The impact of prioritisation and dosing intervals on the effects of COVID-19 vaccination in Europe: an agent-based cohort model

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SUPPLEMENTARY MATERIAL: Different countries configuration

Table 1. Initial parameters configuration for different countries simulations. Other parameters have their default value. Population structures follow their own age and sex distribution.(1)

	Population (1)	Total deaths (2)	Last week deaths (2)	Vaccination speed (2)	Increase in people living in care homes (3–5)	Proportion of nurses per resident (3–5)
Austria	9006400	7237	743	0,14%	0,87	Def.
Belgium	11589616	20572	723	0,10%	2,16	Def.
Bulgaria	6948445	8651	730	0,01%	0,05	Def.
Croatia	4105267	4711	505	0,07%	0,25	Def.
Cyprus	1207361	176	42	0,09%	1,18	Def.
Czech Republic	10708982	14820	2389	0,10%	0,73	Def.
Denmark	5792203	1873	416	0,16%	0,98	0,24
Europe	747636045	538618	61799	0,14%	0,60	Def.
Estonia	1326538	349	86	0,08%	1,40	0,05
Finland	5540718	632	56	0,10%	1,26	Def.
France	65273510	71792	5260	0,09%	1,18	0,09
Germany	83783943	50010	12104	0,09%	1,15	0,15
Greece	10423056	5545	477	0,05%	0,02	Def.
Hungary	9660350	11615	1440	0,07%	0,84	0,06
Iceland	341250	29	1	0,02%	1,68	Def.
Ireland	4937796	2768	351	0,16%	0,92	0,22
Italy	60461828	83681	6874	0,10%	0,44	Def.
Latvia	1886201	1032	291	0,06%	0,11	Def.
Lithuania	2722289	2514	479	0,18%	2,97	Def.
Luxembourg	625975	562	49	0,07%	1,51	0,35
Malta	441539	244	16	0,27%	1,24	Def.
Netherlands	17134872	13350	1391	0,04%	1,12	0,26
Norway	5421241	543	72	0,08%	1,15	Def.
Poland	37846605	34141	4196	0,09%	0,22	Def.
Portugal	10196707	9465	1832	0,05%	0,36	0,03
Romania	19237681	17485	1214	0,10%	0,14	Def.
Slovakia	5459642	3737	1034	0,10%	0,88	Def.
Slovenia	2078931	3257	480	0,13%	1,03	Def.

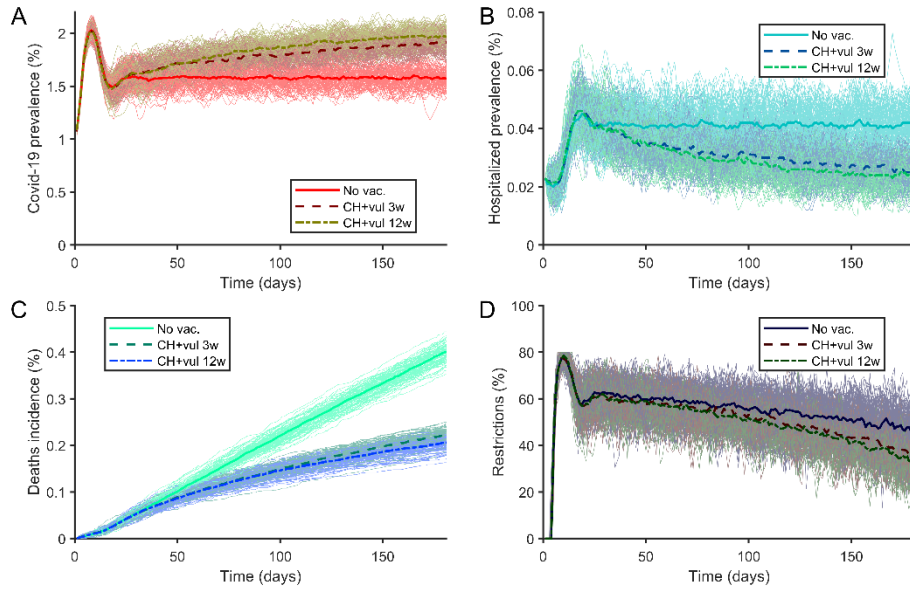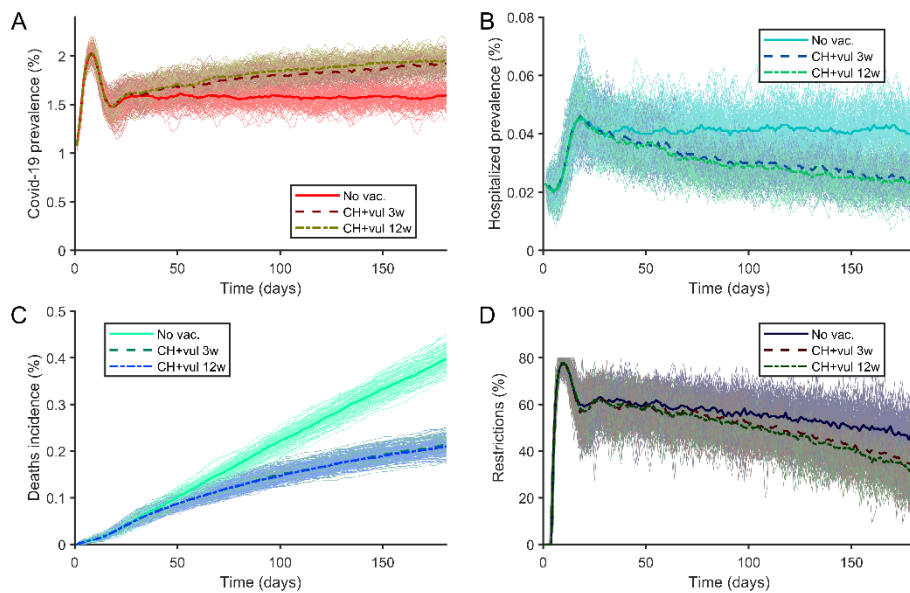| Spain	46754782	54637	2441	0,15%	0,62	Def.
Sweden	10099270	10797	869	0,10%	1,20	Def.
Switzerland	8654617	8924	809	0,08%	1,57	0,29
United Kingdom	67886004	93469	14429	0,42%	0,92	Def.

Figure 1. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for AstraZeneca vaccine using Austria conditions described in table 1.

Figure 2. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where

they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for Moderna vaccine using Austria conditions described in table 1.
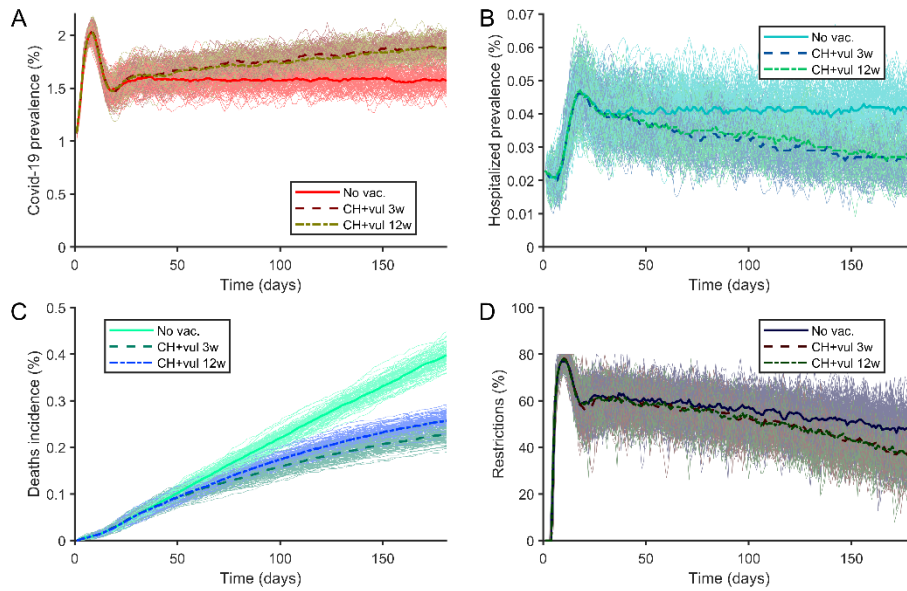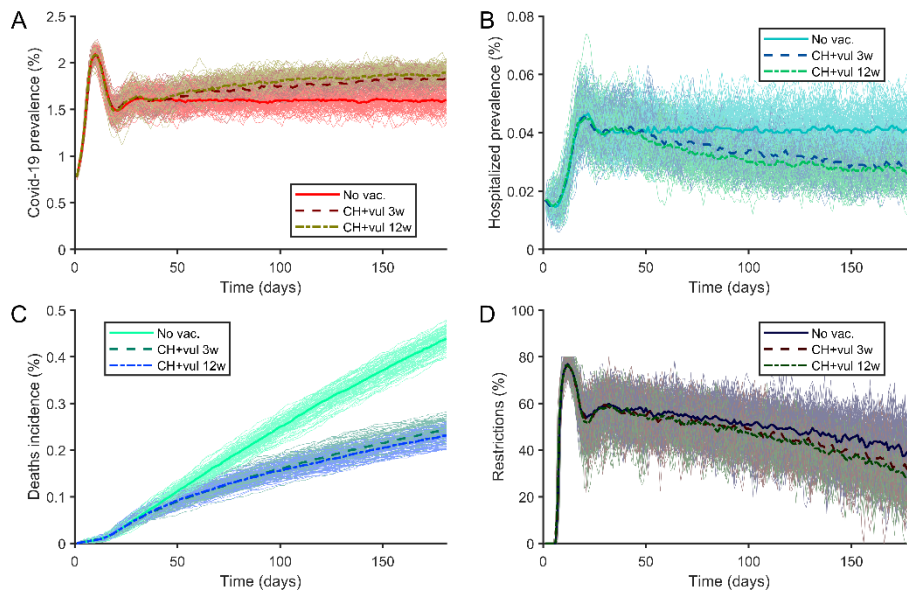

Figure 3. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for Pfizer vaccine using Austria conditions described in table 1.

