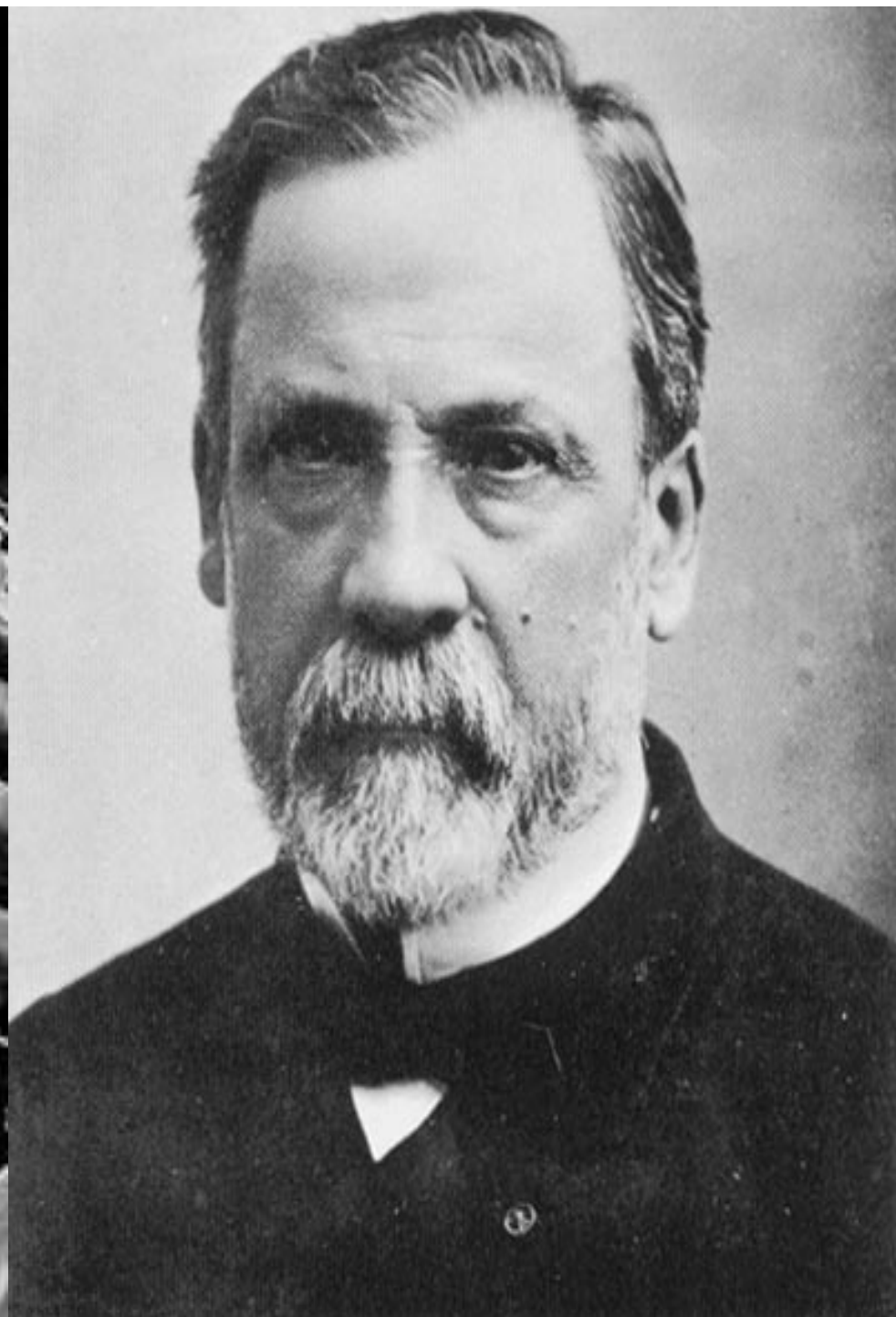


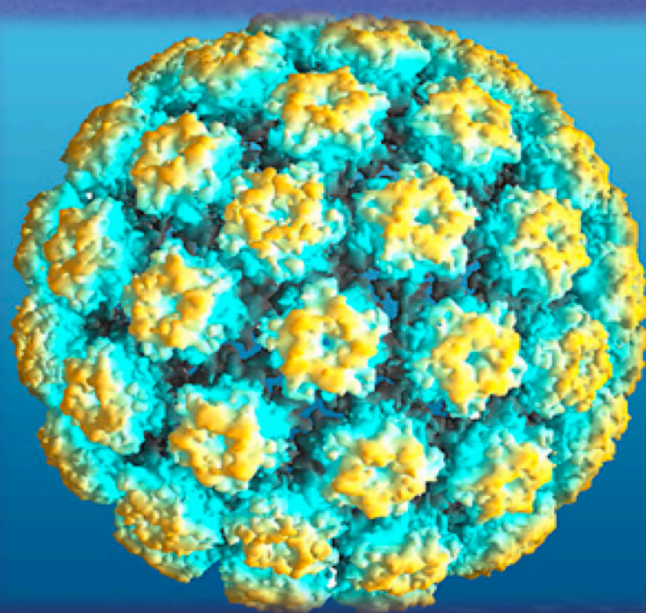
