Diagnostic Needs

- Sensitive and specific molecular assays.
  - Good pipeline
- Sensitive and specific serologic assays that can discriminate antibody response to Zika virus from other flaviviruses
  - Serologic assays that can be used for risk stratification in pregnant women in endemic regions.
  - More studies to determine best antigen(s) to use.
- Sensitive and specific rapid tests that can be used at point-of-care
- Assays to discriminate vaccine response from natural infection
- Access to well-characterized clinical specimens (acute and convalescent) for assay validation, regulatory approval.
  - Serial bleeds after PCR positive to validate serologic assays.

Clinical specimens

- Need access to well-characterized clinical specimens (acute and convalescent) for assay validation, regulatory approval.
  - Critical to have convalescent serum (serial bleeds) from PCR positive cases to validate serologic assays.
  - Assess reliability of detecting Zika specific IgM/IgG response in primary and secondary infection.
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Diagnostic Testing - Research Needs

- studies to determine the duration of Zika virus shedding in various specimen types (urine, saliva, semen, amniotic fluid, CSF.
- Best antigen(s) for serology tests
  - functional characterization studies of antibodies and their binding epitopes cross-reacting between Zika and other flaviviruses.
  - novel diagnostic assays and antigens capable of distinguishing the antibody response to related flaviviruses.
- Improved, highly specific, high-throughput quantitative assays to measure antibody-mediated neutralization and enhancement of Zika virus infection.