Figure 4. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3

weeks. Dash-dot line for doses separation of 12 weeks. Figures for AstraZeneca vaccine using Belgium conditions described in table 1.
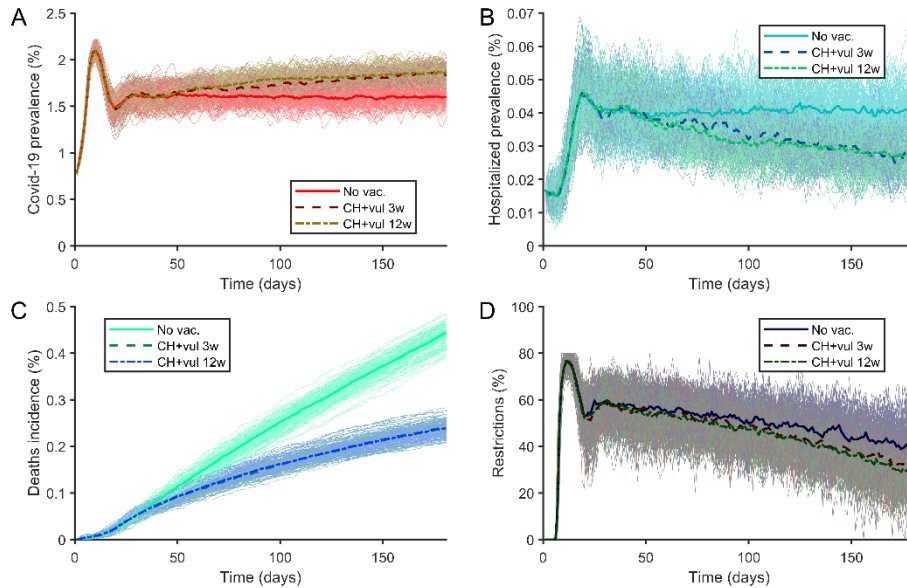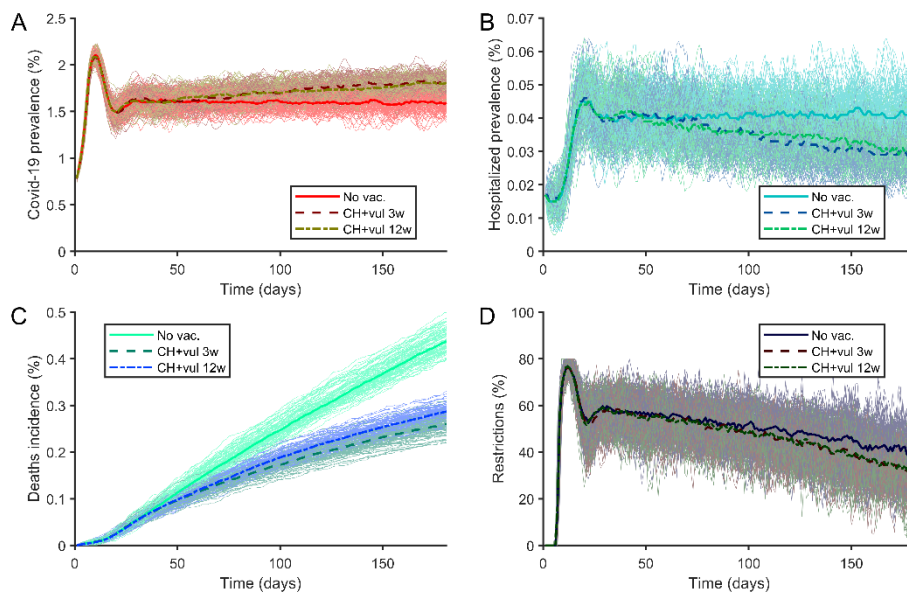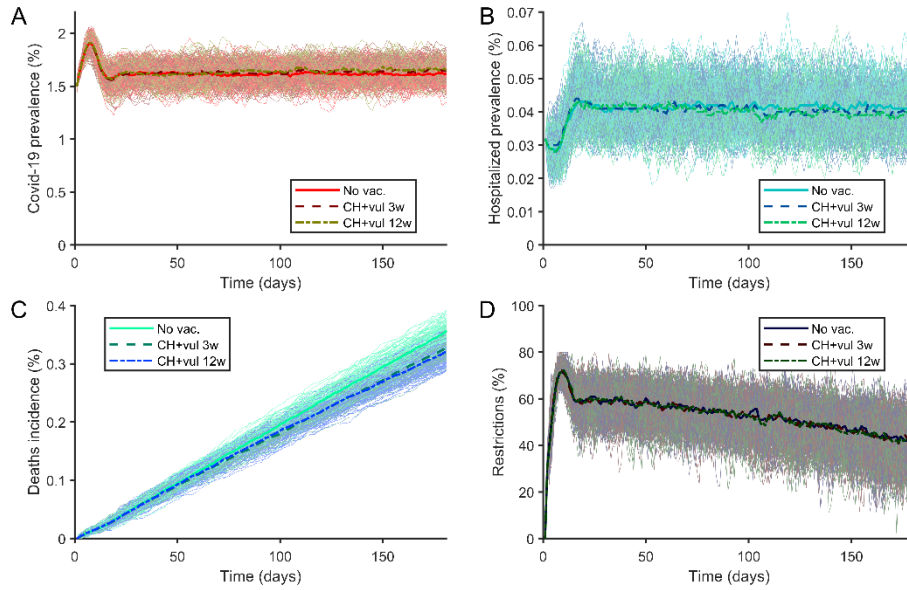

Figure 5. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for Moderna vaccine using Belgium conditions described in table 1.
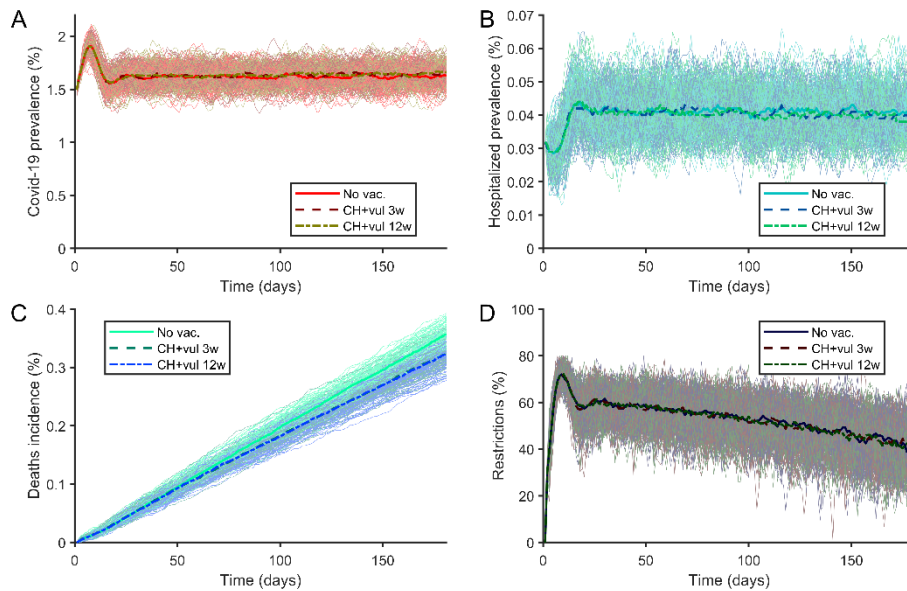

Figure 6. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for Pfizer vaccine using Belgium conditions described in table 1.
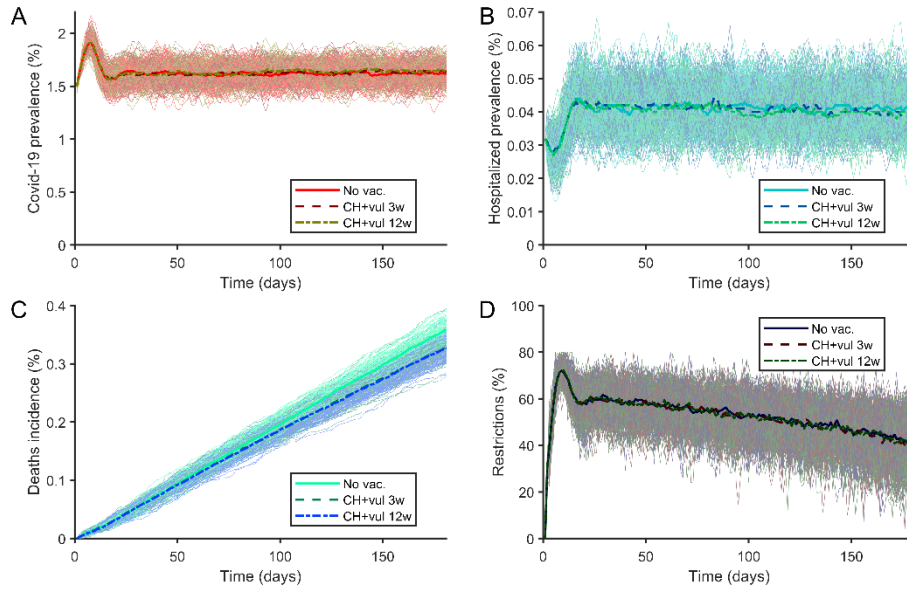
Figure 7. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for AstraZeneca vaccine using Bulgaria conditions described in table 1.
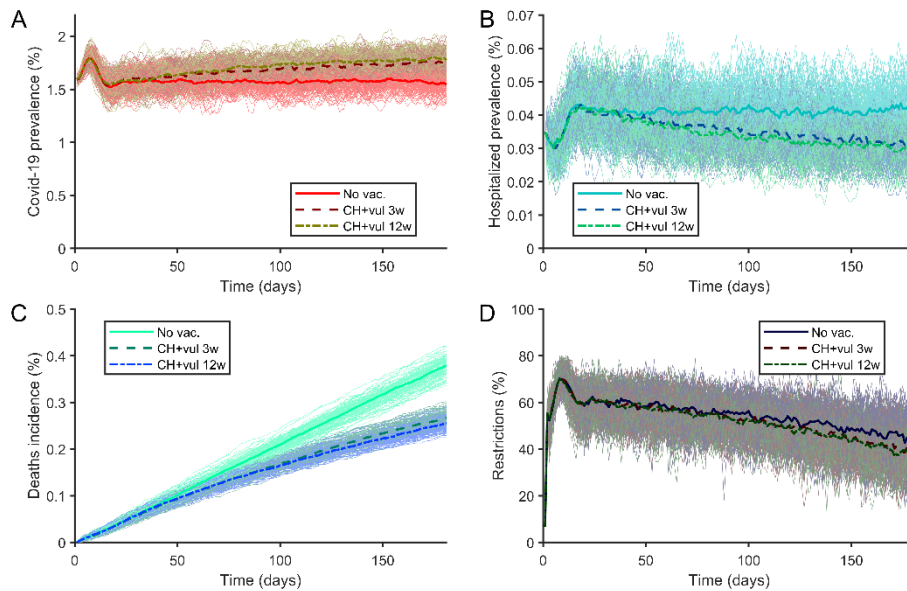

Figure 8. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for Moderna vaccine using Bulgaria conditions described in table 1.
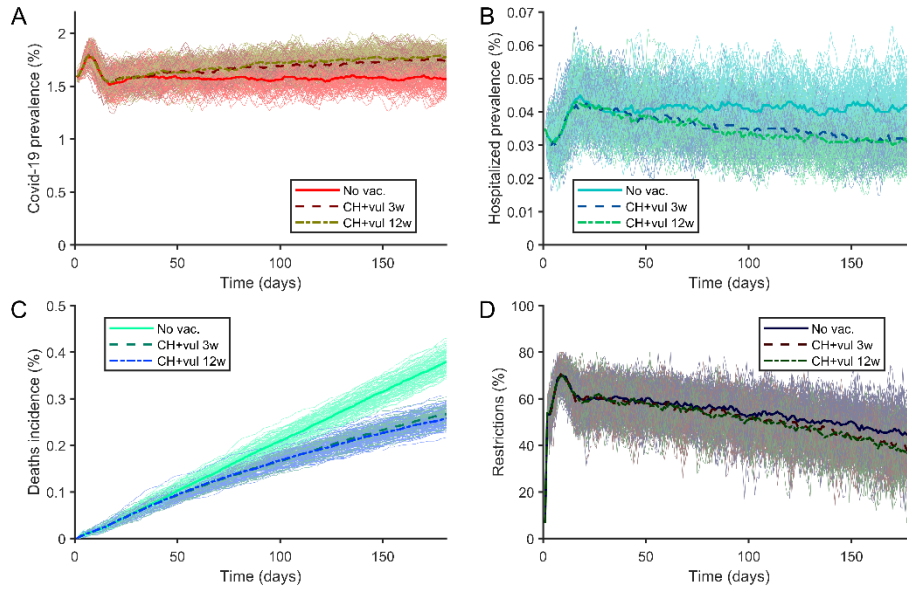
Figure 9. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for Pfizer vaccine using Bulgaria conditions described in table 1.
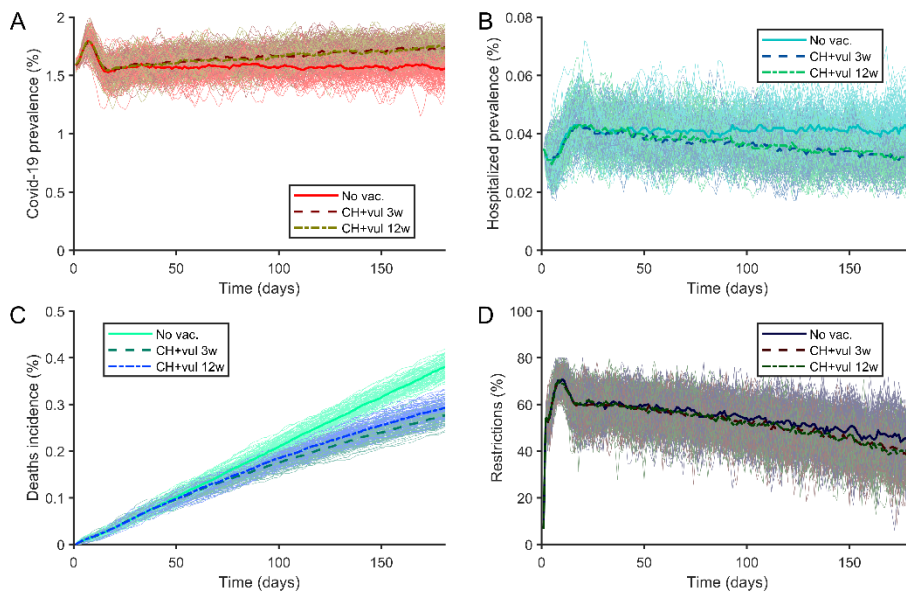