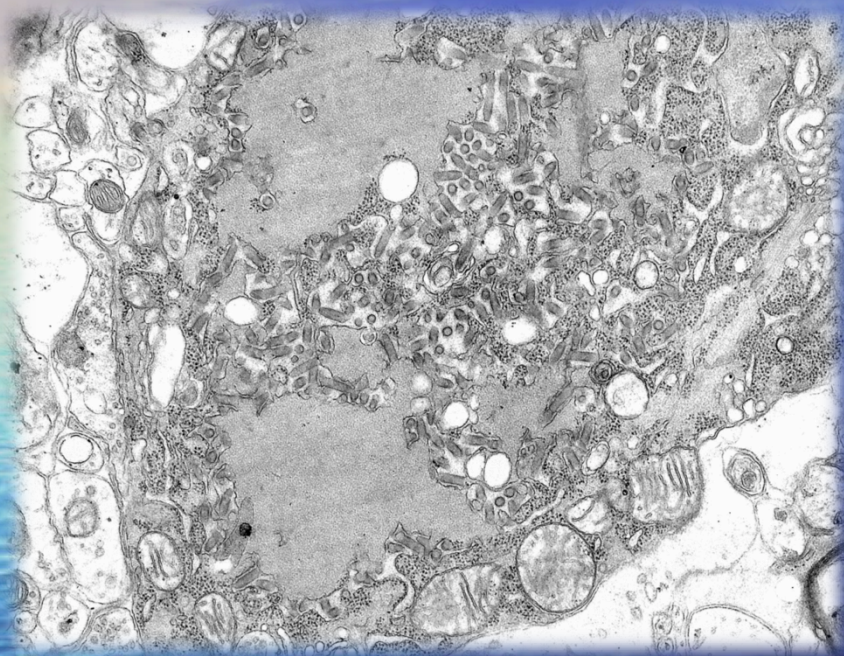
# ADULT IMMUNIZATIONS



