SARS CoV 2 Testing

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NPHET

250220
Sample Preparation

- Rate limiting step
- Manual
- Viral inactivation
- Requires class 2 cabinet
- 10 samples per person per hour
- Begins in AM and continues through the course of the day
- 30 samples in AM / 30 samples in PM
Extraction

• Automated platform

• 96 well plate format

• 30 samples accommodated (controls; targets)

• Requires 1 hour
Liquid Handling

- Automated platform
- 96 (384) well plate
- Takes 2 hours per 96 well plate
- 30 samples accommodated
PCR

• Automated platform

• 96 well format

• Takes 2 hours for 90 results (incorporating controls): equates to 30 samples

• Result analysis & interpretation
Capacity

Current Assay (LDT)
- One cabinet (2 WTE)
  - 30 samples in AM (results around 1700)
  - 30 samples in PM (results next morning)
- Two cabinets (3 WTE)
  - 60 samples in AM (results around 1700)
  - 60 samples in PM (results next morning)

Commercial Assay
- Controls included
- 90 samples per PCR plate
  - Sample preparation still the rate limiting step
  - 90 samples in AM (results around 1700)
  - 90 samples in PM (results next morning)