



CARBONTEQ

## Infected humans

→ Prob of person being bitten :-

net-factor  $\times$  bites  $\times$  infected mosquitoes

→ Susceptible population :-

Total humans - infected humans

→ Prob of transmitting virus :-

total humans  $\times$  transmission prob

→ Recovery of humans :-

recovery time  $\times$  infected humans.

## Infected mosquitoes

→ Prob of infection:-

net factor  $\times$  bites  $\times$  [not infected mosquitoes]  
 $\times$  infected humans.

→ Prob of transmission:-

Total humans  $\times$  Prob (human - mosquito)

→ Mosquito death:-

mosquito life - infected mosquito.