**Carlos A. González-Oppenheimer, MD, FACP**  
**Internal Medicine Program Director**









# ADULT IMMUNIZATIONS



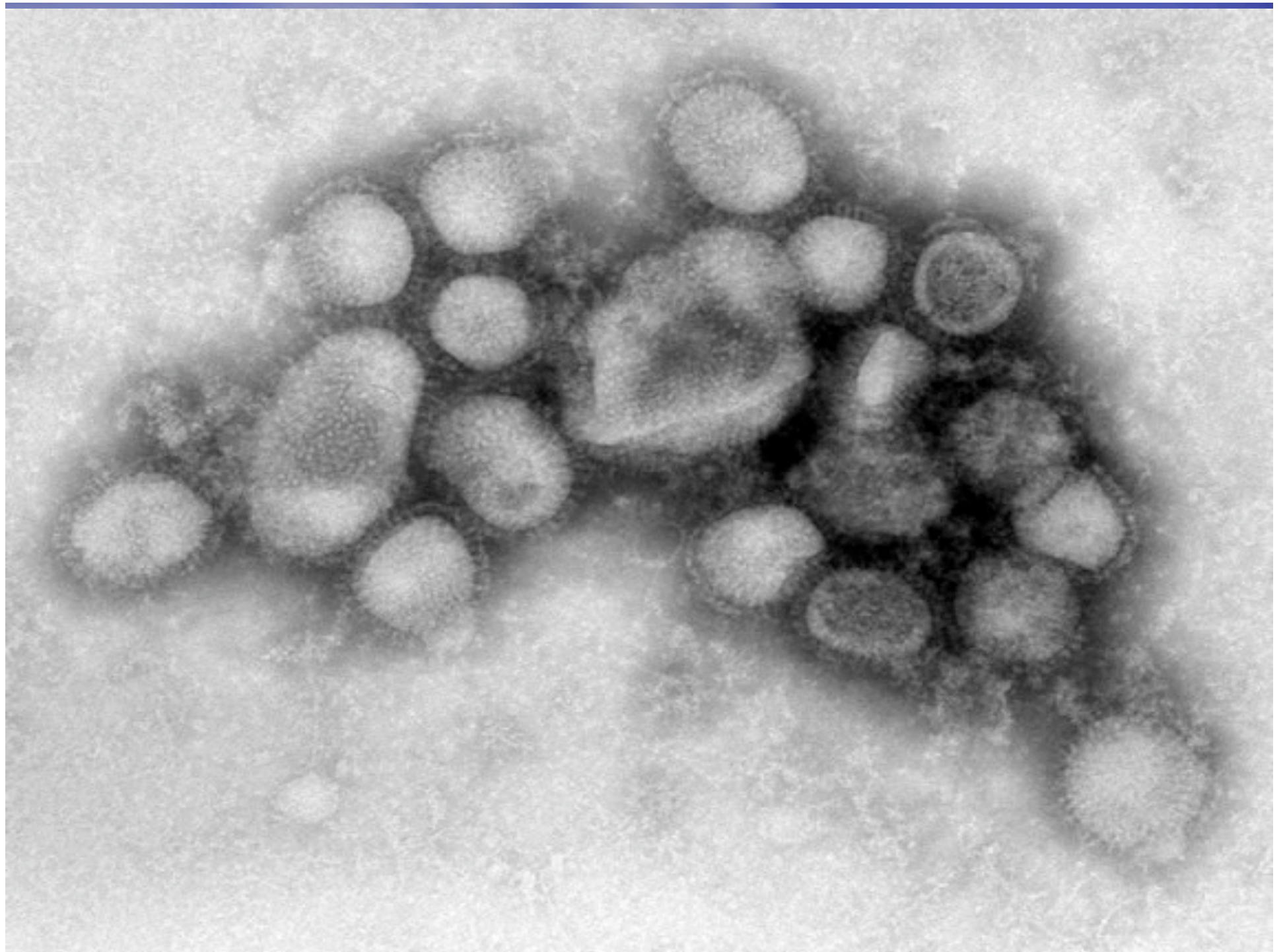
## ■ Childhood Immunizations:

