



Appendix

Table A1: Ranges of 10-day windows (inclusive of range limits), in days since 100th confirmed case, used for least-squares estimation of exponential growth rate r in an early and late phase.

Location	Early-phase window range (no. of cases)	Late-phase window range (no. of cases)	Early-phase window range (no. of deaths)	Late-phase window range (no. of deaths)
Austria	0 - 9	31 - 40	10 - 19	31 - 40
Belgium	4 - 13	33 - 42	10 - 19	33 - 42
Brazil	3 - 12	26 - 35	4 - 13	26 - 35
Denmark	4 - 13	29 - 38	-	-
France	0 - 9	39 - 48	5 - 14	39 - 48
Germany	0 - 9	38 - 47	12 - 21	38 - 47
Hong Kong, China	4 - 13	37 - 46	-	-
Iceland	0 - 9	27 - 36	-	-
Iran	0 - 9	42 - 51	0 - 9	42 - 51
Ireland	2 - 11	25 - 34	-	-
Italy	0 - 9	45 - 54	0 - 9	45 - 54
Japan	7 - 16	47 - 56	-	-
Netherlands	0 - 9	33 - 42	7 - 16	33 - 42
New South Wales, Australia	0 - 9	19 - 28	-	-
New York, USA	0 - 9	31 - 40	9 - 18	31 - 40
Norway	0 - 9	33 - 42	-	-
Ontario, Canada	3 - 12	24 - 33	-	-
Quebec, Canada	0 - 9	20 - 29	-	-
Singapore	5 - 14	39 - 48	-	-
South Korea	0 - 9	48 - 57	-	-
Spain	0 - 9	37 - 46	3 - 12	37 - 46
Sweden	0 - 9	33 - 42	-	-
Switzerland	0 - 9	34 - 43	-	-
Turkey	0 - 9	20 - 29	-	-
United Kingdom	0 - 9	34 - 43	9 - 18	34 - 43

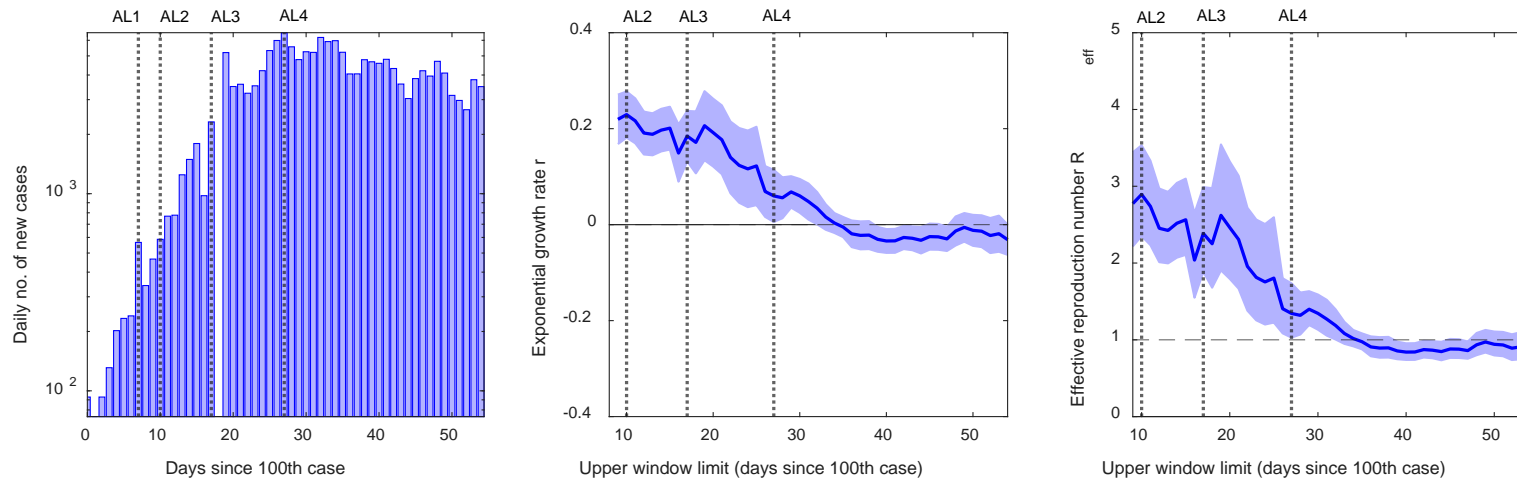


Figure A1: Italy. **Left:** daily numbers of new cases on each day since 100th confirmed case. **Middle:** Estimated mean exponential growth rate r (blue line) and 90% confidence interval (shaded region). **Right:** Estimated mean R_{eff} (blue line) and 90% confidence interval (shaded region). Vertical black dotted lines indicate days on which Alert Levels were implemented.

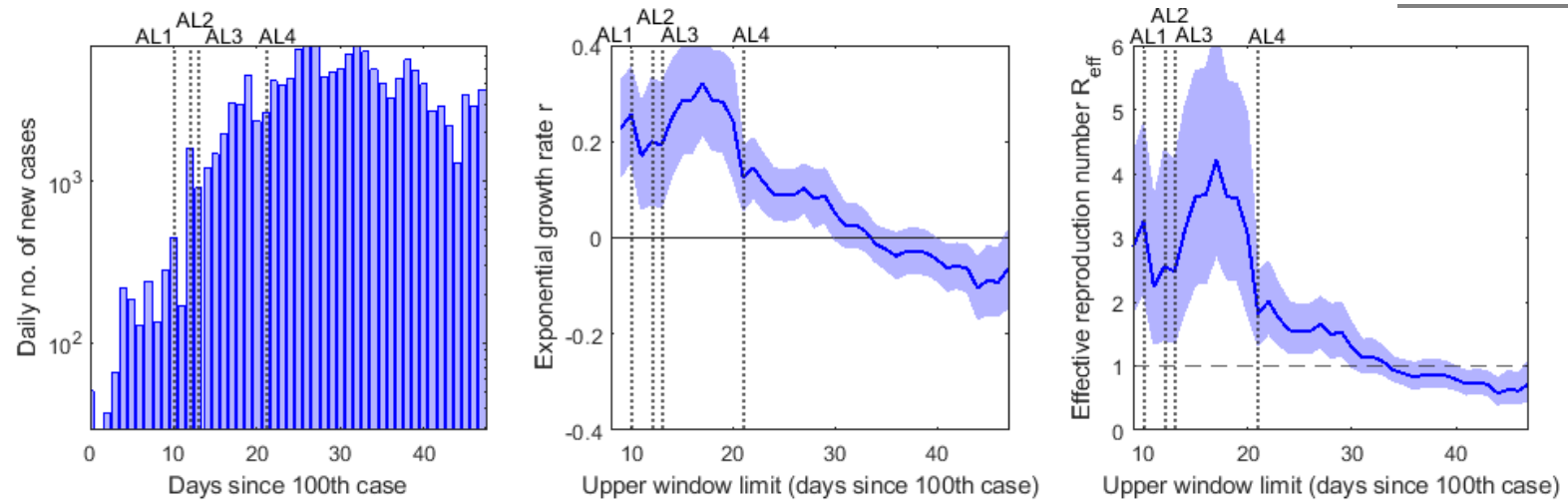


Figure A2: Germany. **Left:** daily numbers of new cases on each day since 100th confirmed case. **Middle:** Estimated mean exponential growth rate r (blue line) and 90% confidence interval (shaded region). **Right:** Estimated mean R_{eff} (blue line) and 90% confidence interval (shaded region). Vertical black dotted lines indicate days on which Alert Levels were implemented.

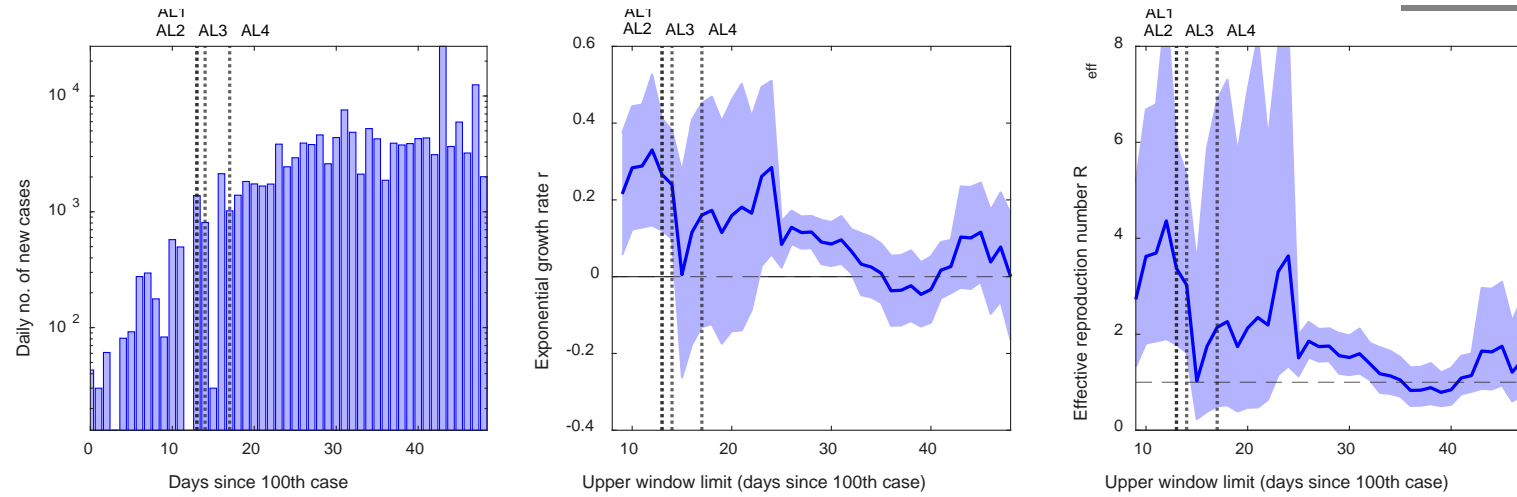


Figure A3: France. **Left:** daily numbers of new cases on each day since 100th confirmed case. **Middle:** Estimated mean exponential growth rate r (blue line) and 90% confidence interval (shaded region). **Right:** Estimated mean R_{eff} (blue line) and 90% confidence interval (shaded region). Vertical black dotted lines indicate days on which Alert Levels were implemented.

