

The relative bias for  $P(y=0)$  for data simulated under ZIP distribution with  $\phi_c = 80\%$ .

One-part models							
parameters		Non-exposed			Exposed		
$\phi_t$	$\gamma_1$	LOLS	Poisson	NB	LOLS	Poisson	NB
75%	0	-0.241	-0.285	-0.025	-0.25	-0.339	0.005
	0.2	-0.247	-0.283	-0.019	-0.283	-0.424	-0.002
	0.6	-0.263	-0.284	-0.006	-0.351	-0.612	-0.021
80%	0	-0.234	-0.284	-0.007	-0.234	-0.284	-0.007
	0.2	-0.242	-0.286	-0.002	-0.263	-0.360	-0.014
	0.6	-0.258	-0.287	0.011	-0.324	-0.534	-0.030
85%	0	-0.225	-0.283	0.010	-0.217	-0.227	-0.020
	0.2	-0.234	-0.287	0.015	-0.241	-0.289	-0.027
	0.6	-0.246	-0.282	0.031	-0.291	-0.437	-0.039

  

Hurdle/Zero inflated models							
parameters		Non-exposed			Exposed		
$\phi_t$	$\gamma_1$	2P-LOLS	PH/ZIP	NBH/ZINB	2P-LOLS	PH/ZIP	NBH/ZINB
75%	0	0.001	0.000	0.000	0.000	-0.001	-0.001
	0.2	0.002	0.001	0.001	0.000	0.000	0.000
	0.6	0.001	0.000	0.000	0.000	0.000	0.000
80%	0	0.001	0.001	0.001	0.001	0.000	0.000
	0.2	0.000	0.000	0.000	0.001	0.001	0.001
	0.6	0.000	-0.001	-0.001	0.000	0.000	0.000
85%	0	0.001	0.001	0.001	0.000	-0.001	-0.001
	0.2	0.000	-0.001	-0.001	0.000	0.000	0.000
	0.6	0.002	0.001	0.001	0.001	0.001	0.001