Figure 10. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for AstraZeneca vaccine using Croatia conditions described in table 1.
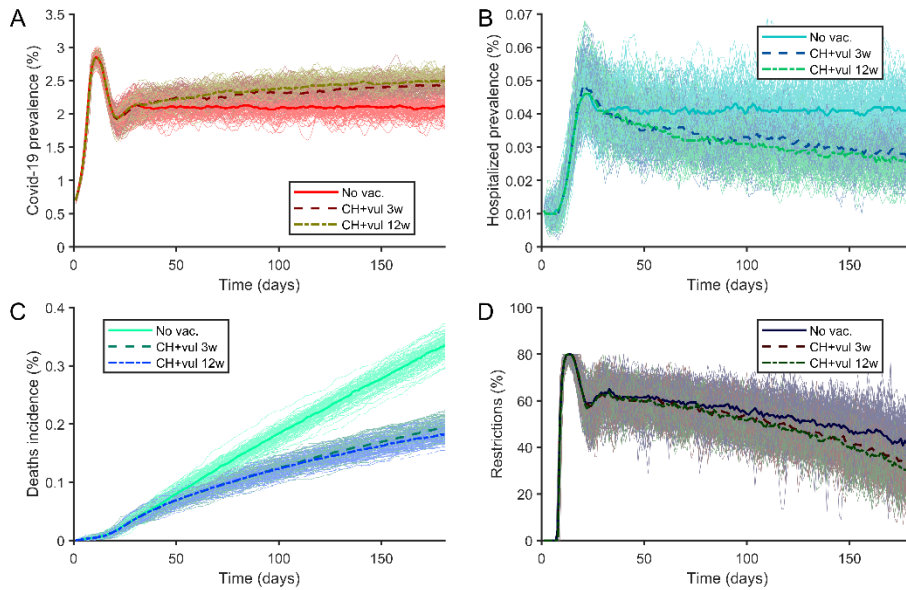
Figure 11. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for Moderna vaccine using Croatia conditions described in table 1.
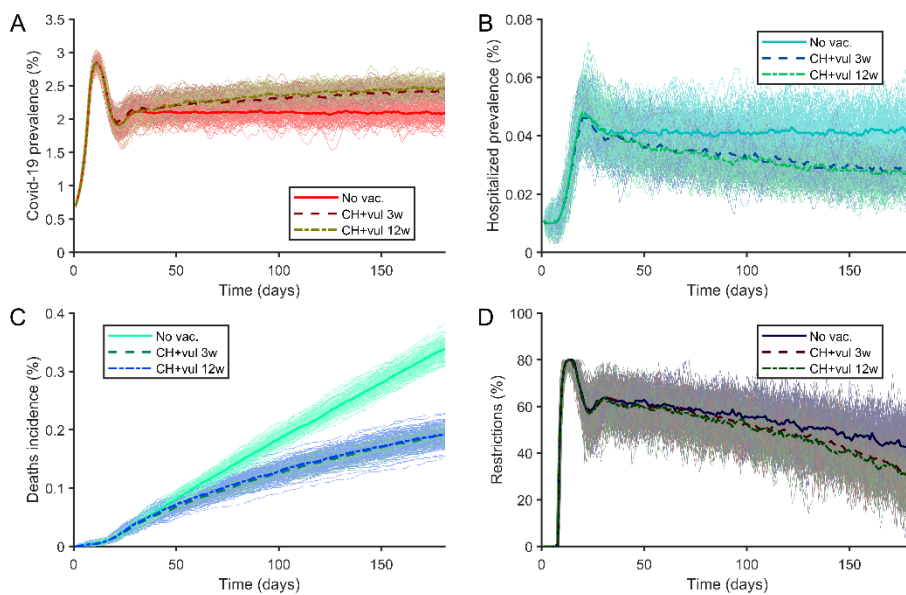

Figure 12. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for Pfizer vaccine using Croatia conditions described in table 1.
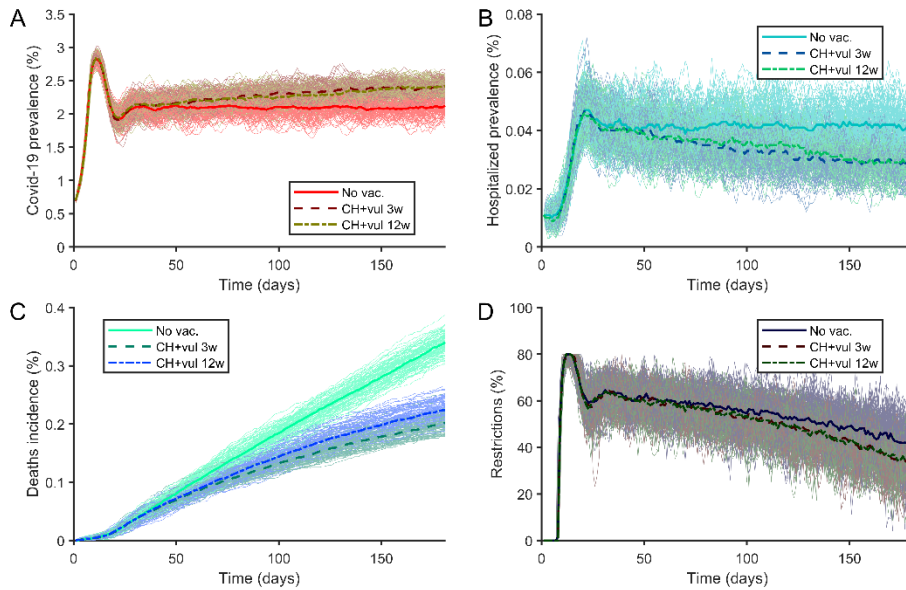
Figure 13. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for AstraZeneca vaccine using Cyprus conditions described in table 1.
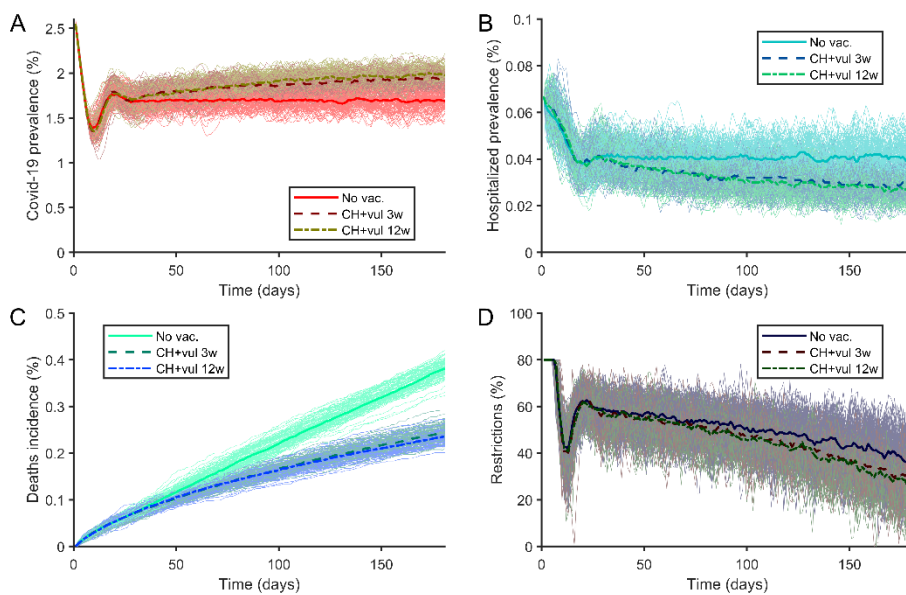

Figure 14. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for Moderna vaccine using Cyprus conditions described in table 1.
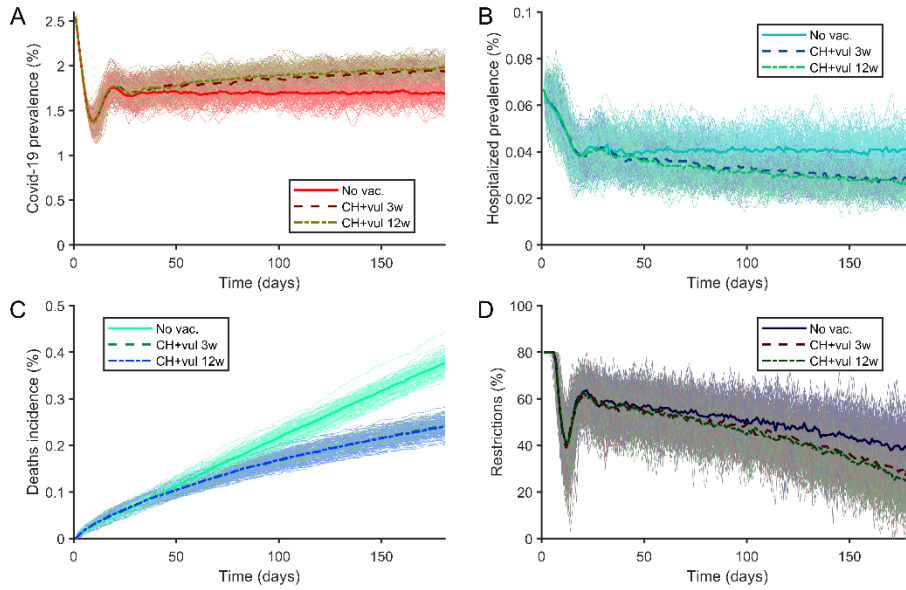
Figure 15. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for Pfizer vaccine using Cyprus conditions described in table 1.
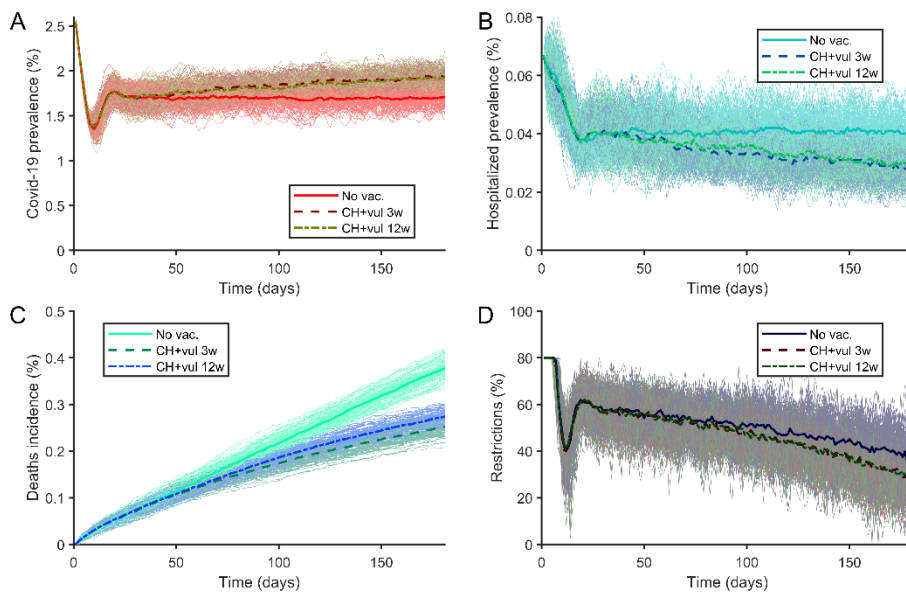

Figure 16. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for AstraZeneca vaccine using Czech Republic conditions described in table 1.
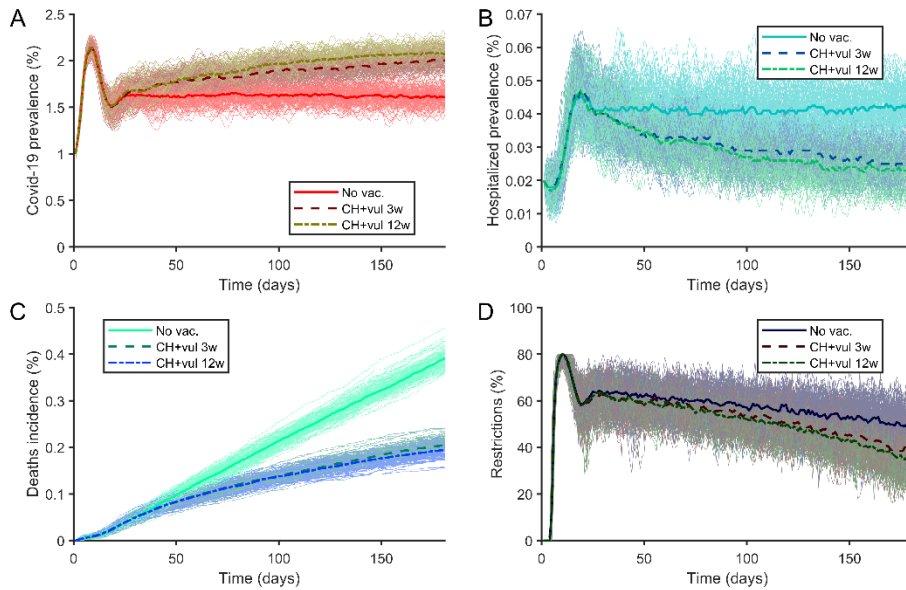
Figure 17. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for Moderna vaccine using Czech Republic conditions described in table 1.

Figure 18. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for Pfizer vaccine using Czech Republic conditions described in table 1.