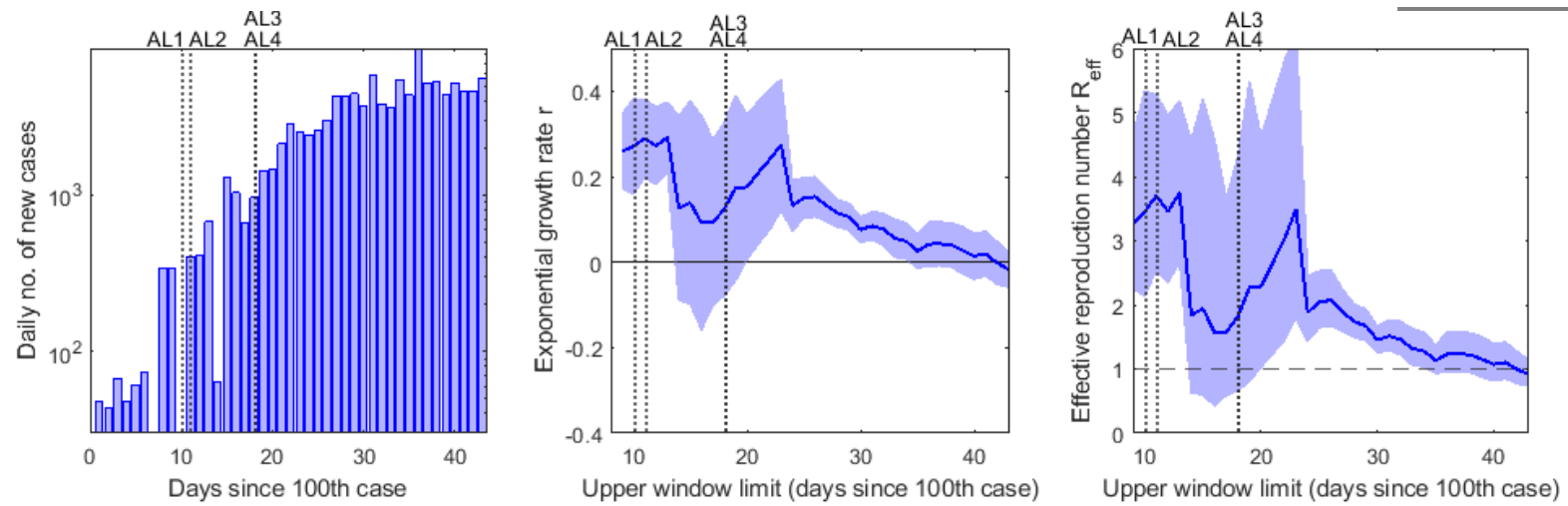


Figure A4: United Kingdom. **Left:** daily numbers of new cases on each day since 100th confirmed case. **Middle:** Estimated mean exponential growth rate r (blue line) and 90% confidence interval (shaded region). **Right:** Estimated mean R_{eff} (blue line) and 90% confidence interval (shaded region). Vertical black dotted lines indicate days on which Alert Levels were implemented.

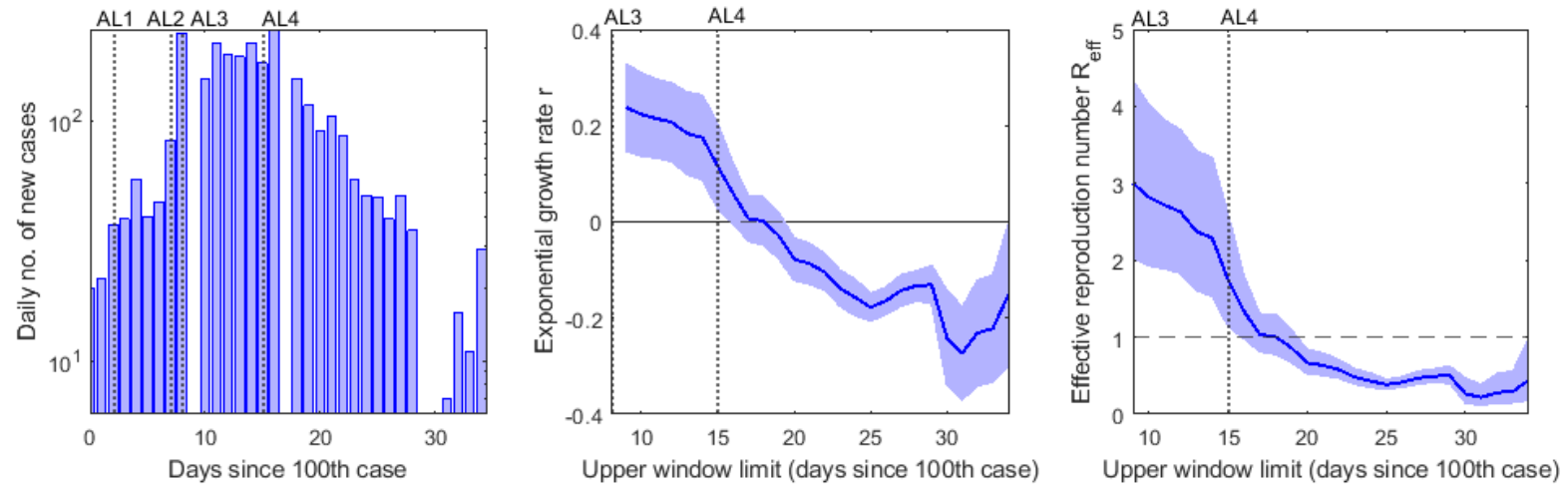


Figure A5: New South Wales, Australia. **Left:** daily numbers of new cases on each day since 100th confirmed case. **Middle:** Estimated mean exponential growth rate r (blue line) and 90% confidence interval (shaded region). **Right:** Estimated mean R_{eff} (blue line) and 90% confidence interval (shaded region). Vertical black dotted lines indicate days on which Alert Levels were implemented.

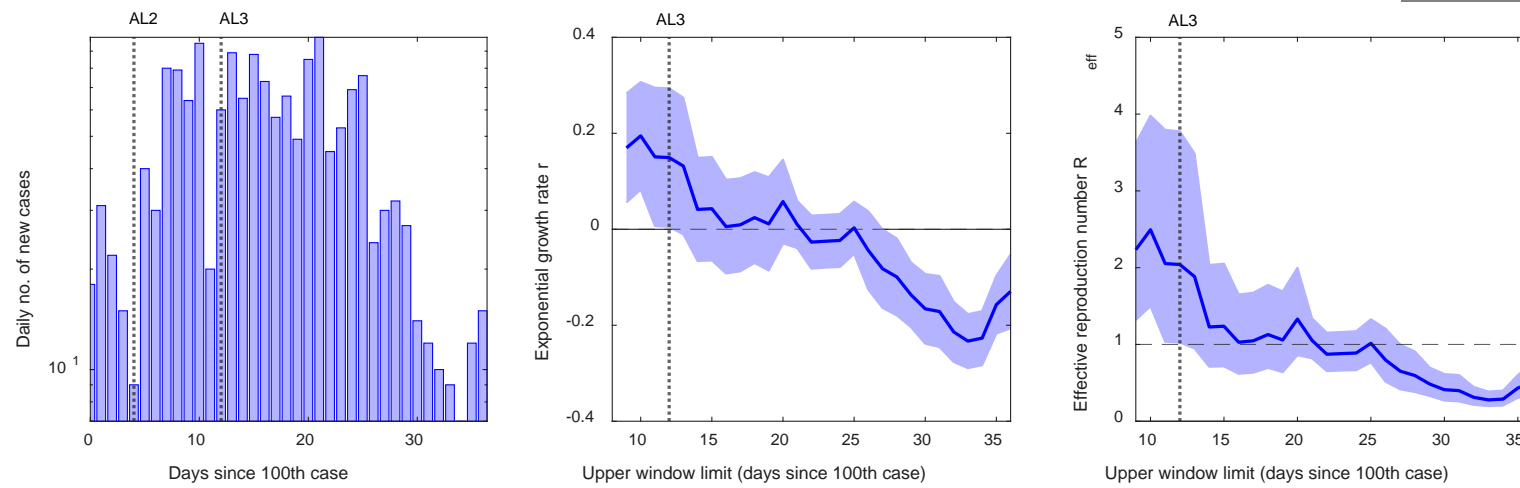


Figure A6: Iceland. **Left:** daily numbers of new cases on each day since 100th confirmed case. **Middle:** Estimated mean exponential growth rate r (blue line) and 90% confidence interval (shaded region). **Right:** Estimated mean R_{eff} (blue line) and 90% confidence interval (shaded region). Vertical black dotted lines indicate days on which Alert Levels were implemented.