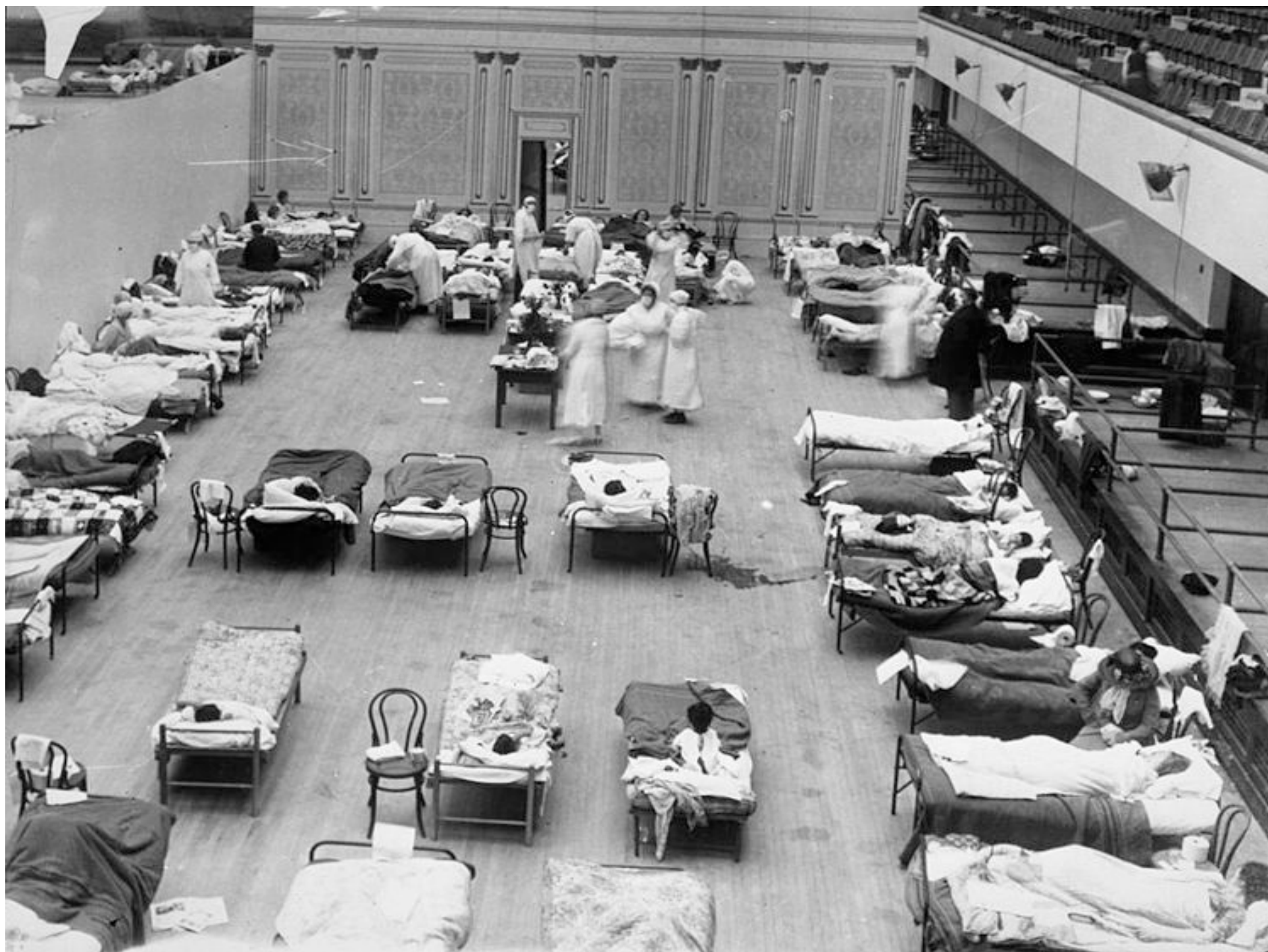
- Cost effective and health cost saving since many decades
- Pertussis, Polio, Measles and Rubella

## ■ Adult Immunizations:

- 1970 Universal campaign, cost effective but not health care saving (Pneumococcal and Influenza). "Epidemic" oriented