Figure 19. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for AstraZeneca vaccine using Denmark conditions described in table 1.
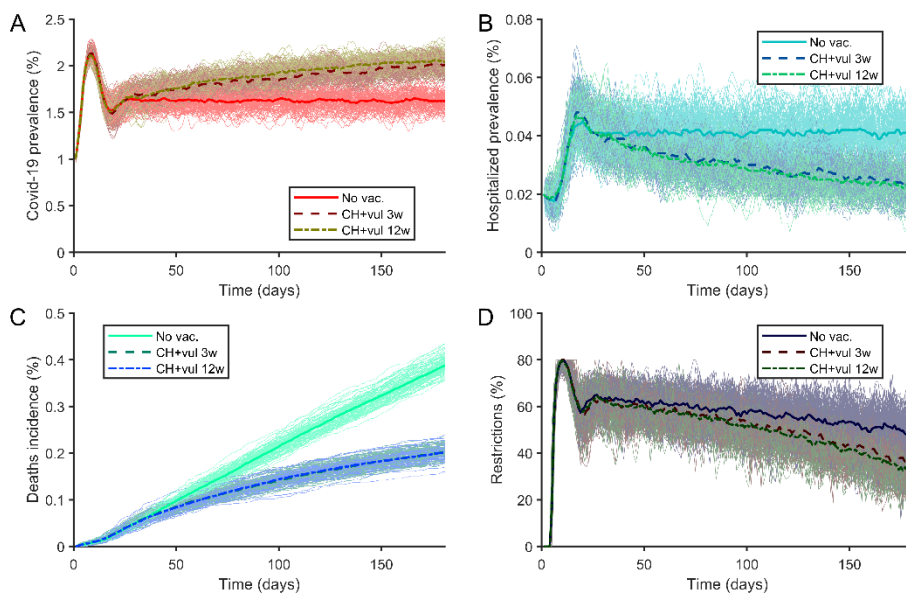

Figure 20. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for Moderna vaccine using Denmark conditions described in table 1.
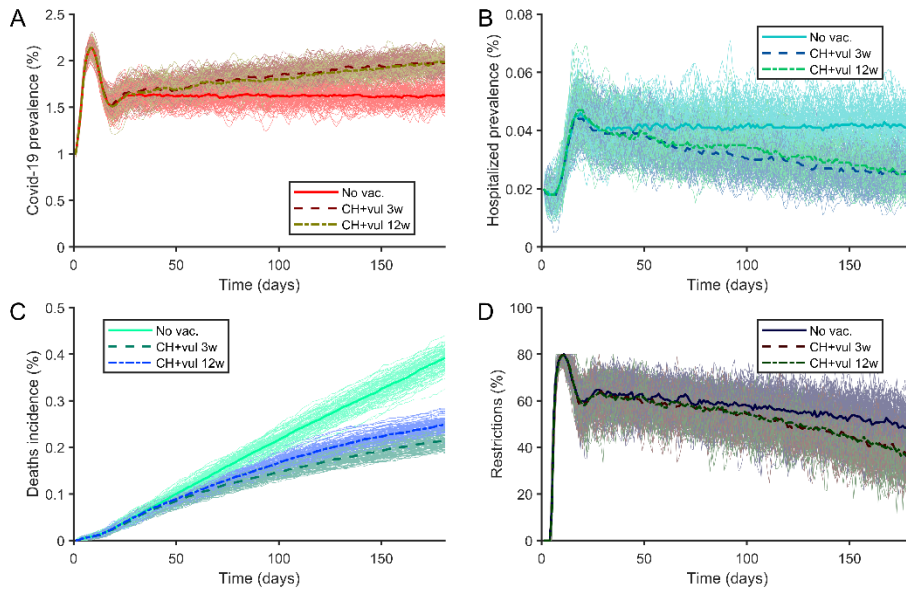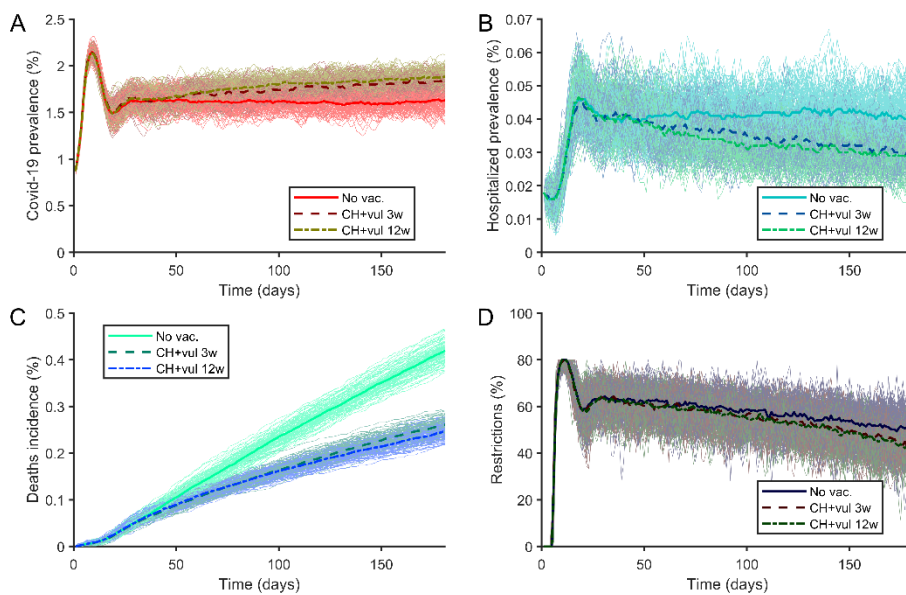
Figure 21. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for Pfizer vaccine using Denmark conditions described in table 1.

Figure 22. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for AstraZeneca vaccine using Estonia conditions described in table 1.
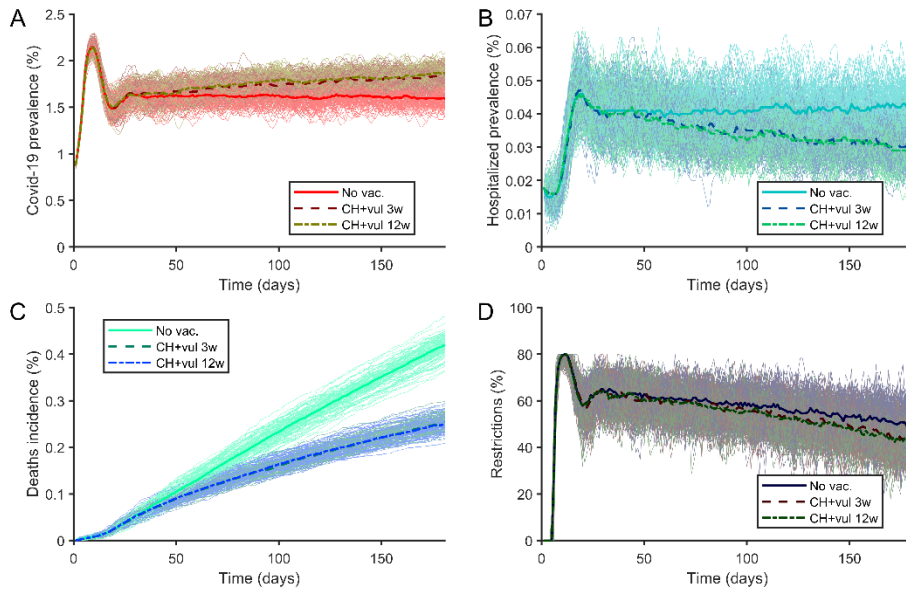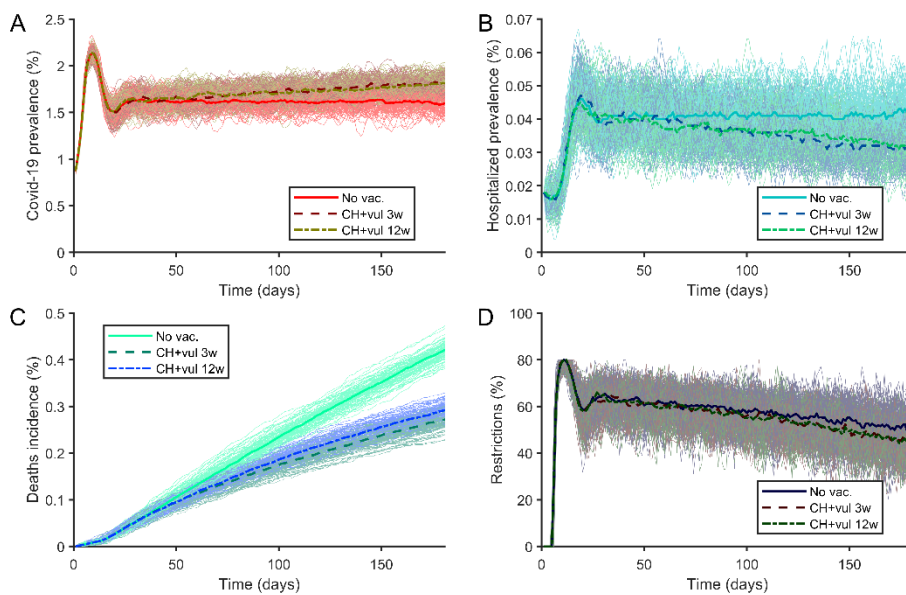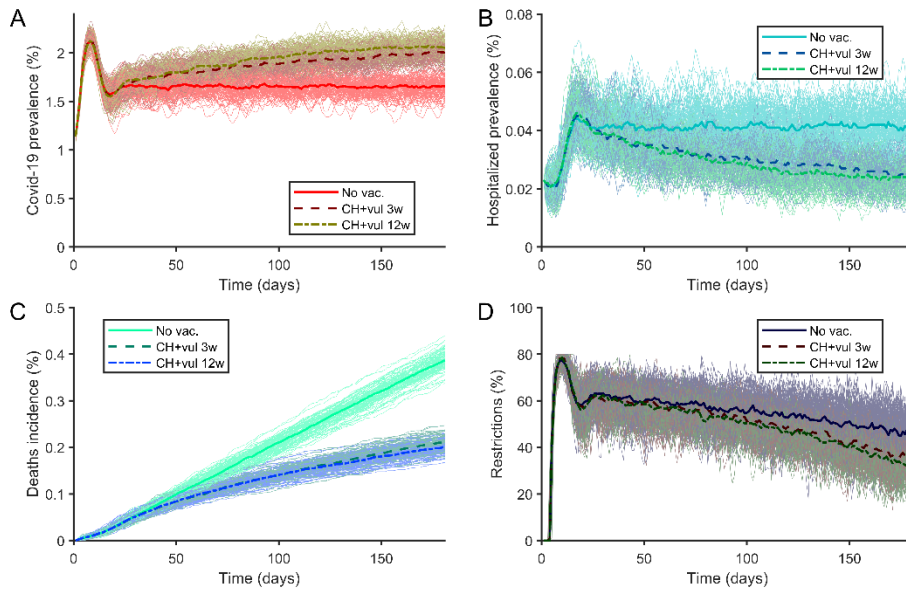
Figure 23. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for Moderna vaccine using Estonia conditions described in table 1.

Figure 24. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for Pfizer vaccine using Estonia conditions described in table 1.