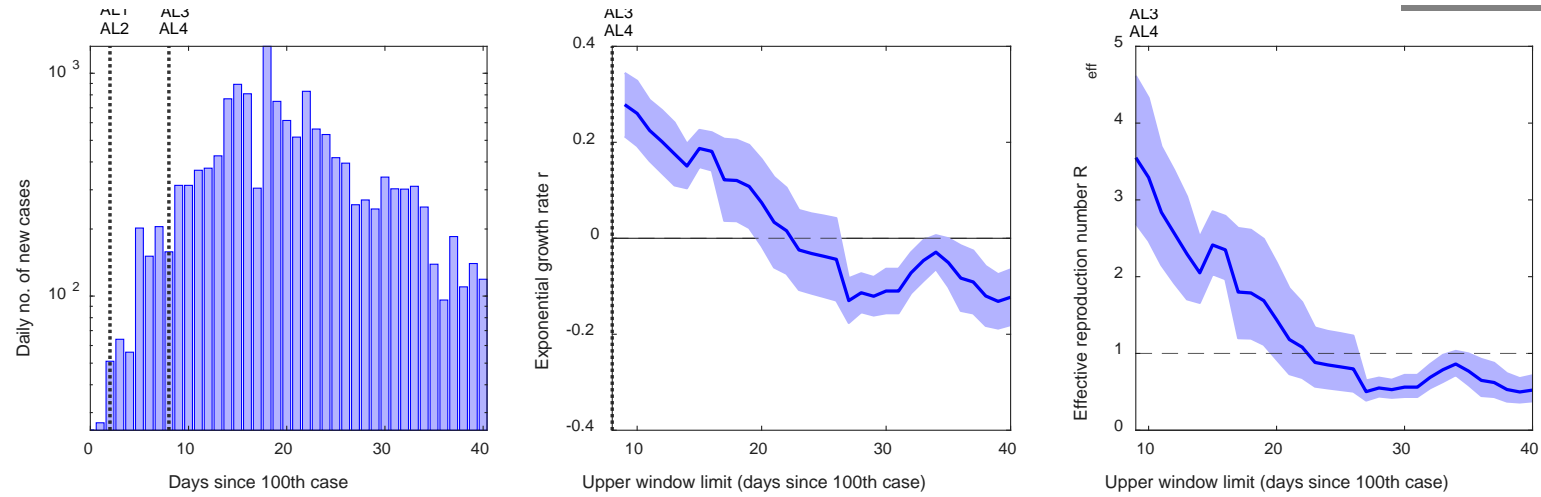


Figure A7: Austria. **Left:** daily numbers of new cases on each day since 100th confirmed case. **Middle:** Estimated mean exponential growth rate r (blue line) and 90% confidence interval (shaded region). **Right:** Estimated mean R_{eff} (blue line) and 90% confidence interval (shaded region). Vertical black dotted lines indicate days on which Alert Levels were implemented.

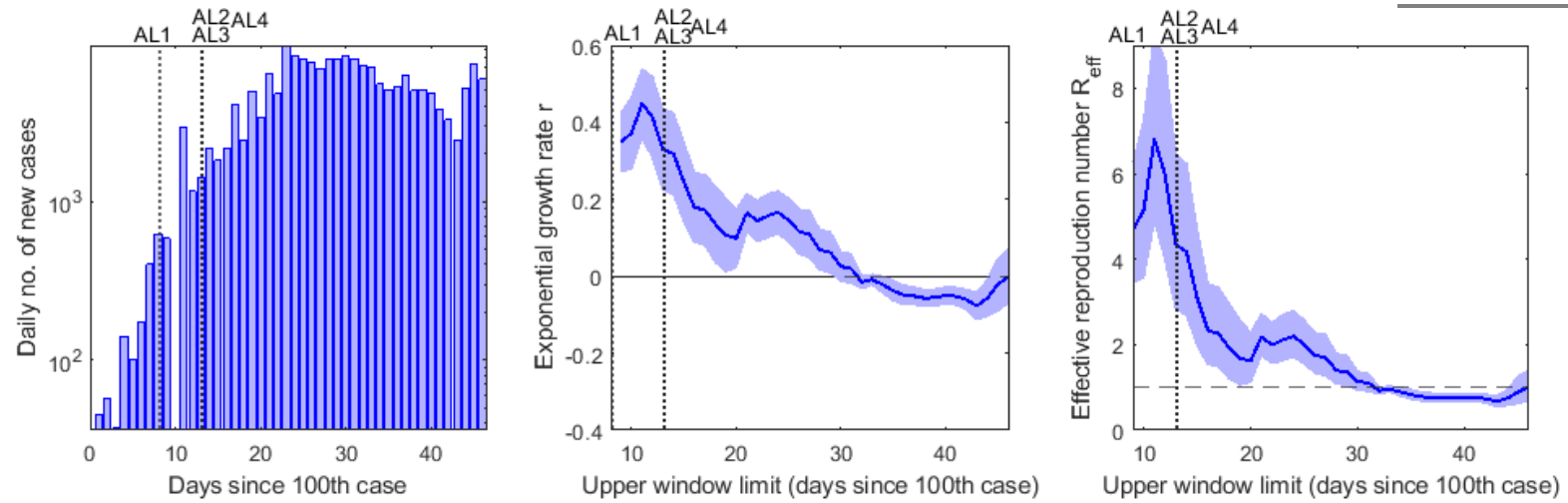


Figure A8: Spain. **Left:** daily numbers of new cases on each day since 100th confirmed case. **Middle:** Estimated mean exponential growth rate r (blue line) and 90% confidence interval (shaded region). **Right:** Estimated mean R_{eff} (blue line) and 90% confidence interval (shaded region). Vertical black dotted lines indicate days on which Alert Levels were implemented.

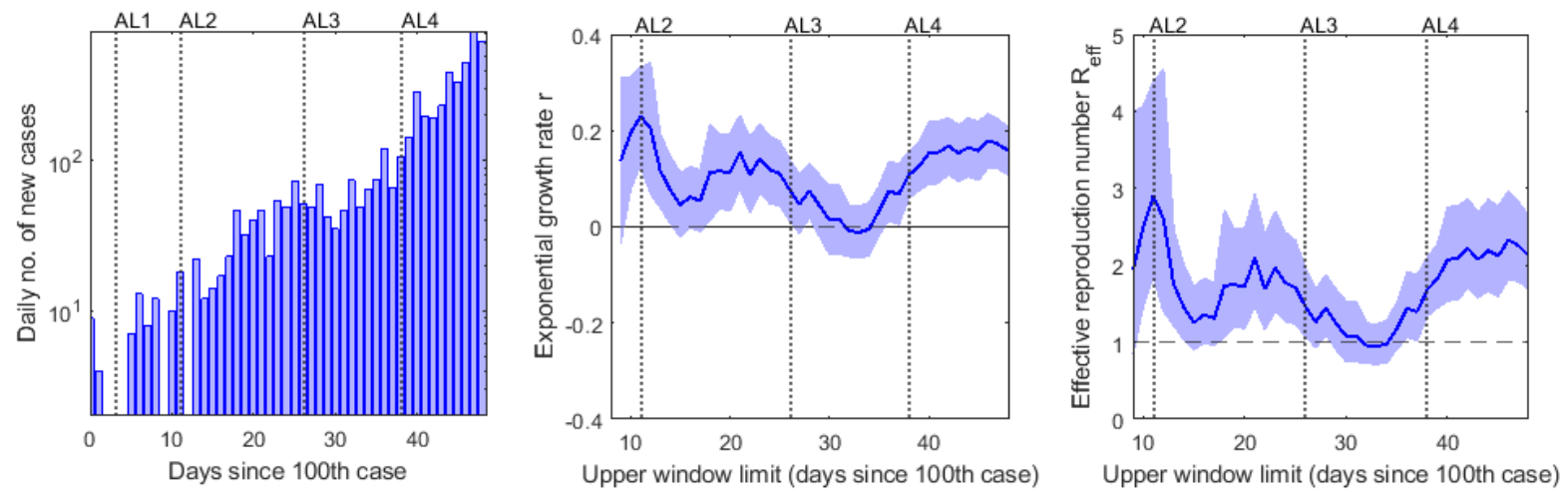


Figure A9: Singapore. **Left:** daily numbers of new cases on each day since 100th confirmed case. **Middle:** Estimated mean exponential growth rate r (blue line) and 90% confidence interval (shaded region). **Right:** Estimated mean R_{eff} (blue line) and 90% confidence interval (shaded region). Vertical black dotted lines indicate days on which Alert Levels were implemented.

