title: Analyzing Screening Guidelines Scenarios

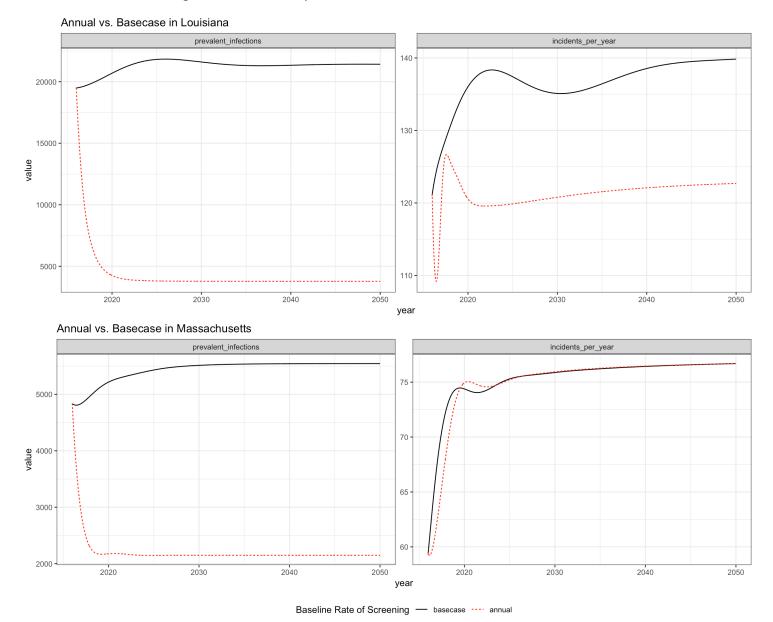
author: Christian Testa output: html\_document

In this document, we'll set the minimum level screening rates for the entire population and the MSM

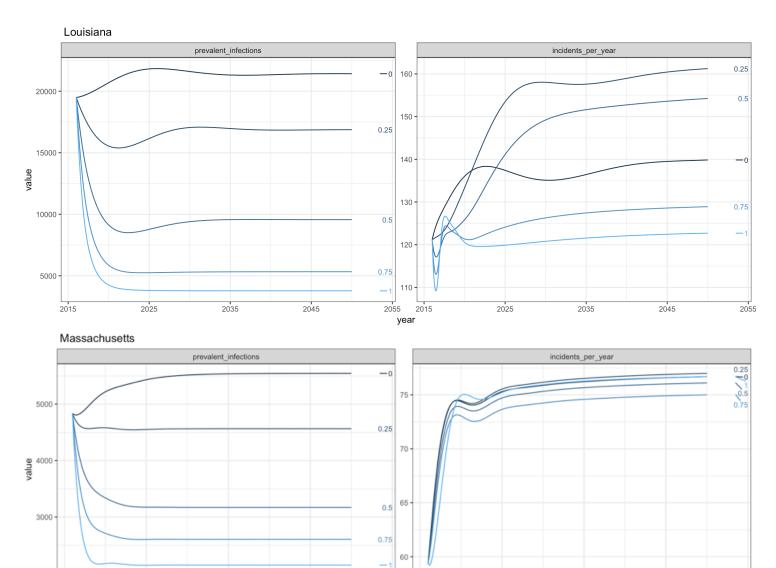
populations and look at the impact on prevalence and incidence through 2050.

### **Annual Screening**

Let's do annual screening first, as an example.



