

Evaluation and Comparison of Statistical Methods for Early Temporal Detection of Outbreaks: a Simulation-Based Study

Table S1: FPR, specificity, POD, POD1week, sensitivity, negative predictive value, positive predictive value and F_1 -measure for 12 evaluated methods and $\alpha = 0.001$ (for past outbreak constant $k_1 = 0, 2, 3, 5, 10$ and current outbreak $k_2 = 1$ to 10 for POD and sensitivity).

Method	FPR	Specificity	POD	POD1week	Sensitivity	NPV*	PPV**	F_1 -measure
Improved Farrington	0.2%	99.8%	25.7%	19.7%	11.0%	94.4%	75.8%	0.19
Original Farrington	0.9%	99.1%	41.1%	31.8%	18.9%	94.9%	59.1%	0.29
Periodic Poisson GLM	1.5%	98.6%	52.1%	42.6%	25.1%	95.2%	53.7%	0.34
Periodic Neg Binomial GLM	0.1%	99.9%	24.2%	19.5%	10.1%	94.4%	88.7%	0.18
CDC	1.3%	98.1%	32.2%	9.8%	22.6%	95.1%	44.4%	0.30
CUSUM	44.0%	52.7%	80.5%	70.5%	75.4%	97.0%	9.5%	0.17
CUSUM Rossi	39.5%	57.6%	77.0%	65.9%	71.8%	96.9%	10.1%	0.18
CUSUM GLM	44.2%	52.0%	84.4%	73.8%	79.5%	97.5%	9.9%	0.18
CUSUM GLM Rossi	39.9%	56.8%	81.1%	69.5%	76.1%	97.3%	10.4%	0.18
EARS C1	4.0%	96.4%	52.9%	46.5%	18.7%	94.7%	25.4%	0.22
EARS C2	5.3%	95.3%	57.0%	46.8%	30.6%	95.4%	29.9%	0.30
EARS C3	5.2%	95.0%	47.4%	6.0%	29.2%	95.3%	27.8%	0.28

Table 1: FPR, specificity, POD, POD1week, sensitivity, negative predictive value*, positive predictive value** and F_1 -measure for 12 evaluated methods and $\alpha = 0.001$ (for past outbreak constant $k_1 = 0, 2, 3, 5, 10$ and current outbreak $k_2 = 1$ to 10 for POD and sensitivity).