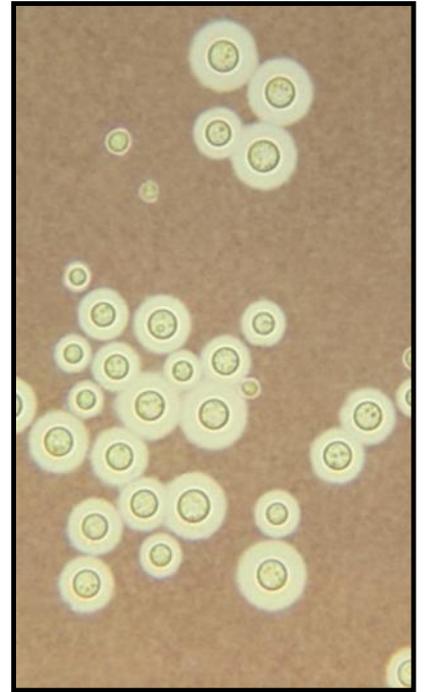


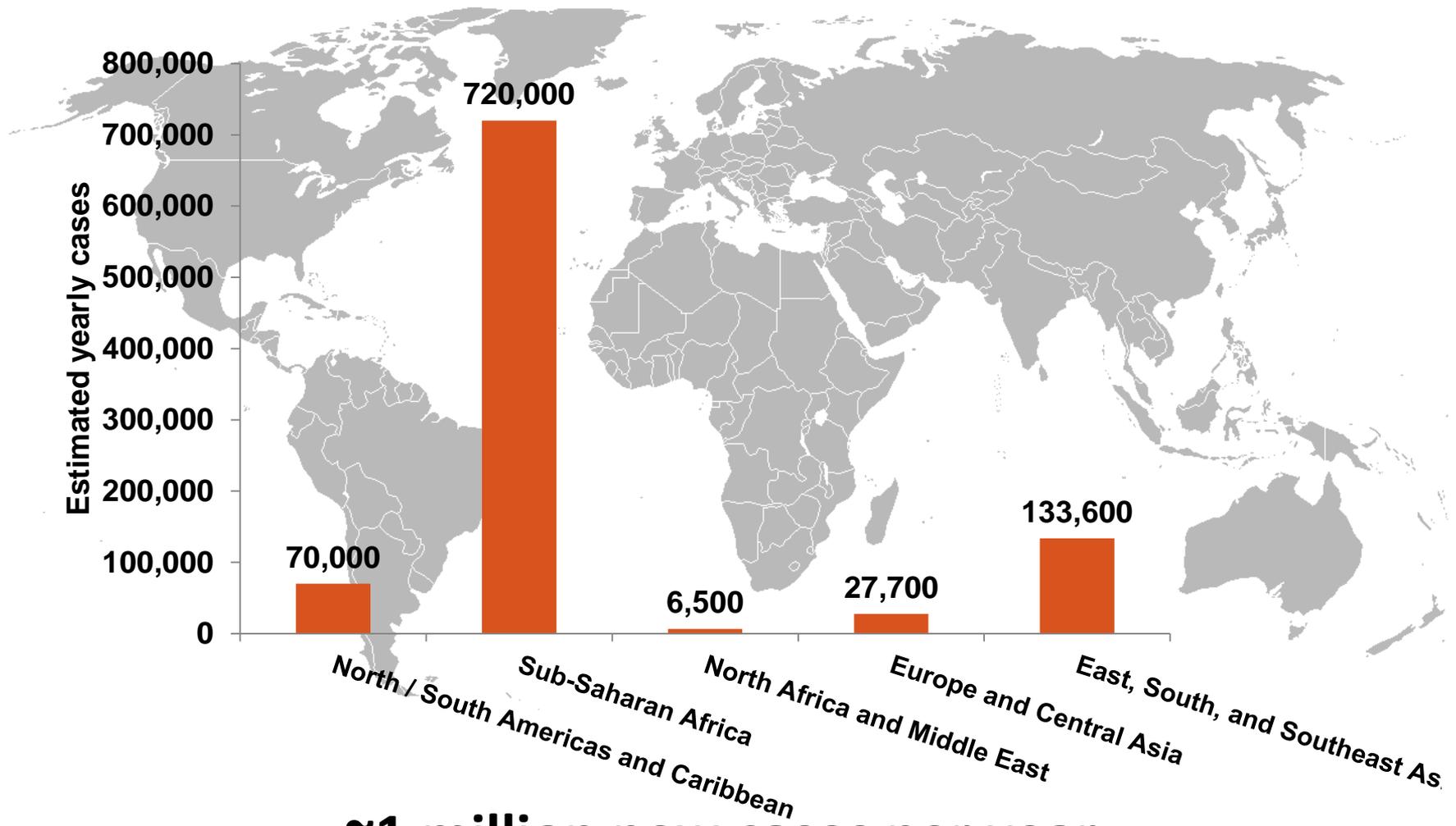
# *Cryptococcus neoformans*

- Fungus found in soil and bird feces
- Common opportunistic infection (OI) in HIV-infected people
  - Primarily manifests as meningitis
  - One of defining OIs of AIDS
- No person-to-person transmission



India Ink microscopy of  
*Cryptococcus*

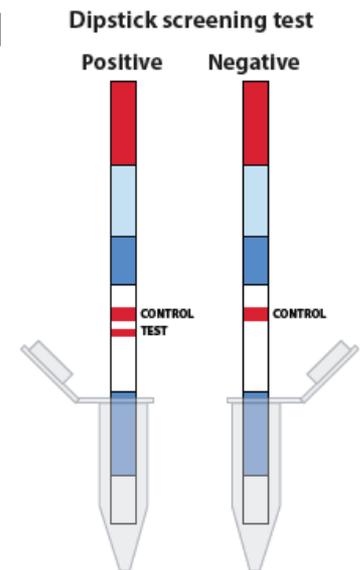
# Global burden of HIV-related Cryptococcal Meningitis



**~1 million new cases per year  
and ~ 625,000 deaths per year**

# CM Diagnostic Methods

- India Ink and culture classically used (poor sensitivity)
- Cryptococcal antigen (**CrAg**) Latex Agglutination (**LA**)
  - High sensitivity and specificity
  - Requires significant laboratory infrastructure
- New CrAg Lateral Flow Assay (**LFA**)
  - Highly sensitive (>95%)
  - Quick(<15min)
  - Easy to use (Point-of-care testing)
  - Affordable (\$2 per test)



# Cryptococcal Screening

- CrAg tests can detect disease *before* onset of symptoms
- Approach: Screen a subset of HIV infected patients with low CD4 count for CrAg and treat those with a positive test
- Goal: find people with early disease and prevent progression to meningitis
  - Now recommended by World Health Organization