# Increasing Baseline Screening to Every 4 years, 2 years, 1.5 years, and once a year year



year

2055 2015

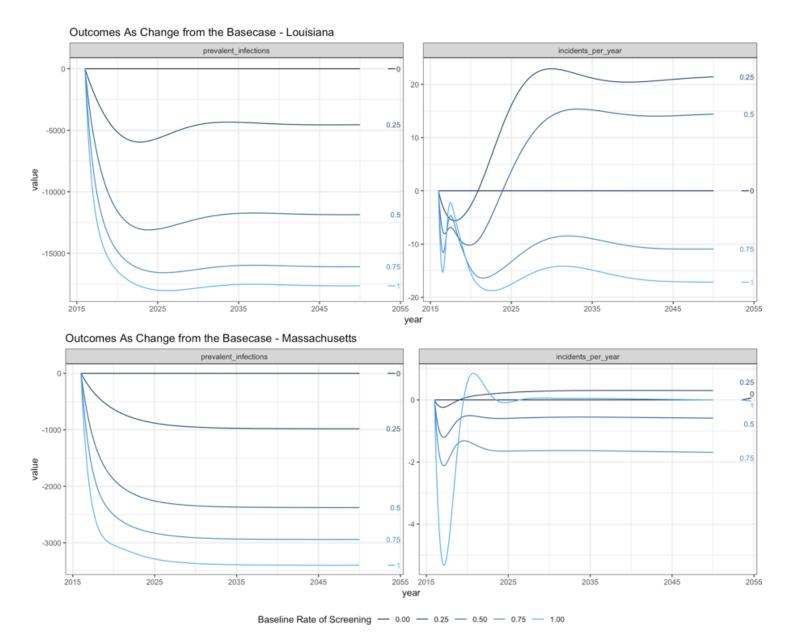
2000 -

2025

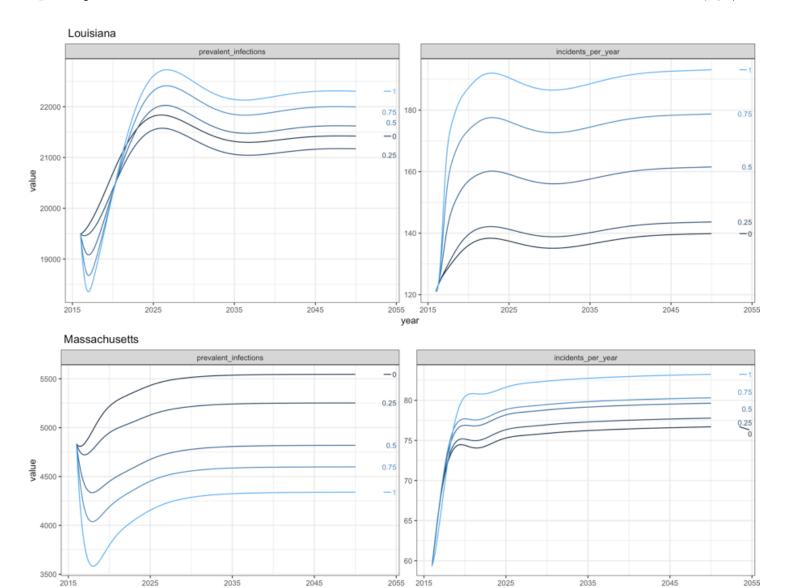
2035

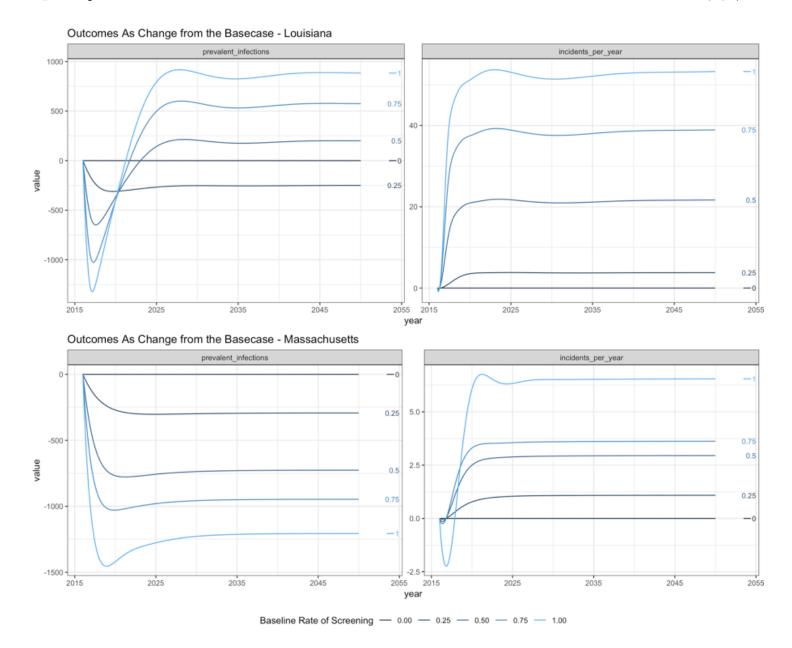
2045

2055



## Now 4 Levels for MSM

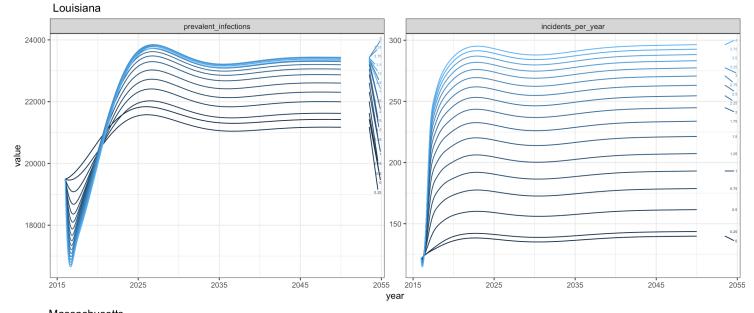




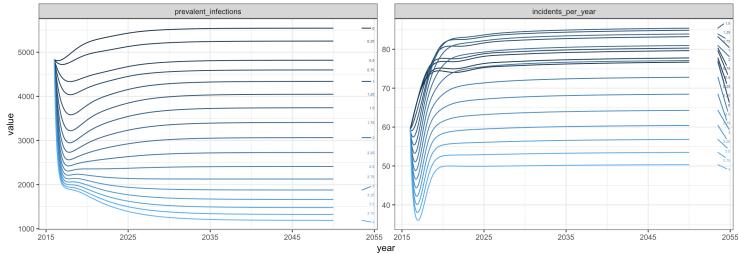
### Baseline Screening Rates for MSM seq(0,4,0.25)

We can observe that in