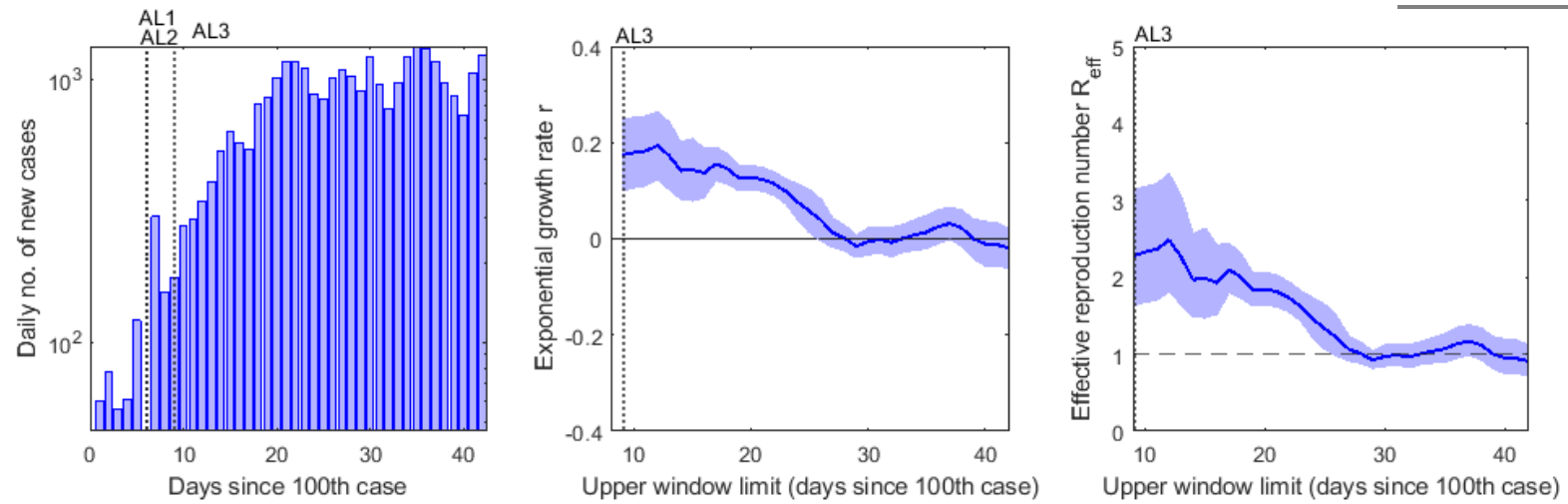


Figure A10: Netherlands. **Left:** daily numbers of new cases on each day since 100th confirmed case. **Middle:** Estimated mean exponential growth rate r (blue line) and 90% confidence interval (shaded region). **Right:** Estimated mean R_{eff} (blue line) and 90% confidence interval (shaded region). Vertical black dotted lines indicate days on which Alert Levels were implemented.

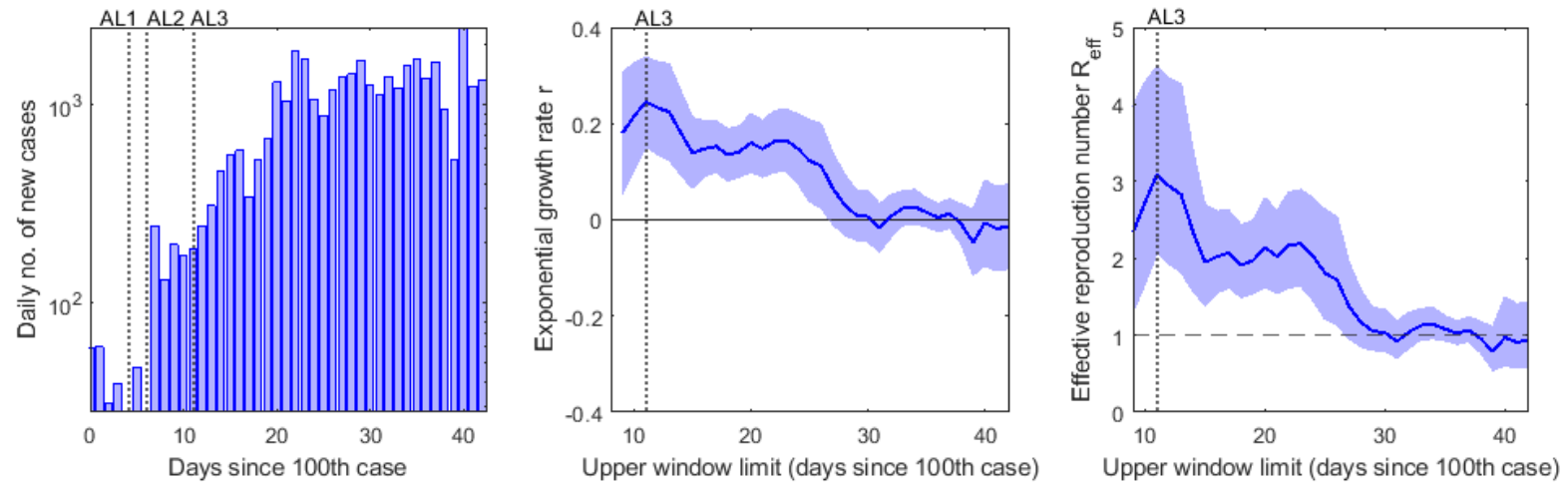


Figure A11: Belgium. **Left:** daily numbers of new cases on each day since 100th confirmed case. **Middle:** Estimated mean exponential growth rate r (blue line) and 90% confidence interval (shaded region). **Right:** Estimated mean R_{eff} (blue line) and 90% confidence interval (shaded region). Vertical black dotted lines indicate days on which Alert Levels were implemented.

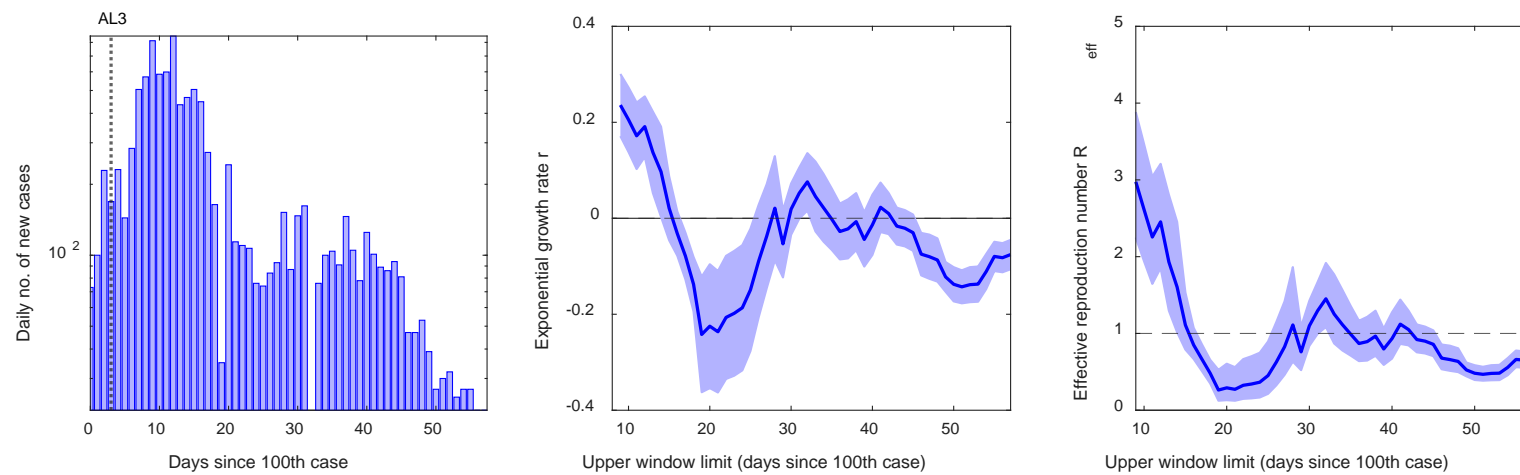


Figure A12: South Korea. **Left:** daily numbers of new cases on each day since 100th confirmed case. **Middle:** Estimated mean exponential growth rate r (blue line) and 90% confidence interval (shaded region). **Right:** Estimated mean R_{eff} (blue line) and 90% confidence interval (shaded region). Vertical black dotted lines indicate days on which Alert Levels were implemented.

