

### Final Zero Inflated Model model

Covariates (generated from mfp nbr model)	Incident Rate Ratio	P	95% Confidence Interval
$(\text{Exposure Index} + 2.30e-17) - 0.43$	14.75	0.0001	8.31 – 26.71
$((\text{Exposure Index} + 2.30e-17))^3 - 0.08$	0.27	0.0001	0.19 - 0.41
$(\text{Age} + 1)/10^{0.5} - 0.77$	102.12	0.0001	36.12 – 288.66
$(\text{age} + 1)/10^{0.5} * \ln(\text{age\_block} + 1)/10 + 0.40$	0.02	0.0001	0.01 - 0.04
Calender year-2006.871542	1.03	0.0001	1.02 – 1.04
$\ln(\text{Age} * \text{Exposure Index} + 1.73e-18)/10 + 1.48$	0.89	0.0001	0.87 – 0.92
$\ln(\text{Age} * \text{Exposure Index} + 1.73e-18)/10^2 - 2.20$	0.99	0.0001	0.996 - 0.998
Inflate			
Exposure Index	-2.40	0.005	-4.07 – -0.74
Lalpha	-0.46	0.032	-0.88 - -0.04
Alpha	0.62		0.41 – 0.96

Footnote: Age is in years, Exposure index is a weighted prevalence scale ranging from 0 to 1.

