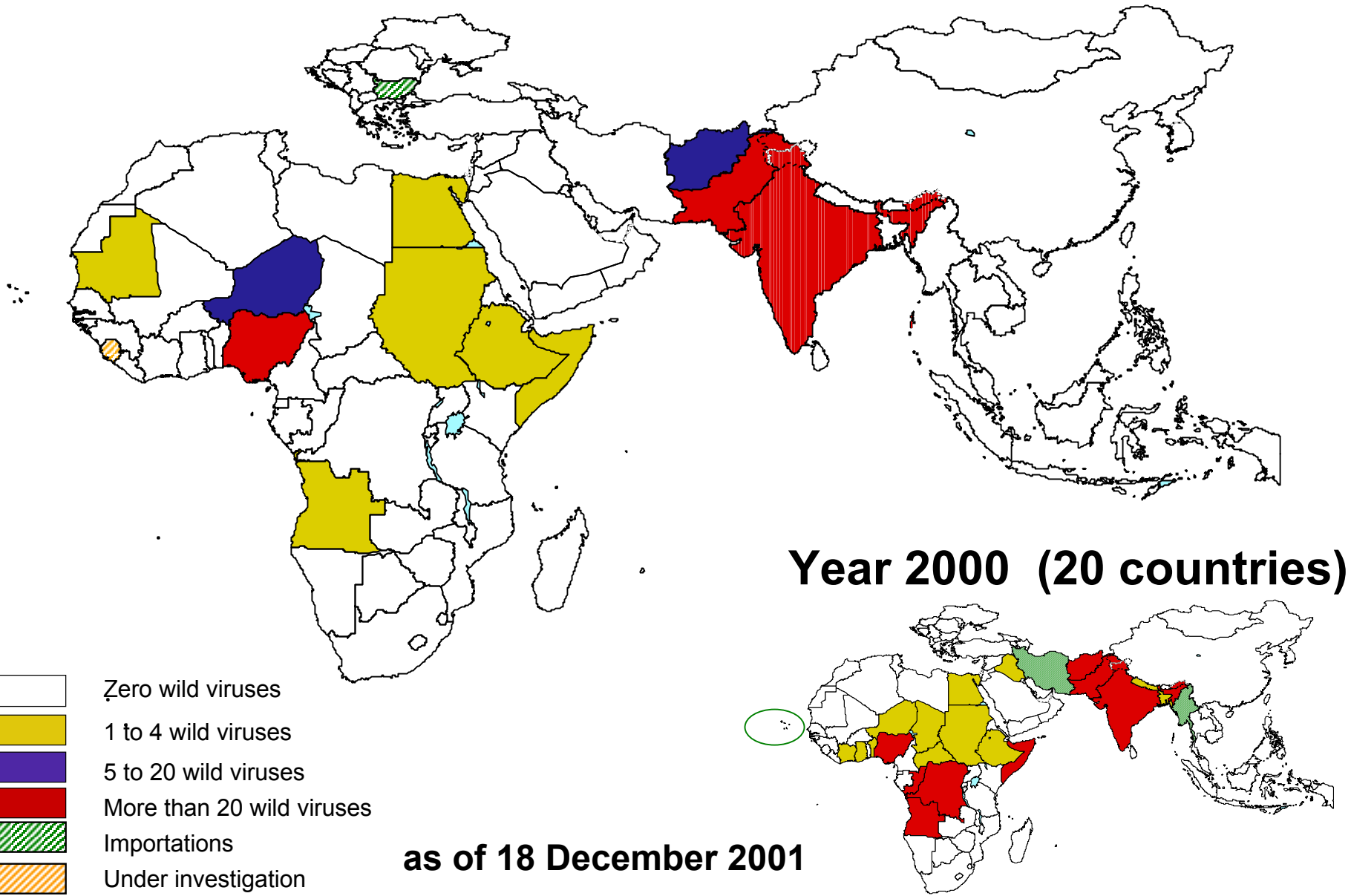
# Social/Political criteria for eradication

- Must have strong local and global political will
- Must have adequate resources

# Current Eradication Program

- Guinea worm
- Polio

# Intensity of indigenous wild poliovirus transmission in 2001 (11 Countries)



*“There are intrinsic and unavoidable tensions between the concepts of eradication and sustainable health development”*

Conference on Global Disease Elimination/Eradication,  
Atlanta, 1998

# Arguments against eradication programs

- Costs are high
- Risks of failure are high
- Resources are diverted from other important health issues
- Health infrastructures are undermined
- Donors drive the program

# Arguments in favor of eradication programs

- They attract donors
- Scope and objectives are well-defined
- They have end-points
- Economic savings accrue forever
- They provide global equity

# Real benefits of eradication programs

- Develop effective leadership and management in health
- Establish high performance standards for surveillance and public health action
- Produce sustainable health improvement



*Disease elimination/eradication  
is the ultimate goal of public  
health.*

It is only a matter of how and  
when.