



Appendix A – Equations

Equation 1

$$DA = D * V * AF$$

DA = number of DNA copies aerosolized

D = number of DNA copies per milliliter

V = sprayed volume in milliliters

AF = aerosol fraction, assumed to be 37.35 percent (0.3735)

Equation 2

$$\text{Log}_{10}\text{reduction} = \text{Log}_{10}(DA/DD)$$

DA = number of DNA copies aerosolized

DD = number of DNA copies detected

Equation 3

$$\text{DNA copies per million sprayed} = 10^{(6 - \text{Log}_{10}\text{reduction})}$$