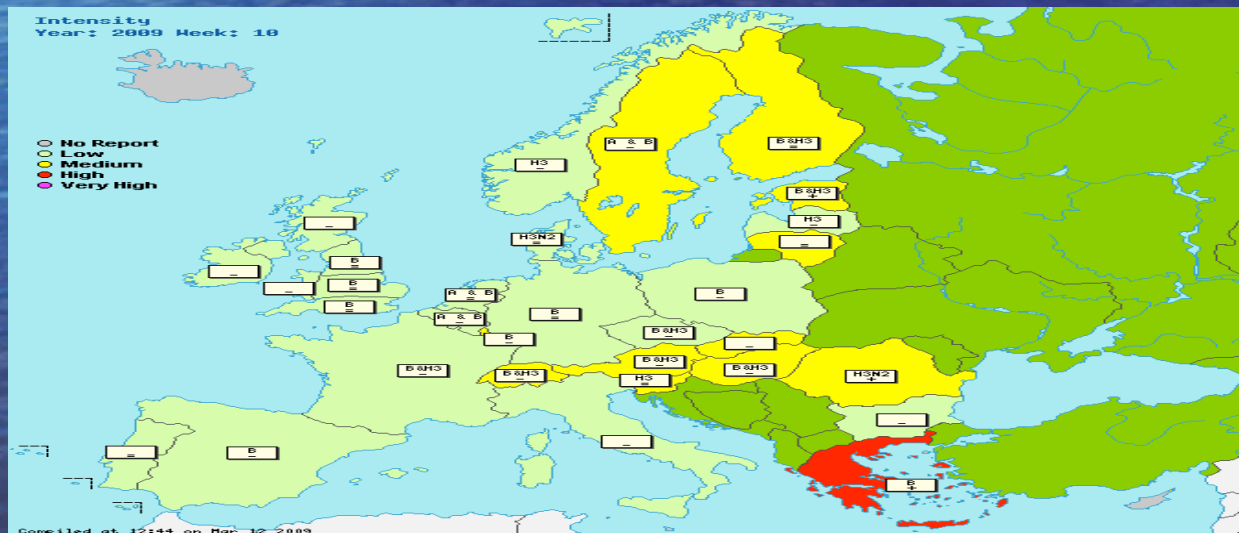
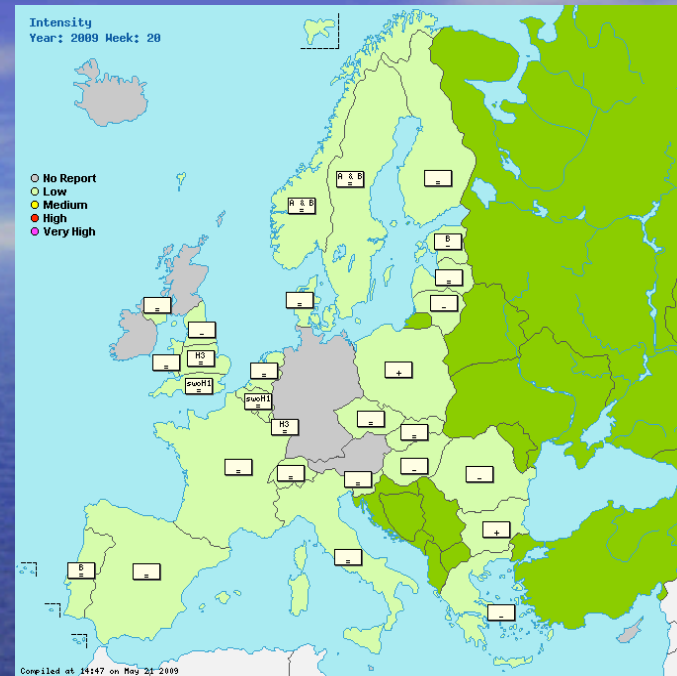
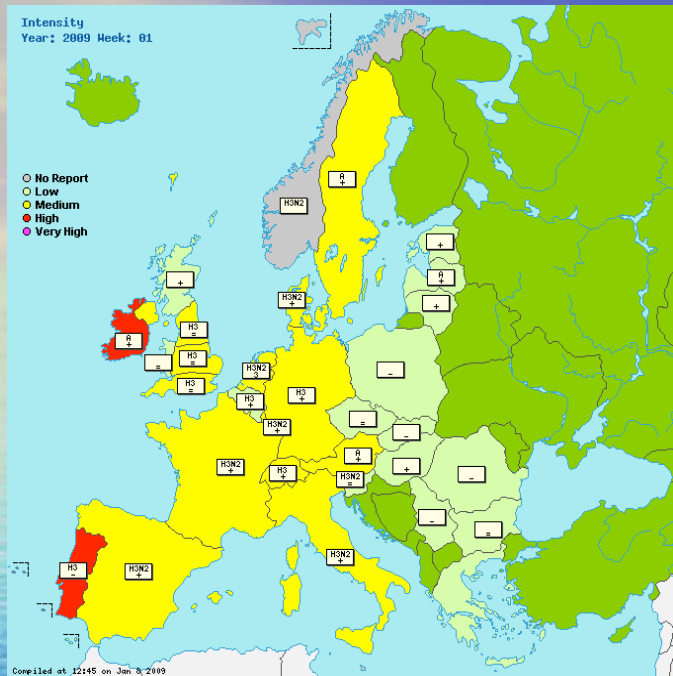