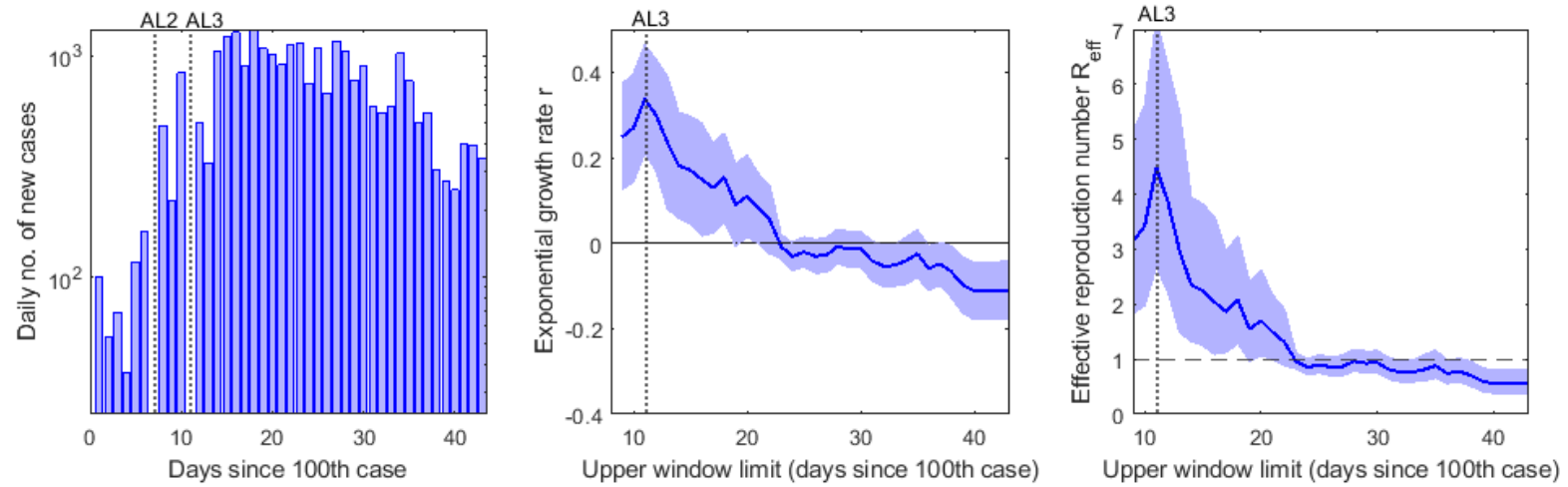


Figure A13: Switzerland. **Left:** daily numbers of new cases on each day since 100th confirmed case. **Middle:** Estimated mean exponential growth rate r (blue line) and 90% confidence interval (shaded region). **Right:** Estimated mean R_{eff} (blue line) and 90% confidence interval (shaded region). Vertical black dotted lines indicate days on which Alert Levels were implemented.

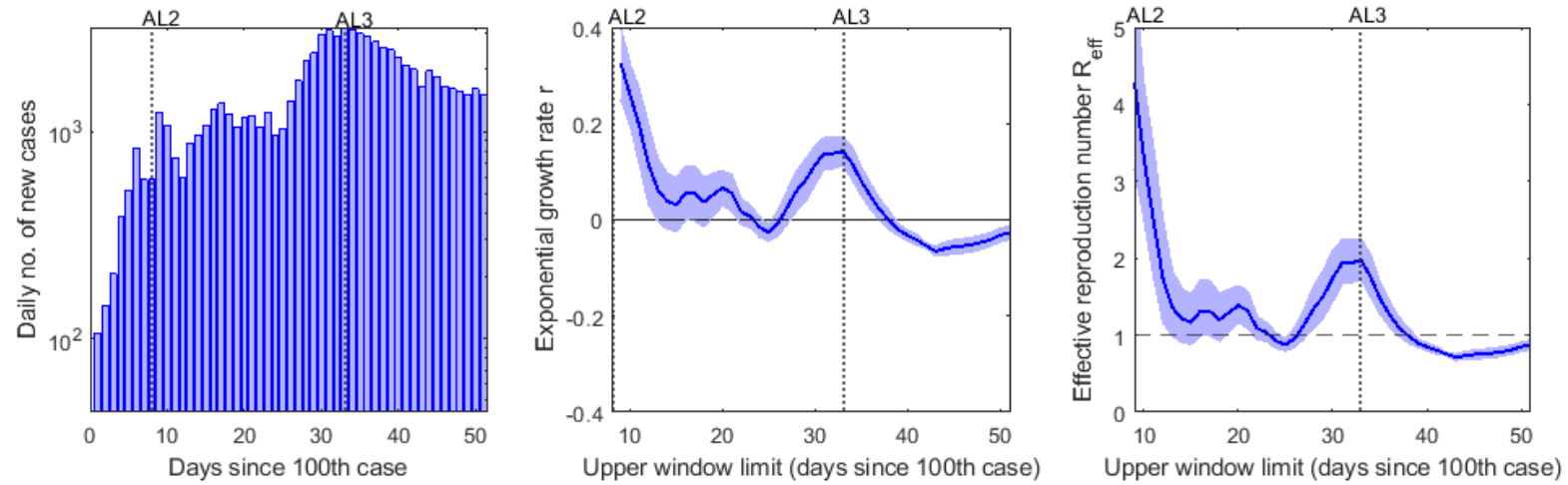


Figure A14: Iran. **Left:** daily numbers of new cases on each day since 100th confirmed case. **Middle:** Estimated mean exponential growth rate r (blue line) and 90% confidence interval (shaded region). **Right:** Estimated mean R_{eff} (blue line) and 90% confidence interval (shaded region). Vertical black dotted lines indicate days on which Alert Levels were implemented.

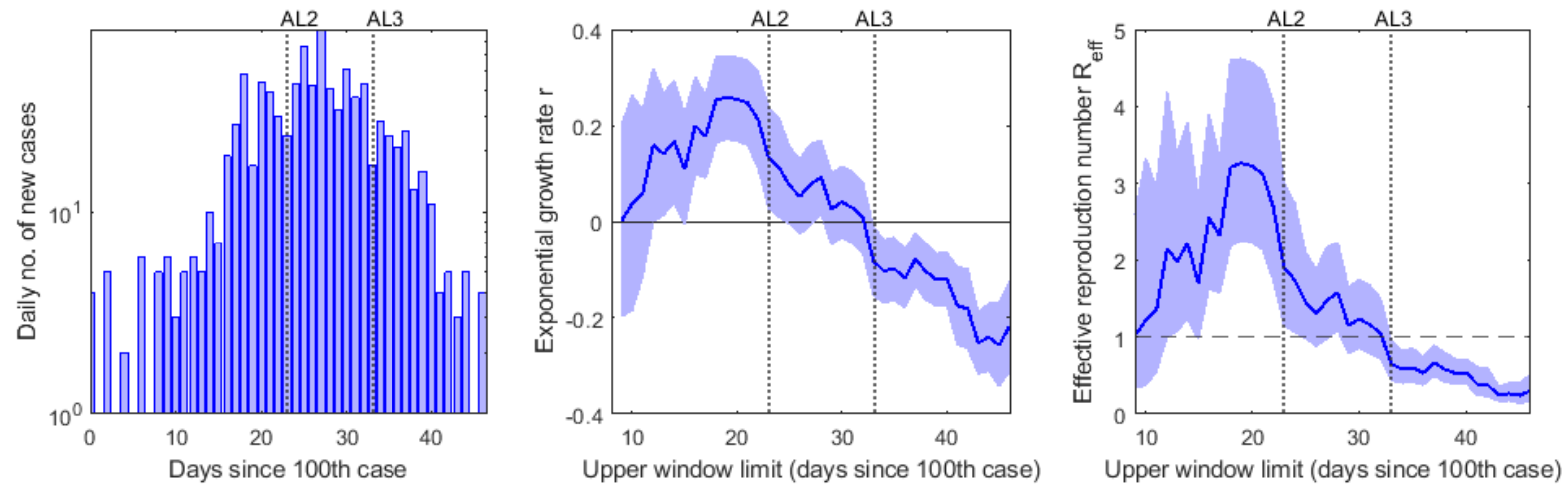


Figure A15: Hong Kong, China. **Left:** daily numbers of new cases on each day since 100th confirmed case. **Middle:** Estimated mean exponential growth rate r (blue line) and 90% confidence interval (shaded region). **Right:** Estimated mean R_{eff} (blue line) and 90% confidence interval (shaded region). Vertical black dotted lines indicate days on which Alert Levels were implemented.

