

S3 Text Figure 1 shows how minimum depuration time (MDT) follows a concave quadratic form with respect to variability (σ_0), as described in the main text by

$$T(\sigma_0) = b^{-1} \left[-\frac{1}{2}\sigma_0^2 + \sqrt{2}\text{erf}^{-1}(2\varphi - 1)\sigma_0 + \ln\left(\frac{\bar{x}_0}{\Psi}\right) \right]. \quad (1)$$

The maximum MDT (or MDT_{WCV}) occurs when $\sigma_0 = \sqrt{2}\text{erf}^{-1}(2\varphi - 1)$, which is described as the worst case variability (WCV) with regards to MDT.

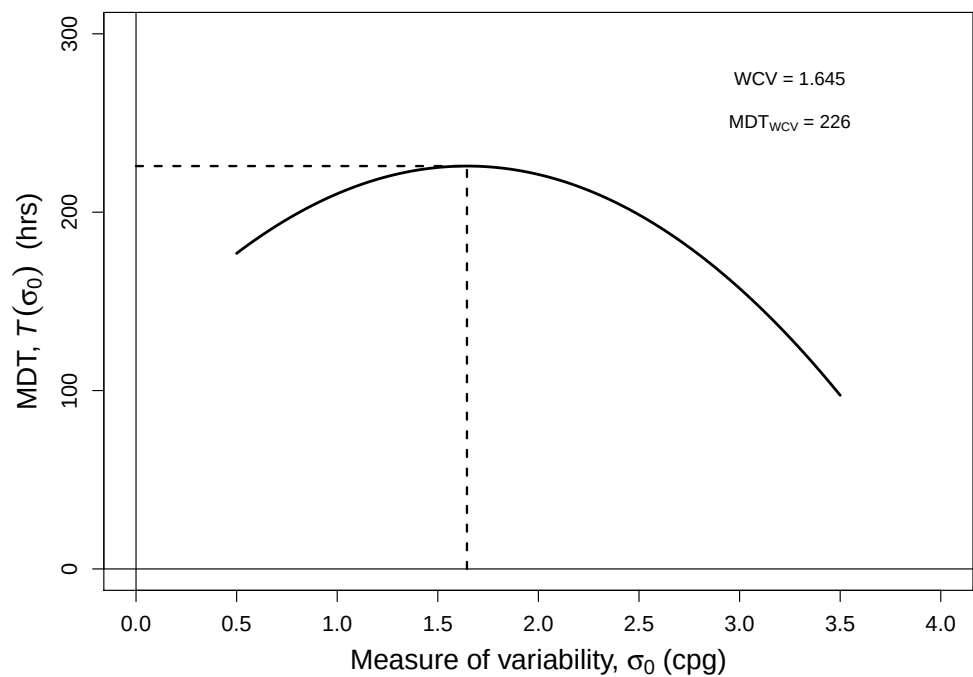


Fig 1. Plot of pathogen variability (σ_0) versus minimum depuration time ($T(\sigma_0)$). Threshold limit $\Psi = 200$ NoV cpg, NoV assurance level $\varphi = 95\%$, and initial mean NoV load $\bar{x}_0 = 1064$ cpg