# SWINE INFLUENZA



# VACCINE ADMINISTRATION & HANDLING

- ✚ Most adult vaccines are administered intra-muscular or sub-cutaneously
- ✚ Buttocks are not recommended for any adult vaccine except for large volume vaccines ( most immune globulins)



# Adverse Side Effects

- All vaccines can cause local reactions, flu like syndromes (live or live attenuated vaccines),
- Allergic reactions (influenza/ poultry allergy)
- Guillan-Barré like paralysis (poliomyelitis)

# Hepatitis B

- All persons through the age of 18
- All adults wishing to be protected
- High risk persons
- Persons with chronic liver disease



# Hepatitis A

- All persons wishing to be protected against HAV
- Persons who travel or work in all countries except, US, Western Europe, New Zealand, Australia, Canada, Japan
- Persons with chronic liver disease
- Men who have sex with men
- Injecting and no injecting drug users
- Laboratory personnel who work with HAV in experimental settings
- People who receive clotting factors
- Food handlers\*
- Unvaccinated adults 40 or younger with recent (2 weeks) exposure
- Persons over 40 with recent exposure immune globulin preferred

# Tetanus diphtheria and pertussis

- All adults who lack written documentation
- Wound management with > 5 years adm.
- If pregnant- Td or Tdap in 2<sup>nd</sup> and 3<sup>rd</sup> trimester
- Tdap only- adults younger than 65 that have not already received Tdap
- Child care providers and grandparents under 65 should be prioritized for vaccination
- Health care providers should be prioritized for vaccination