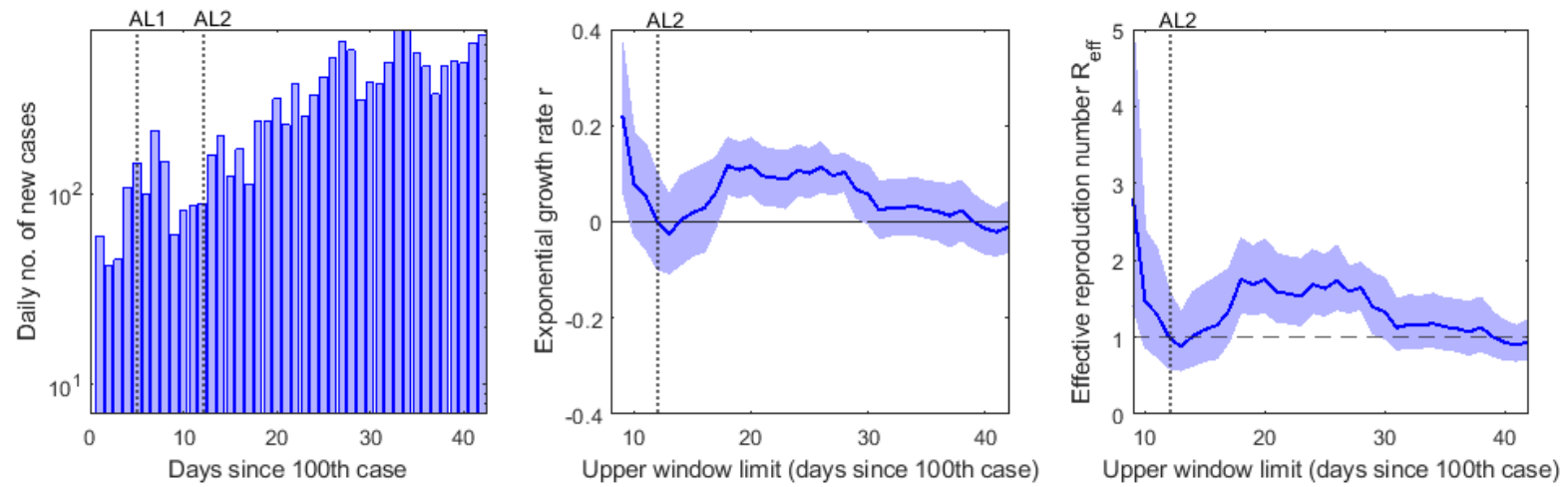


Figure A16: Sweden. **Left:** daily numbers of new cases on each day since 100th confirmed case. **Middle:** Estimated mean exponential growth rate r (blue line) and 90% confidence interval (shaded region). **Right:** Estimated mean R_{eff} (blue line) and 90% confidence interval (shaded region). Vertical black dotted lines indicate days on which Alert Levels were implemented.

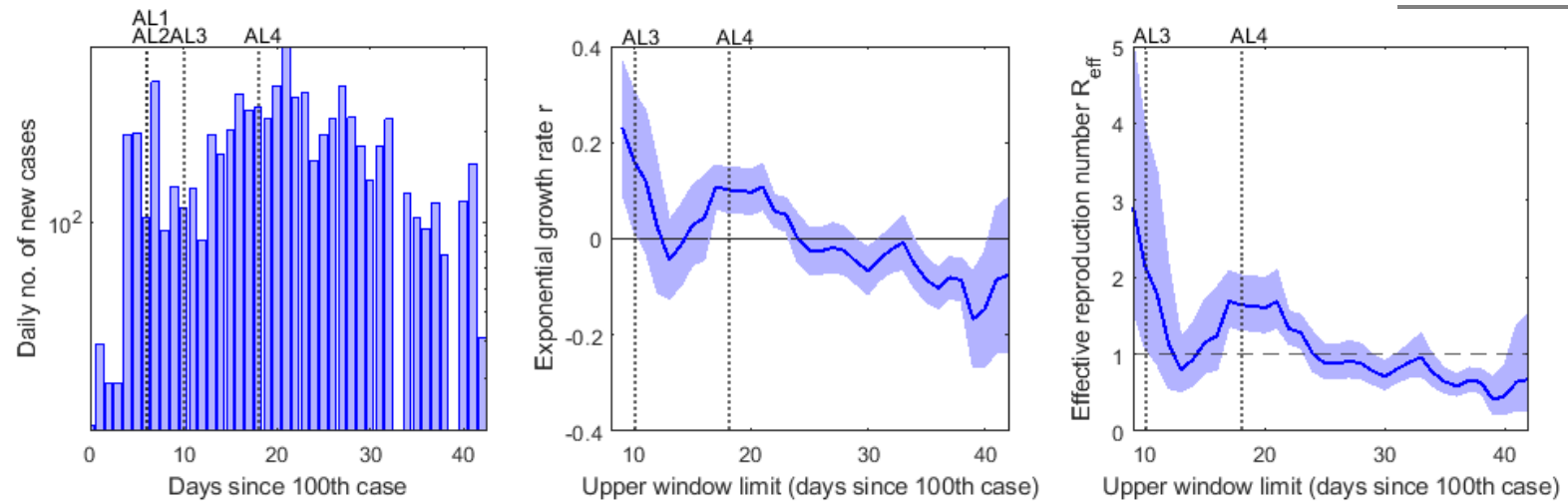


Figure A17: Norway. **Left:** daily numbers of new cases on each day since 100th confirmed case. **Middle:** Estimated mean exponential growth rate r (blue line) and 90% confidence interval (shaded region). **Right:** Estimated mean R_{eff} (blue line) and 90% confidence interval (shaded region). Vertical black dotted lines indicate days on which Alert Levels were implemented.

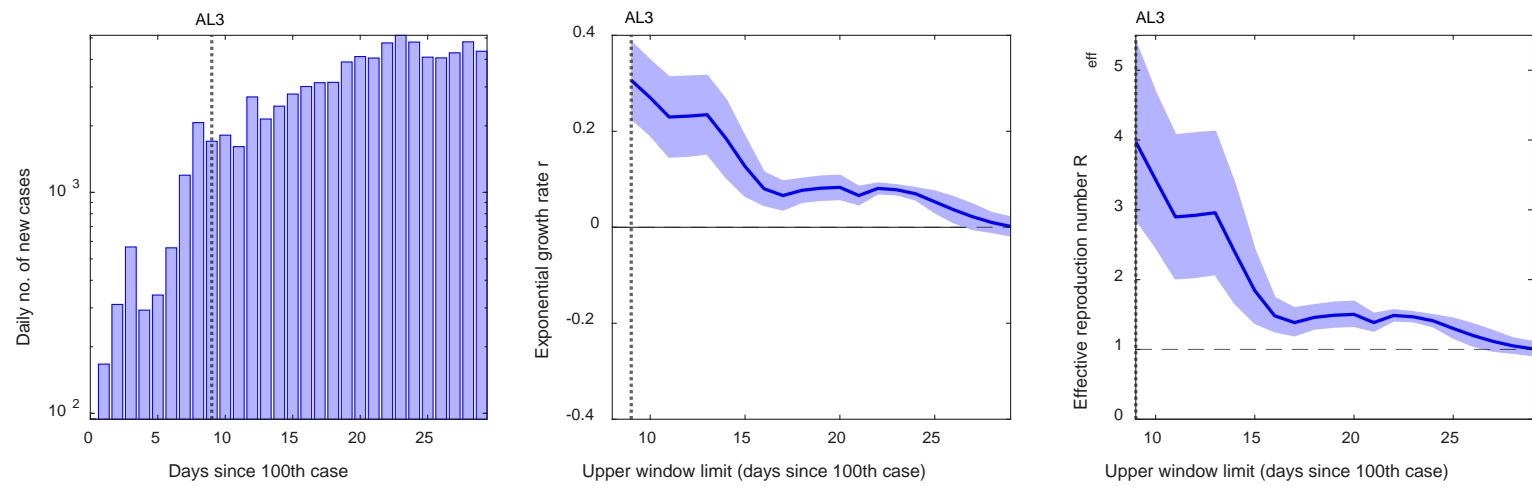


Figure A18: Turkey. **Left:** daily numbers of new cases on each day since 100th confirmed case. **Middle:** Estimated mean exponential growth rate r (blue line) and 90% confidence interval (shaded region). **Right:** Estimated mean R_{eff} (blue line) and 90% confidence interval (shaded region). Vertical black dotted lines indicate days on which Alert Levels were implemented.

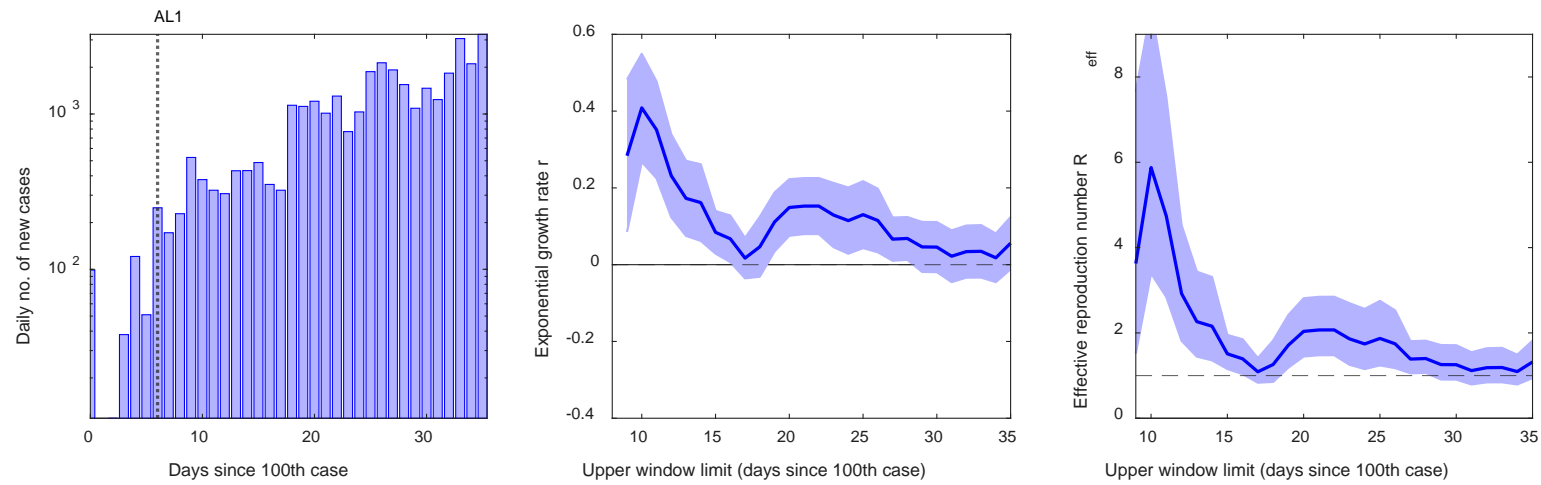


Figure A19: Brazil. **Left:** daily numbers of new cases on each day since 100th confirmed case. **Middle:** Estimated mean exponential growth rate r (blue line) and 90% confidence interval (shaded region). **Right:** Estimated mean R_{eff} (blue line) and 90% confidence interval (shaded region). Vertical black dotted lines indicate days on which Alert Levels were implemented.