Figure 25. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for AstraZeneca vaccine using Europe conditions described in table 1.
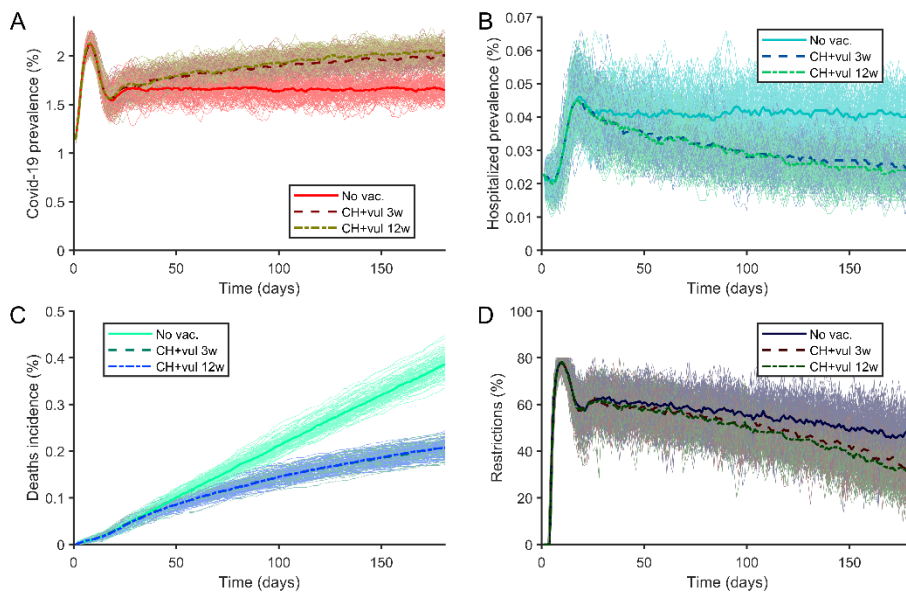

Figure 26. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for Moderna vaccine using Europe conditions described in table 1.
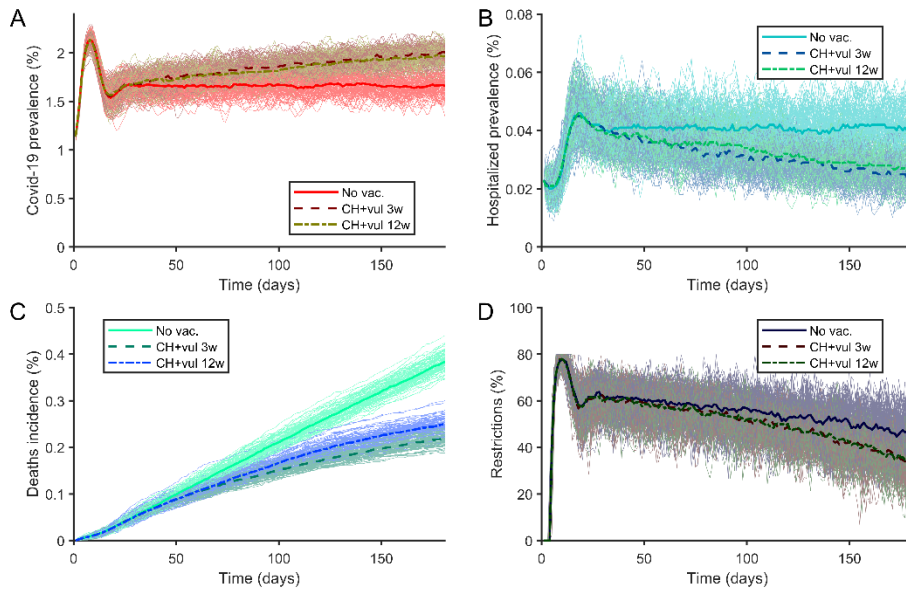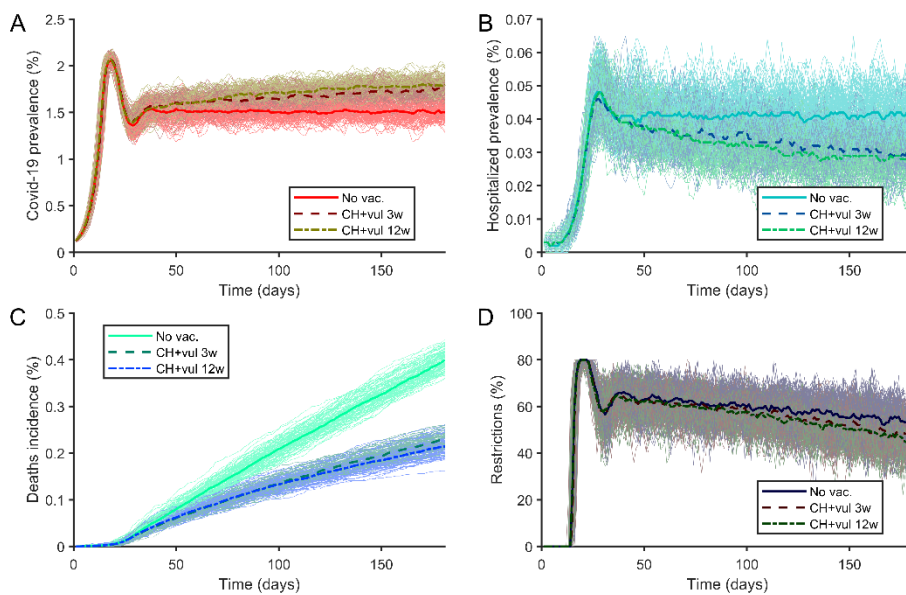
Figure 27. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for Pfizer vaccine using Europe conditions described in table 1.

Figure 28. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for AstraZeneca vaccine using Finland conditions described in table 1.
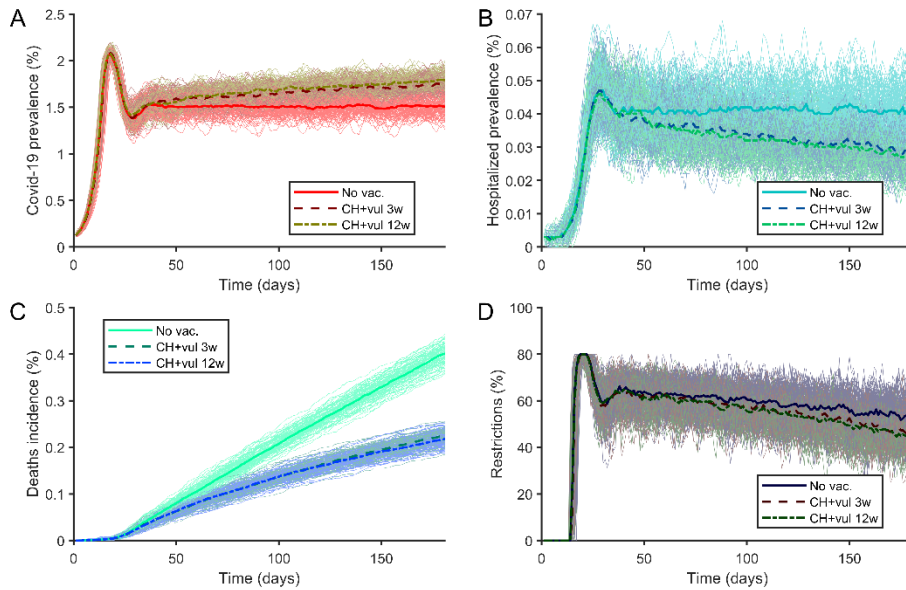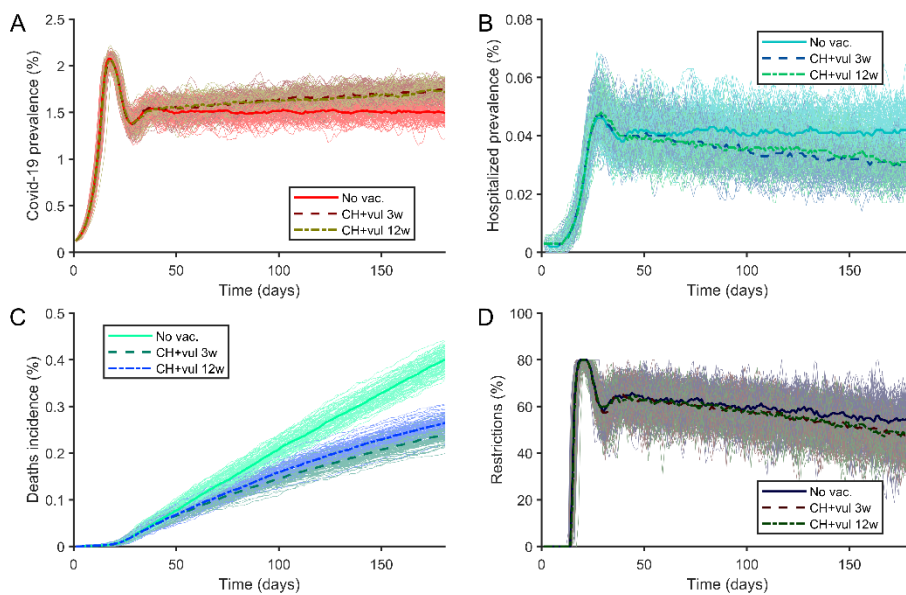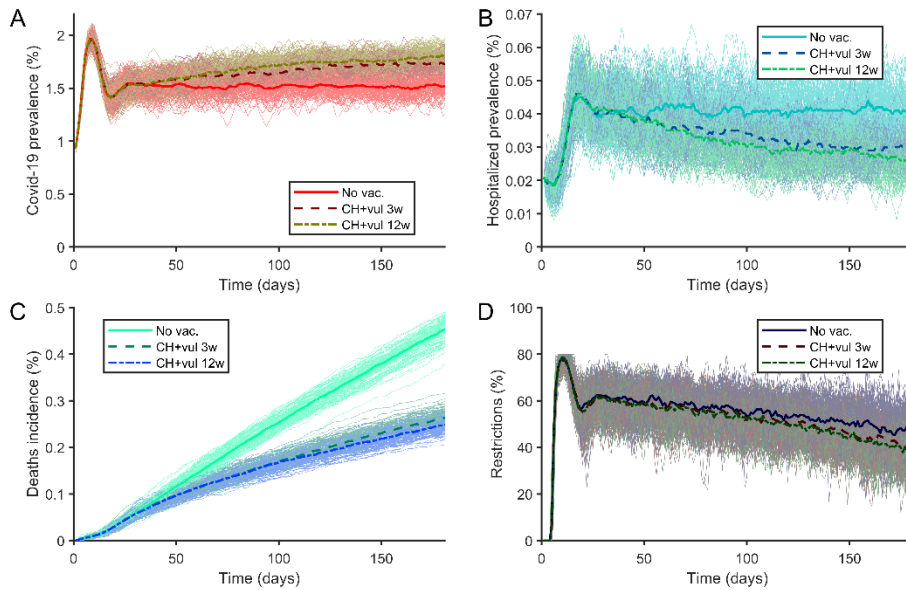
Figure 29. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for Moderna vaccine using Finland conditions described in table 1.

Figure 30. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for Pfizer vaccine using Finland conditions described in table 1.

Figure 31. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for AstraZeneca vaccine using France conditions described in table 1.
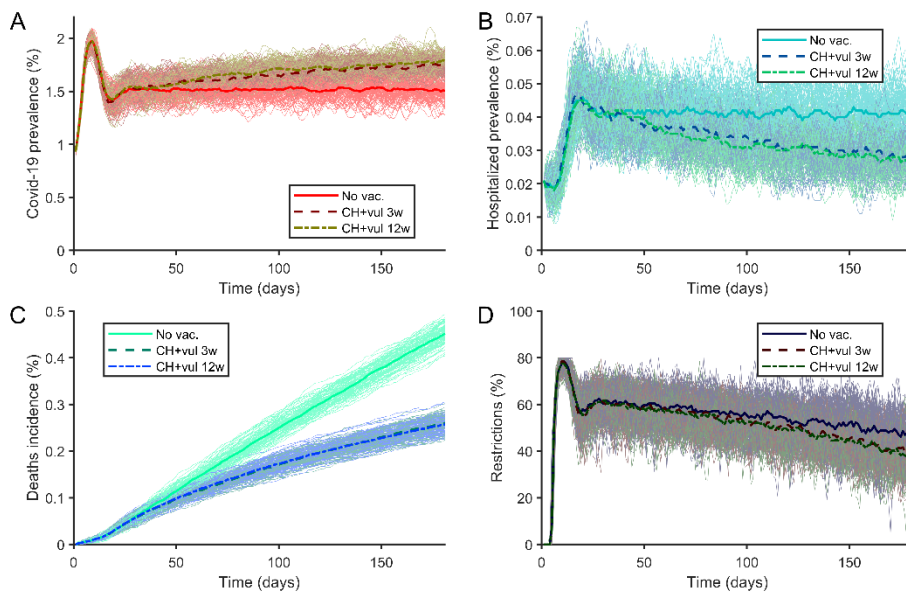

