

## Methodology for Sero-surveillance of COVID-19 using CLIA (by detecting IgG antibodies) at district level in Andhra Pradesh

13<sup>th</sup> Aug'2020

### Sample Sizes:

The assumptions considered are relative precision of 20% in urban areas and 40% in rural areas respectively, confidence interval of 95% and design effect of 2.5. Instead of having identical sample sizes across all districts, we propose differential sample sizes basis the estimated prevalence of COVID in various districts.

We have derived the estimated prevalence utilizing an IFR of 0.1%-0.15%. Assuming 10% of deaths from rural areas, we determine sample sizes for Urban and Rural areas separately for various districts as shown below:

District	Suspected Urban Prevalence	Urban Sample size	Suspected Rural Prevalence	Rural Sample Size	Total Sample size
Chittoor, Kadapa, Kurnool, Visakhapatnam	10-20%	1,500	1.0-1.5%	3,000	<b>4,500</b>
Guntur, Prakasam, West Godavari, Srikakulam, Vizianagaram	c. 25%+	1,000	1.5-2.0%	3,000	<b>4,000</b>