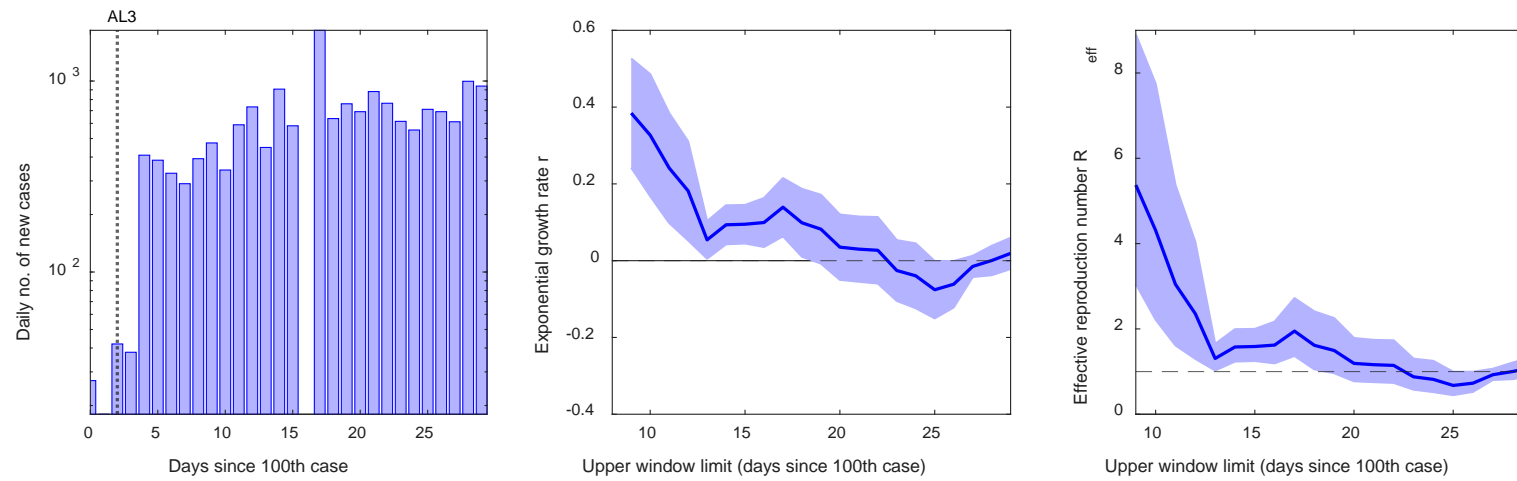


Figure A20: Quebec, Canada. **Left:** daily numbers of new cases on each day since 100th confirmed case. **Middle:** Estimated mean exponential growth rate r (blue line) and 90% confidence interval (shaded region). **Right:** Estimated mean R_{eff} (blue line) and 90% confidence interval (shaded region). Vertical black dotted lines indicate days on which Alert Levels were implemented.

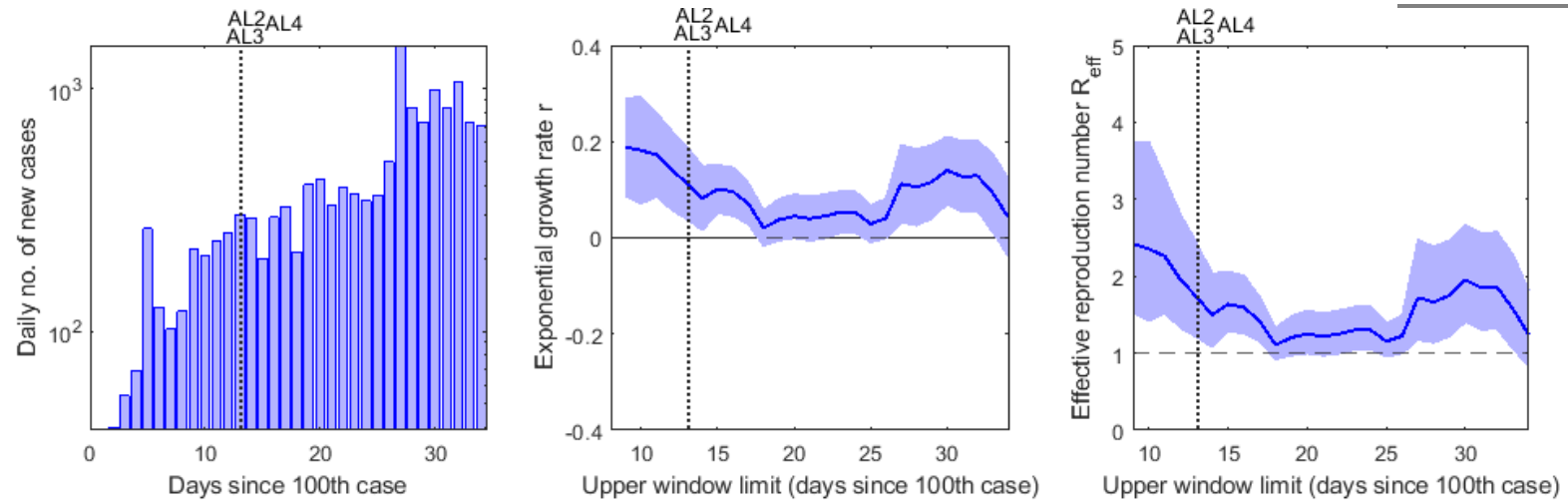


Figure A21: Ireland. **Left:** daily numbers of new cases on each day since 100th confirmed case. **Middle:** Estimated mean exponential growth rate r (blue line) and 90% confidence interval (shaded region). **Right:** Estimated mean R_{eff} (blue line) and 90% confidence interval (shaded region). Vertical black dotted lines indicate days on which Alert Levels were implemented.

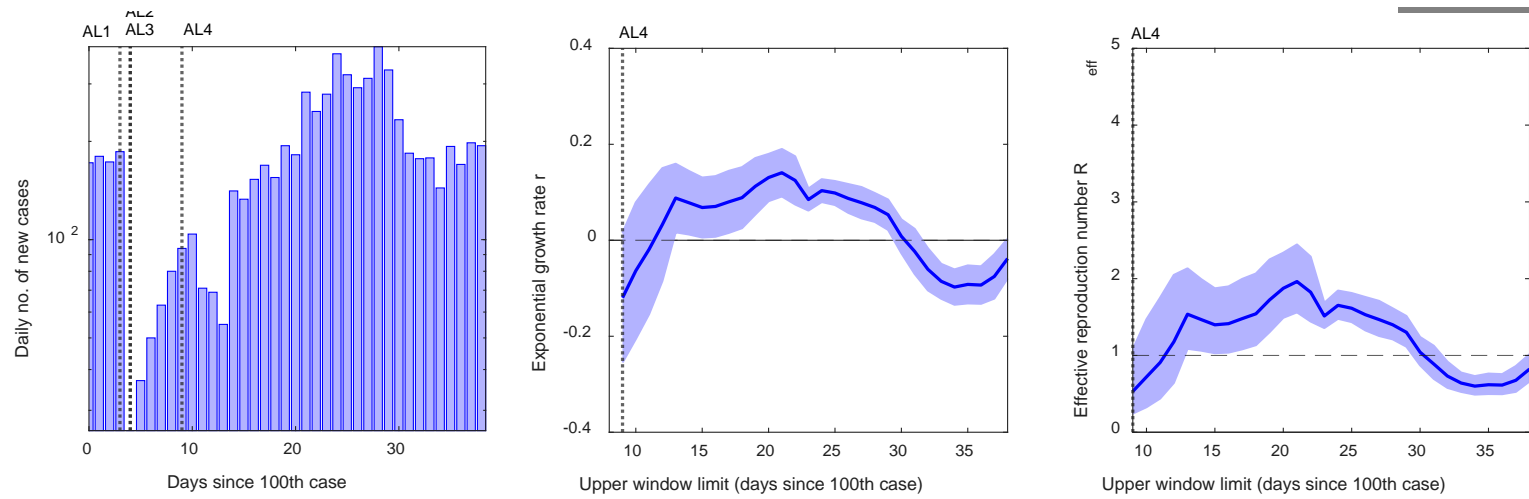


Figure A22: Denmark. **Left:** daily numbers of new cases on each day since 100th confirmed case. **Middle:** Estimated mean exponential growth rate r (blue line) and 90% confidence interval (shaded region). **Right:** Estimated mean R_{eff} (blue line) and 90% confidence interval (shaded region). Vertical black dotted lines indicate days on which Alert Levels were implemented.