Figure 32. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for Moderna vaccine using France conditions described in table 1.
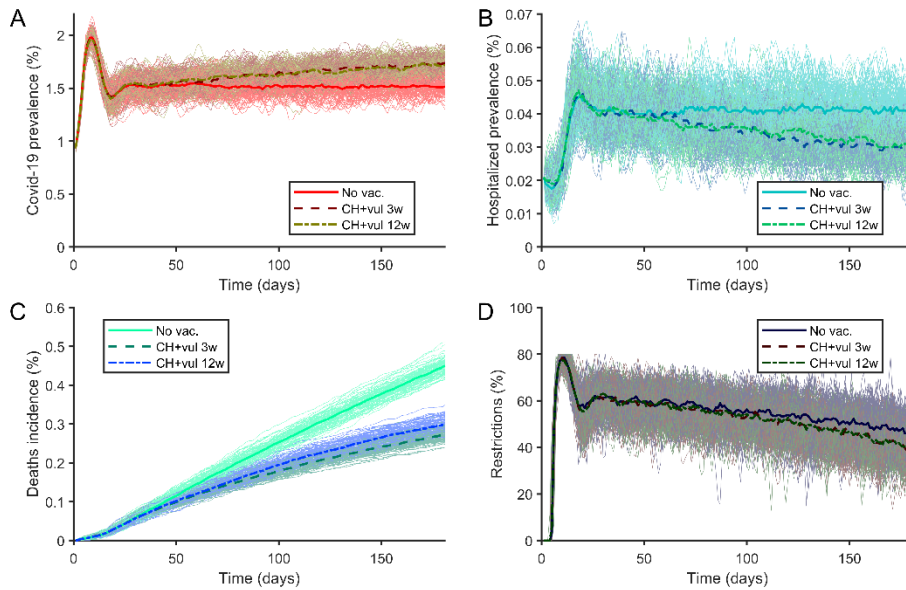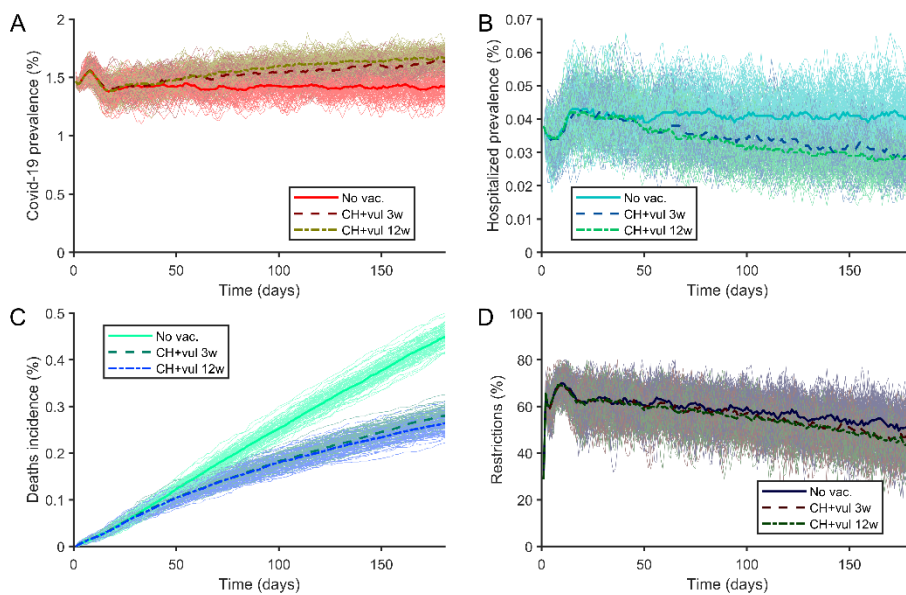
Figure 33. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for Pfizer vaccine using France conditions described in table 1.

Figure 34. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for AstraZeneca vaccine using Germany conditions described in table 1.
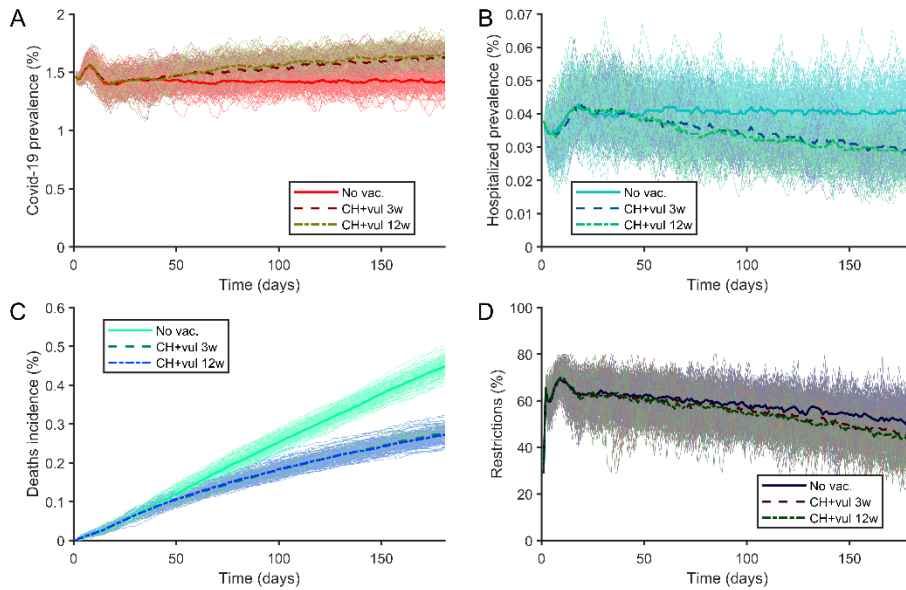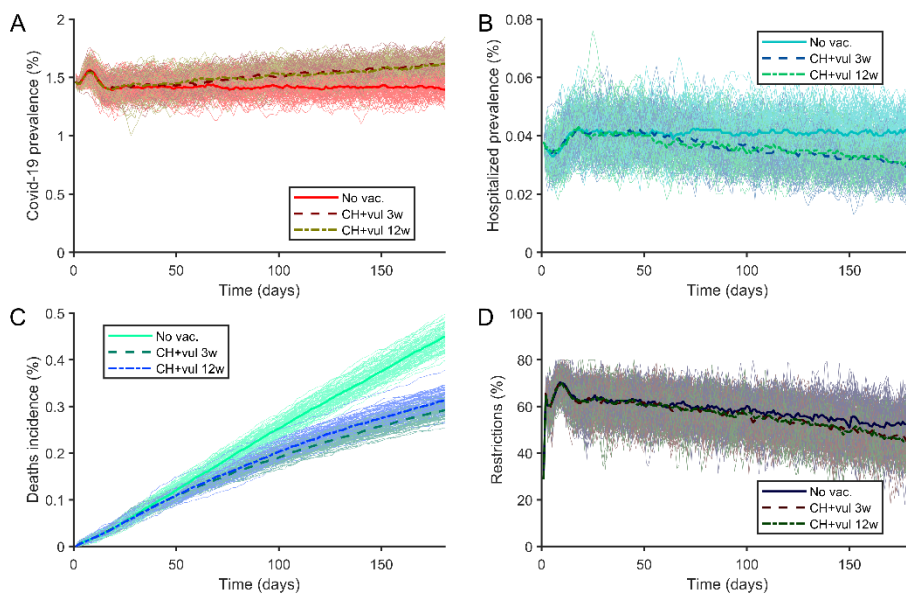
Figure 35. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for Moderna vaccine using Germany conditions described in table 1.
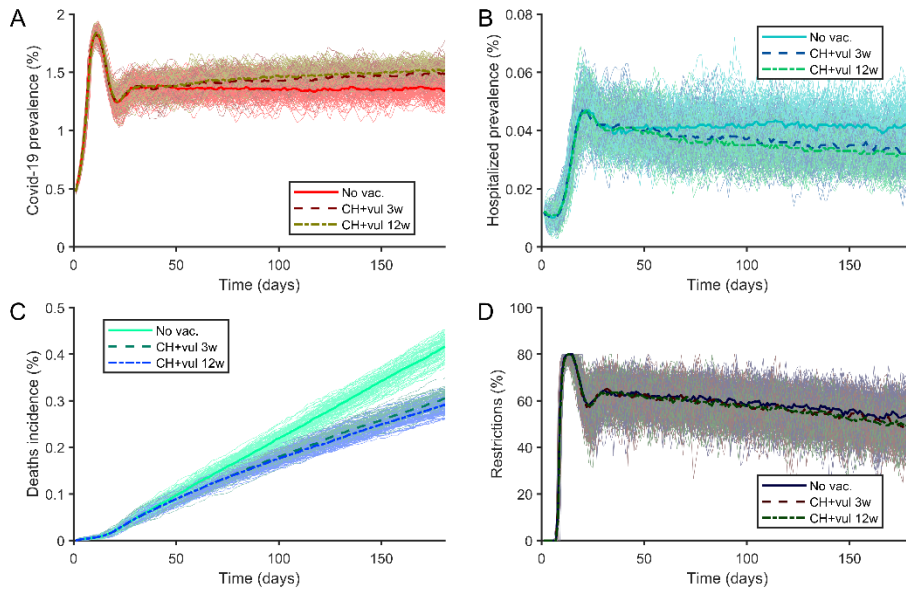

Figure 36. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for Pfizer vaccine using Germany conditions described in table 1.

Figure 37. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for AstraZeneca vaccine using Greece conditions described in table 1.
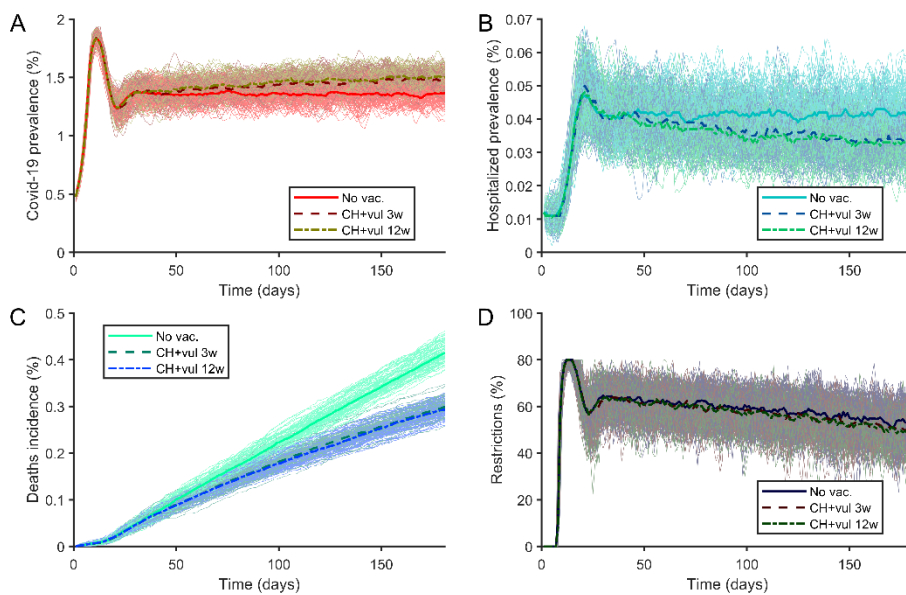

Figure 38. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for Moderna vaccine using Greece conditions described in table 1.
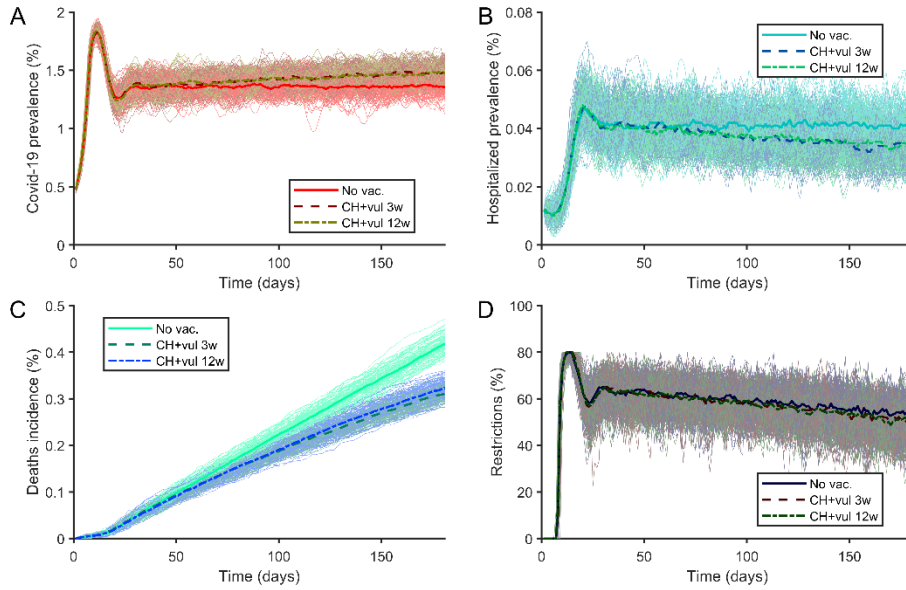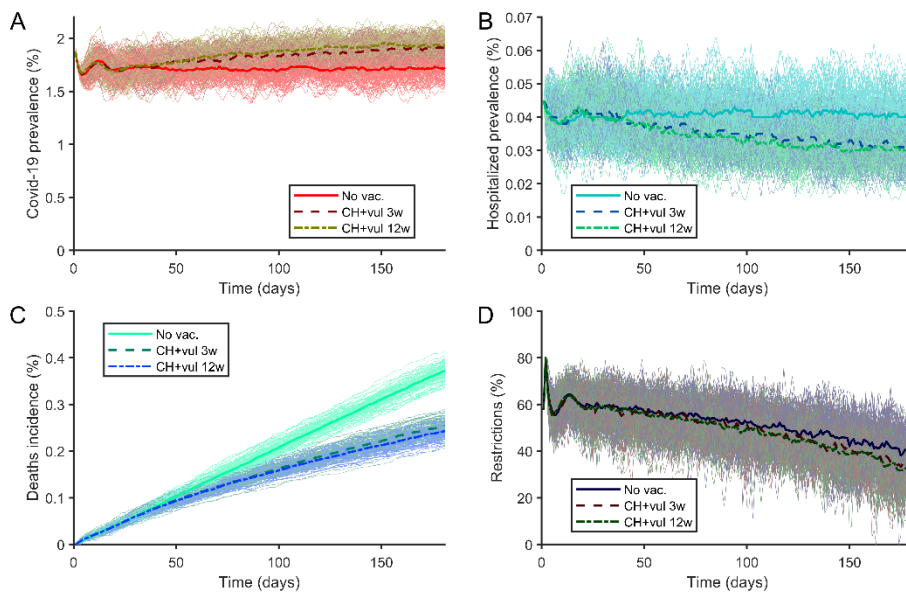
Figure 39. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for Pfizer vaccine using Greece conditions described in table 1.

