(a)

Instantaneous	**Proposed**
$\lambda \propto [1-(1-\beta)^F] IC$	$\lambda \propto \beta F[Y(C-1)+IC]$ δ^{-1}
$S \rightarrow I$	$S \rightarrow Y \rightleftarrows I$ λ'

S: susceptible β: transm prob per contact
I: infectious, new partner F: contact frequency
Y: infectious, same partner δ: partnership duration
λ: incidence C: simultaneous partnerships
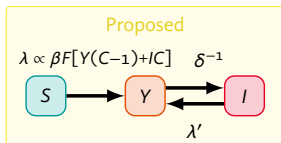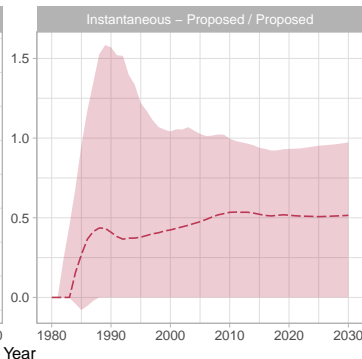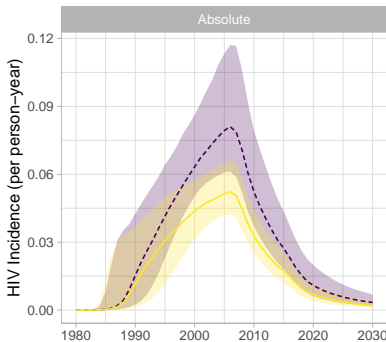
Model (median, 90% confidence interval) ---- Instantaneous — Proposed ---- Relative Difference

(b)