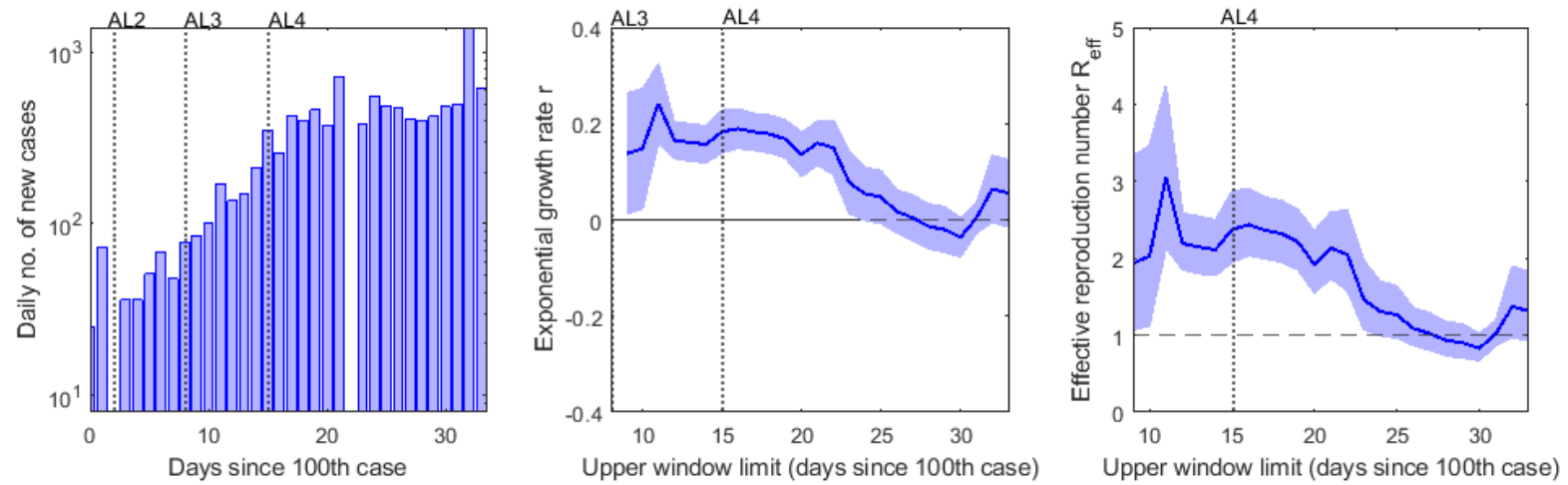


Figure A23: Ontario, Canada. **Left:** daily numbers of new cases on each day since 100th confirmed case. **Middle:** Estimated mean exponential growth rate r (blue line) and 90% confidence interval (shaded region). **Right:** Estimated mean R_{eff} (blue line) and 90% confidence interval (shaded region). Vertical black dotted lines indicate days on which Alert Levels were implemented.

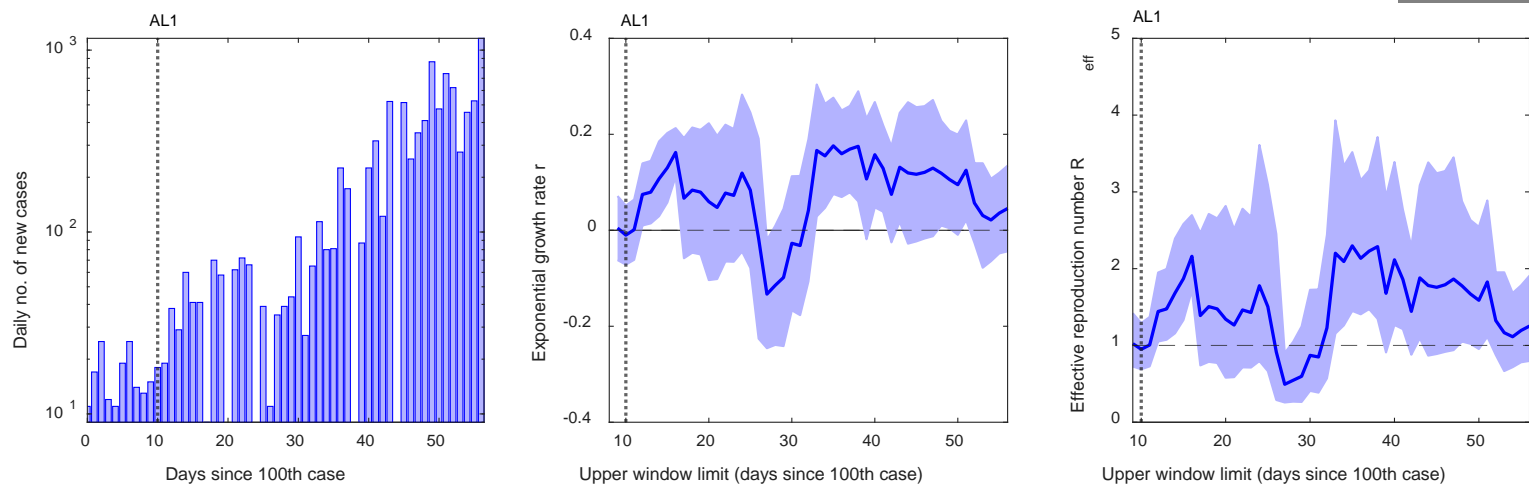


Figure A24: Japan. **Left:** daily numbers of new cases on each day since 100th confirmed case. **Middle:** Estimated mean exponential growth rate r (blue line) and 90% confidence interval (shaded region). **Right:** Estimated mean R_{eff} (blue line) and 90% confidence interval (shaded region). Vertical black dotted lines indicate days on which Alert Levels were implemented.

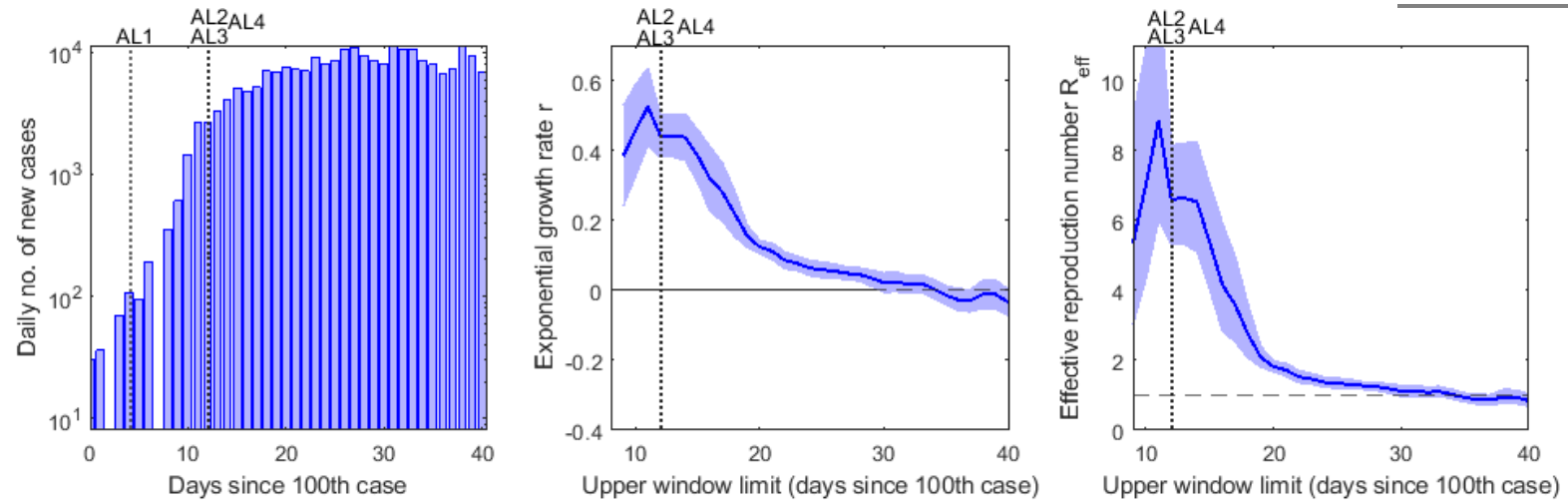


Figure A25: New York (state), USA. **Left:** daily numbers of new cases on each day since 100th confirmed case. **Middle:** Estimated mean exponential growth rate r (blue line) and 90% confidence interval (shaded region). **Right:** Estimated mean R_{eff} (blue line) and 90% confidence interval (shaded region). Vertical black dotted lines indicate days on which Alert Levels were implemented.