Figure 40. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for AstraZeneca vaccine using Hungary conditions described in table 1.
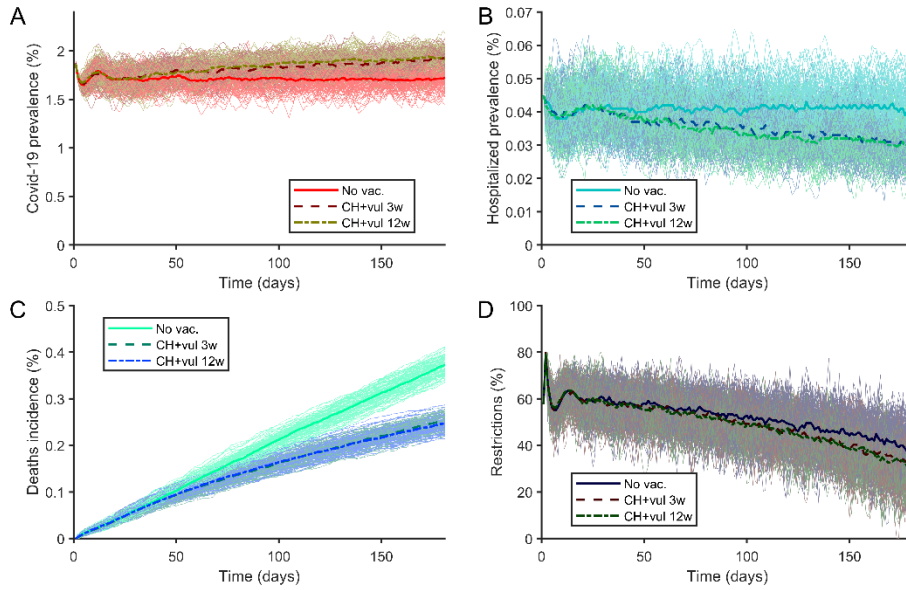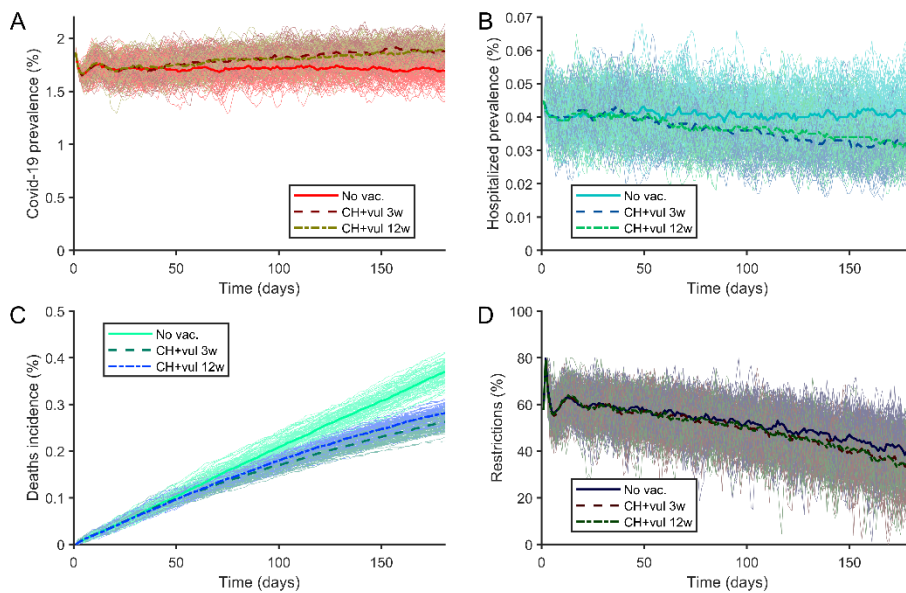
Figure 41. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for Moderna vaccine using Hungary conditions described in table 1.
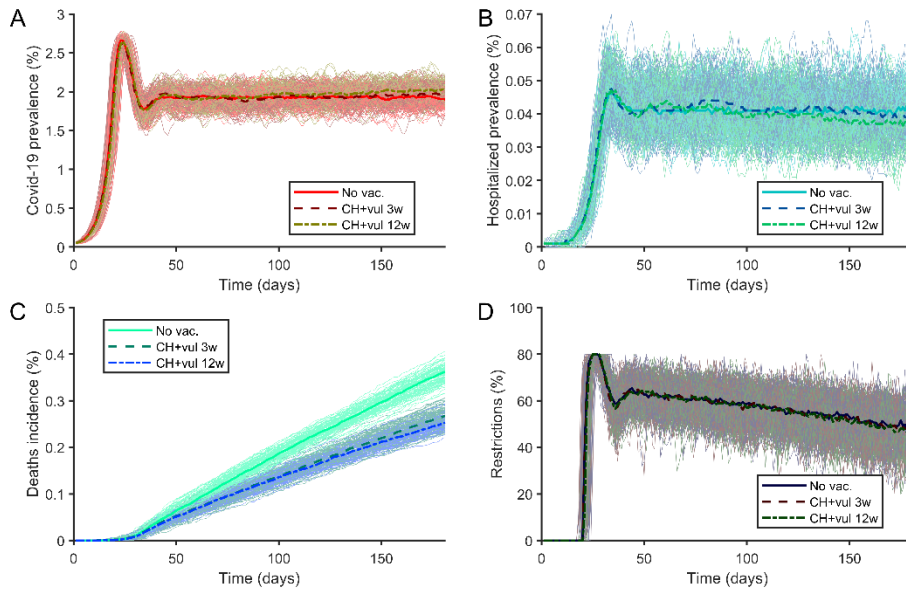

Figure 42. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for Pfizer vaccine using Hungary conditions described in table 1.

Figure 43. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for AstraZeneca vaccine using Iceland conditions described in table 1.
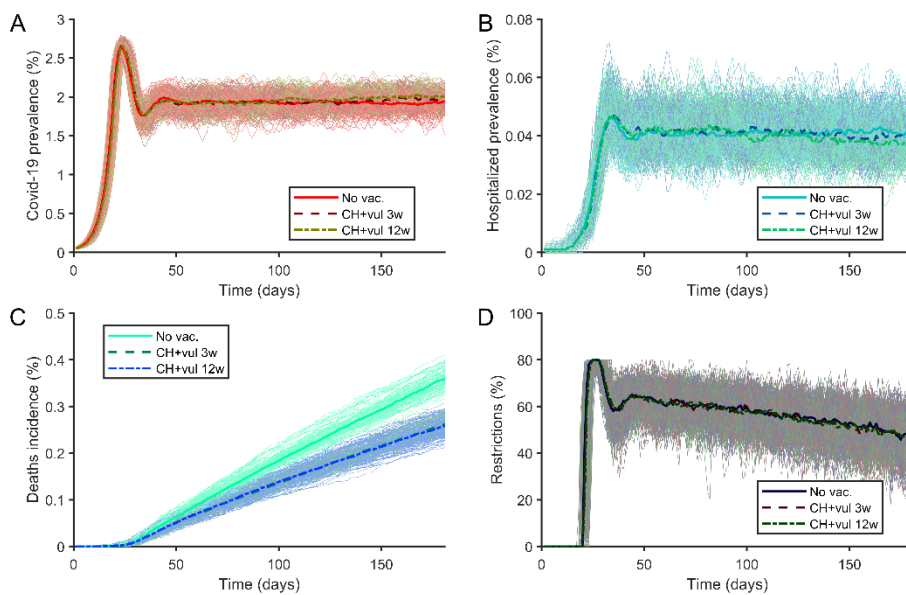

Figure 44. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for Moderna vaccine using Iceland conditions described in table 1.
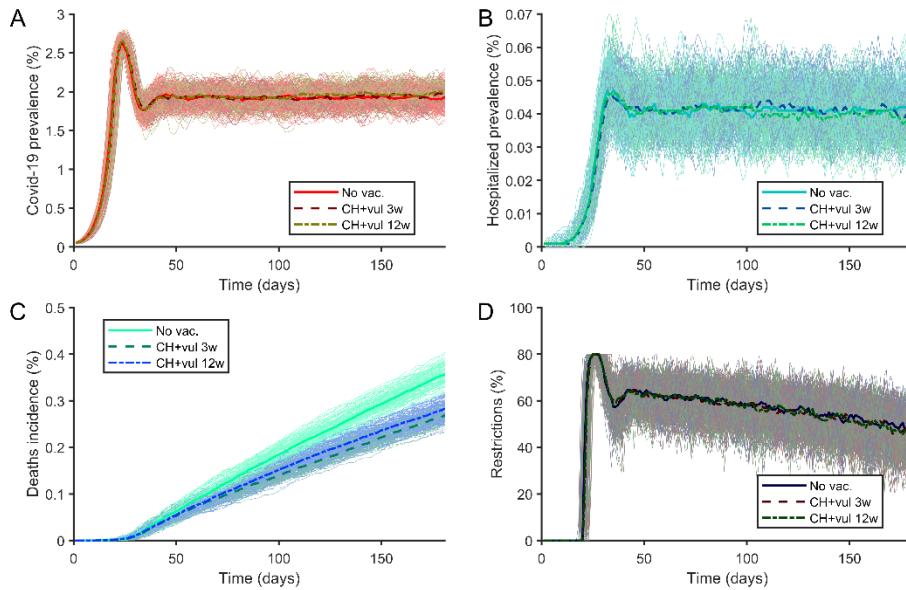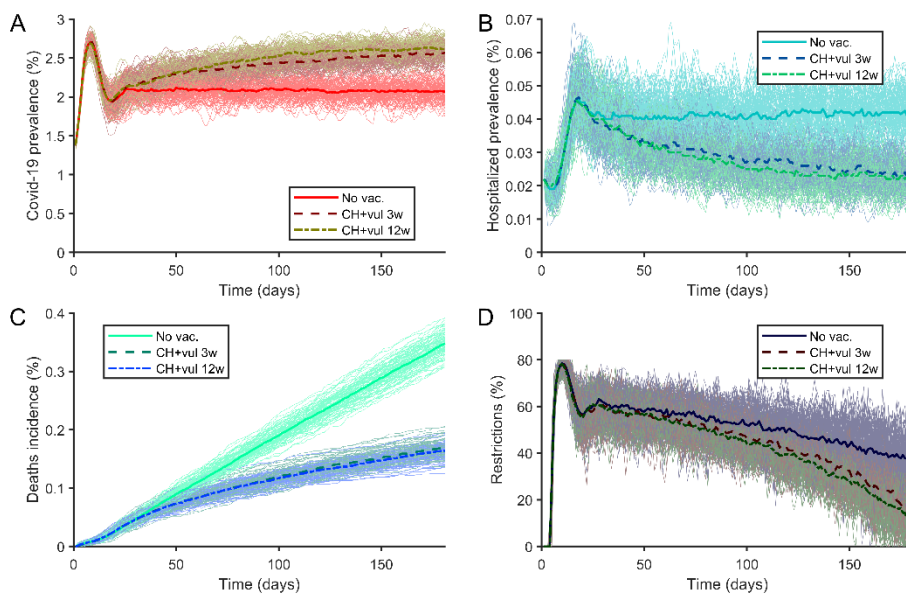
Figure 45. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for Pfizer vaccine using Iceland conditions described in table 1.