# Polio

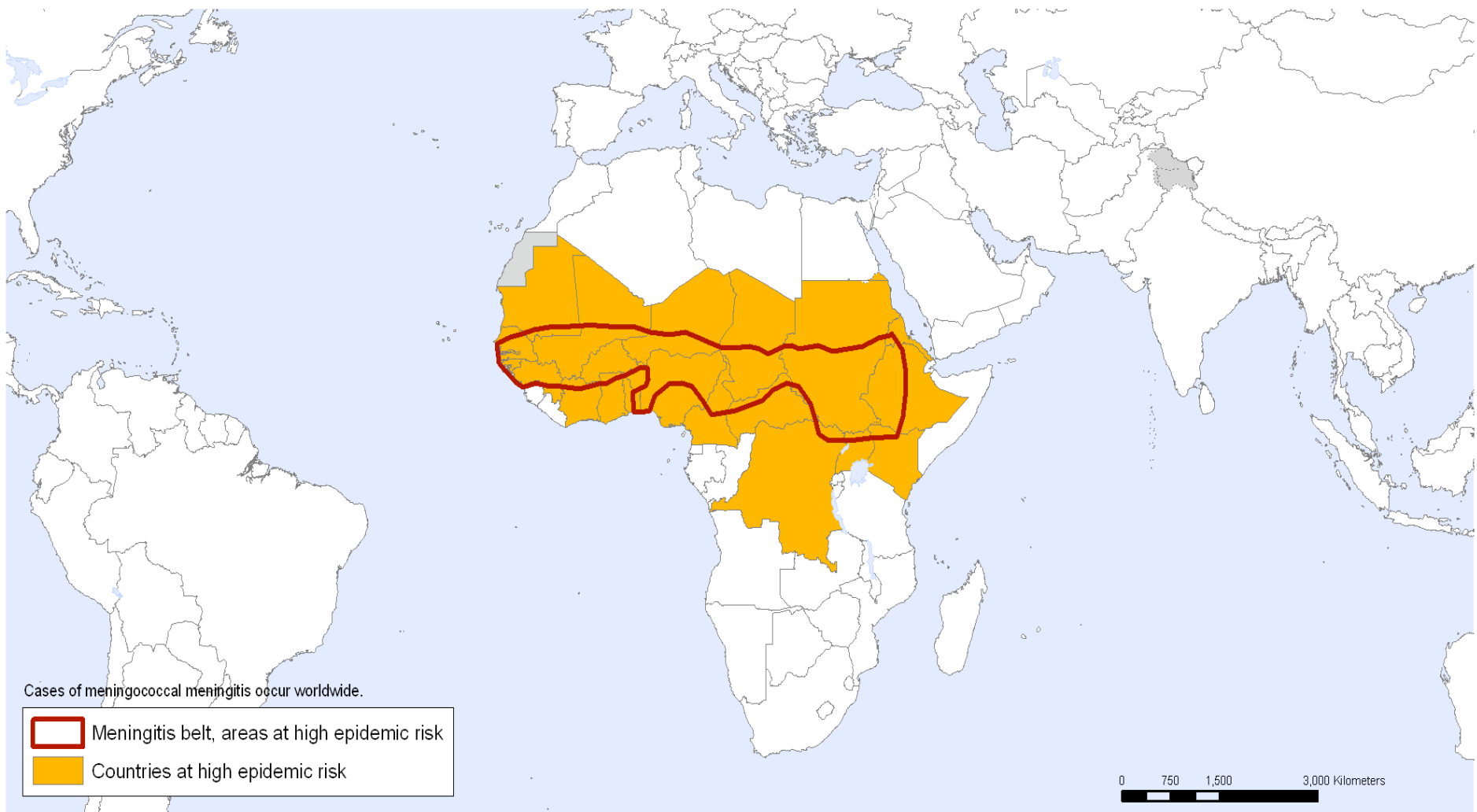
- Adults living in the US who never received or completed primary series
- Traveling to polio endemic areas India, Pakistan, Afghanistan and Nigeria

# Meningococcal

- All persons age 11 to 18
- College fresh persons living in a dormitory
- Persons with asplenia
- Microbiologist exposed to N. Meningitidis
- People traveling to the “meningitis belt”



## Meningococcal meningitis, countries or areas at high risk, 2008



The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

Data Source: World Health Organization  
Map Production: Public Health Information  
and Geographic Information Systems (GIS)  
World Health Organization



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# Varicella

- All adults without evidence of immunity





Zoster

# MMR

- Persons born in 1957 or later ( specially born outside US) should receive at least one dose of MMR unless there is proof of immunity
- Persons of high-risk groups should receive at least two doses
- Women of childbearing age without proof of immunity



# Influenza

- Prevents more than “flu” the pneumonic process and spread
- Seasonal perspective

# Influenza

- All persons 50 and older
- All persons who want to reduce the likelihood of becoming ill with influenza
- Persons with medical problems
- Persons living in chronic care facilities
- Persons who work with high risk people
- Students or personnel living in dormitories
- Travelers at risk for influenza traveling to endemic areas of influenza( see traveling reports)



# Pneumococcal

- More than Pneumonia prevents the systemic invasive component like bacteremia
- No evidence support for a booster each 5 years except persons over 65 and organ recipients and immunocompromised
- Given IM reduce the chance of adverse reactions

# Pneumococcal polysaccharide

- Persons 65 or older
- Persons with chronic illness such as:
  - Asplenia
  - Hodgkin's
  - Multiple Myeloma
  - Chronic Renal Disease
  - Cancer
  - Nephrotic Syndrome
  - Marrow or organ Transplantants
  - Chemotherapy or corticosteroid therapy
  - Smokers and COPD



# HPV

- All previously unvaccinated women under 26 years of age

# The Future

- HIV
- H1 Influenza



# Information and orientation

- CDC- *Important Information Statements*
- Immunization Action Coalition  
[www.immunize.org](http://www.immunize.org)