Louisiana, it appears that screening levels at or above 0.5 times yearly cause an increase in prevalence.

Does it ever start to decrease?

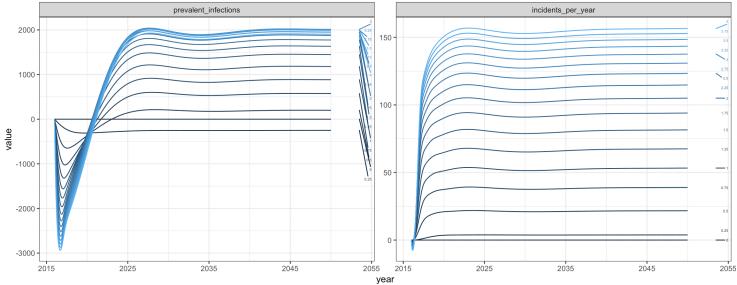


#### Massachusetts

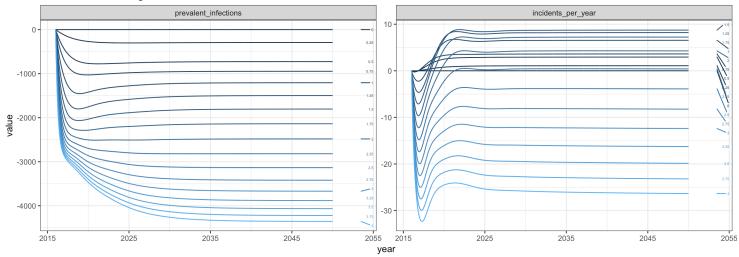


Baseline Level of Screening — 0 — 1 — 2 — 3 — 4





#### Outcomes As Change from the Basecase - Massachusetts



Baseline Rate of Screening — 0 — 1 — 2 — 3 — 4

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