

# Dengue Fever

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$${}^{CF}D_t^p S_b = (1 - v)\pi_b - p\beta_b S_b I_a - \mu_b S_b + \gamma R_b$$

$${}^{CF}D_t^p E_b = p\beta_b S_b I_a - (\delta_b + \mu_b) E_b$$

$${}^{CF}D_t^p I_b = \delta_b E_b - (\theta + \mu_b) I_b$$

$${}^{CF}D_t^p R_b = \theta I_b - (\gamma + m\theta + \mu_b) R_b$$

$${}^{CF}D_t^p V_b = v\pi_b + m\theta R_b - \mu_b V_b$$

$${}^{CF}D_t^p S_a = \pi_a - p\beta_a S_a I_b - \mu_a S_a$$

$${}^{CF}D_t^p I_a = p\beta_a S_a I_b - \mu_a I_a$$