Figure 46. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for AstraZeneca vaccine using Ireland conditions described in table 1.
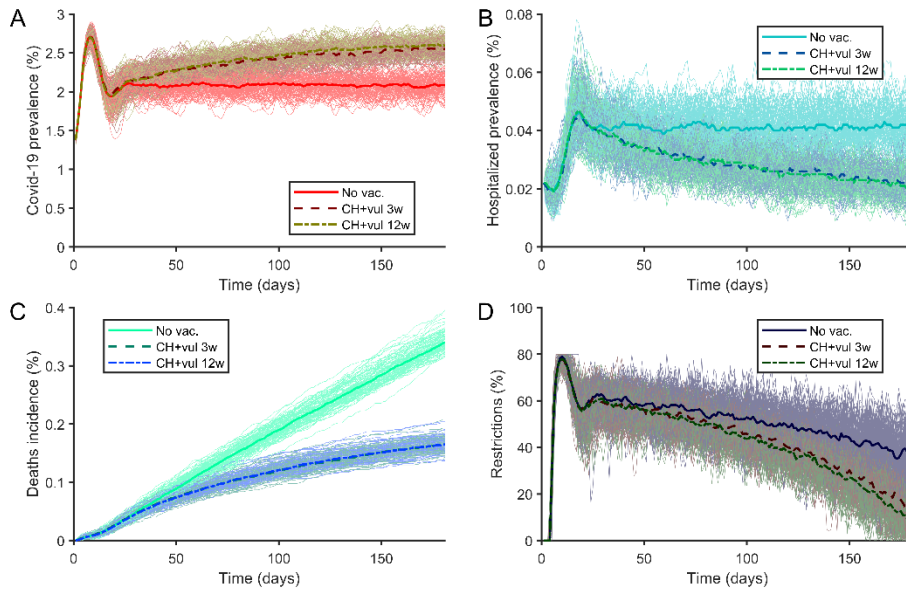
Figure 47. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for Moderna vaccine using Ireland conditions described in table 1.
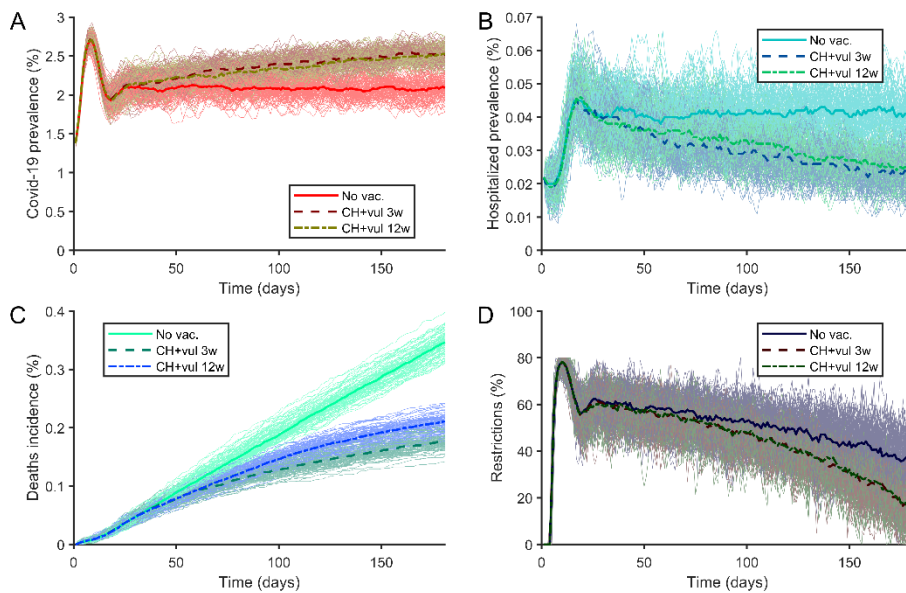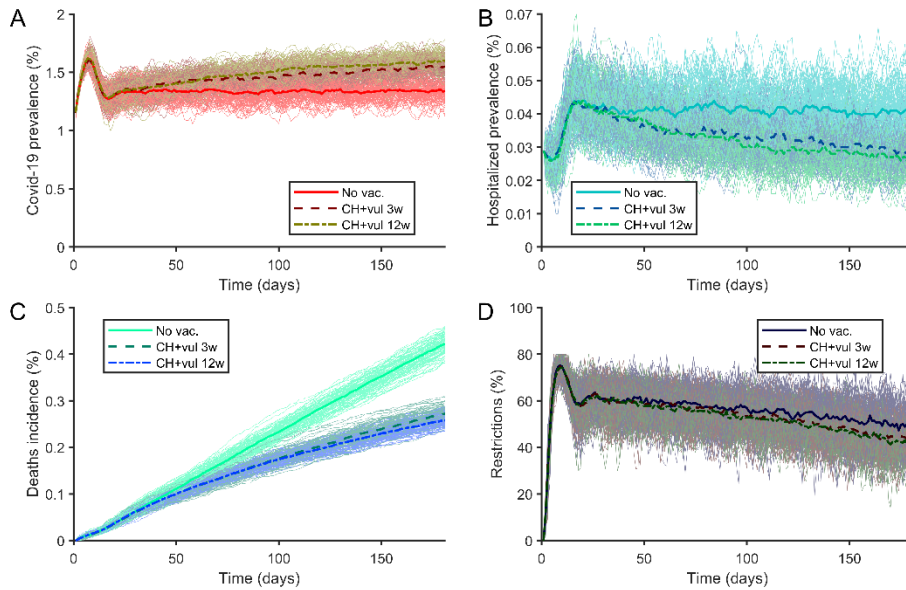

Figure 48. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for Pfizer vaccine using Ireland conditions described in table 1.

Figure 49. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for AstraZeneca vaccine using Italy conditions described in table 1.
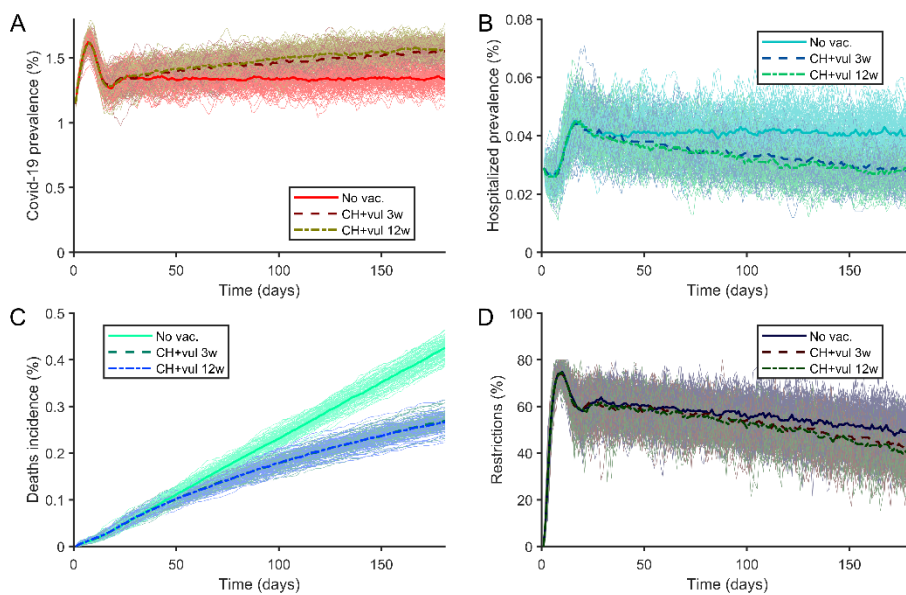

Figure 50. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for Moderna vaccine using Italy conditions described in table 1.
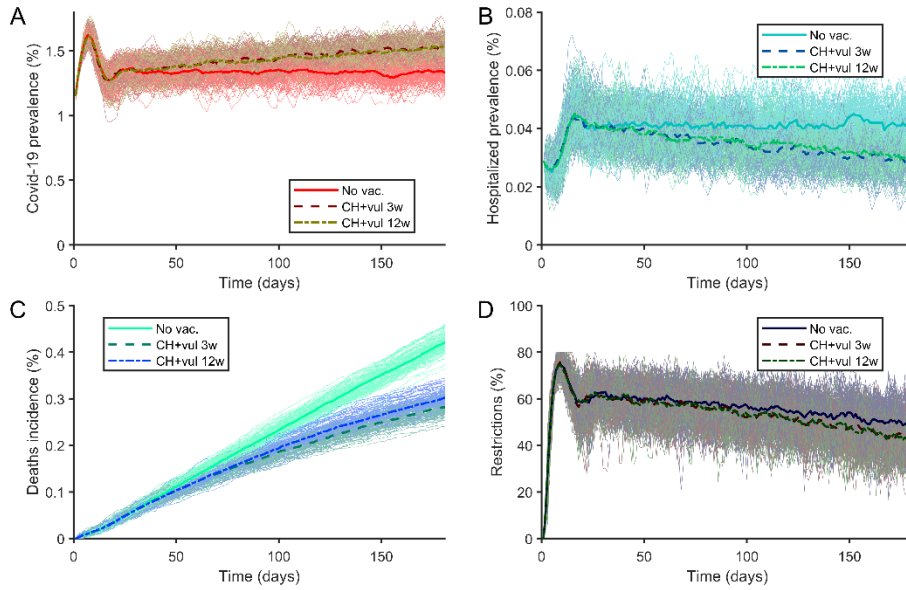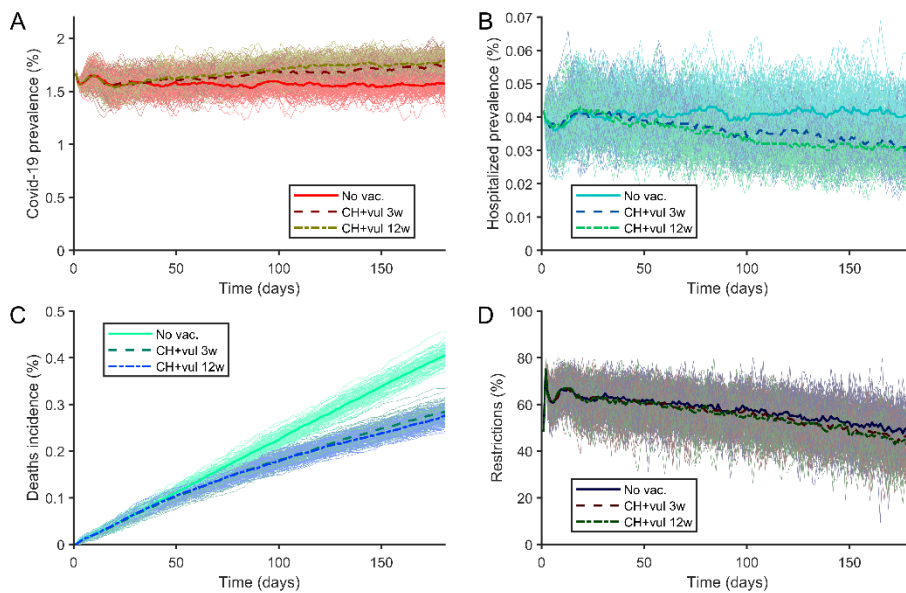
Figure 51. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for Pfizer vaccine using Italy conditions described in table 1.

Figure 52. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for AstraZeneca vaccine using Latvia conditions described in table 1.
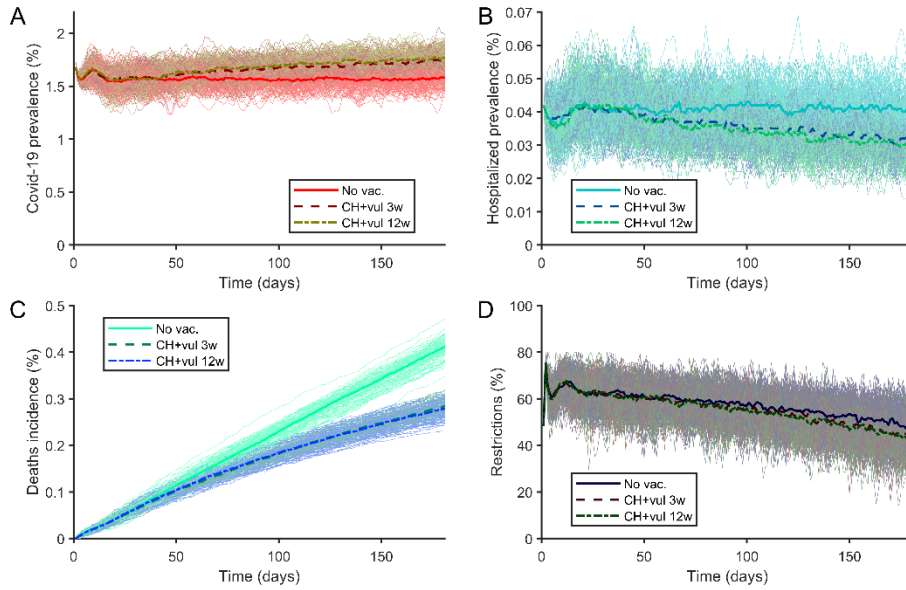
Figure 53. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for Moderna vaccine using Latvia conditions described in table 1.
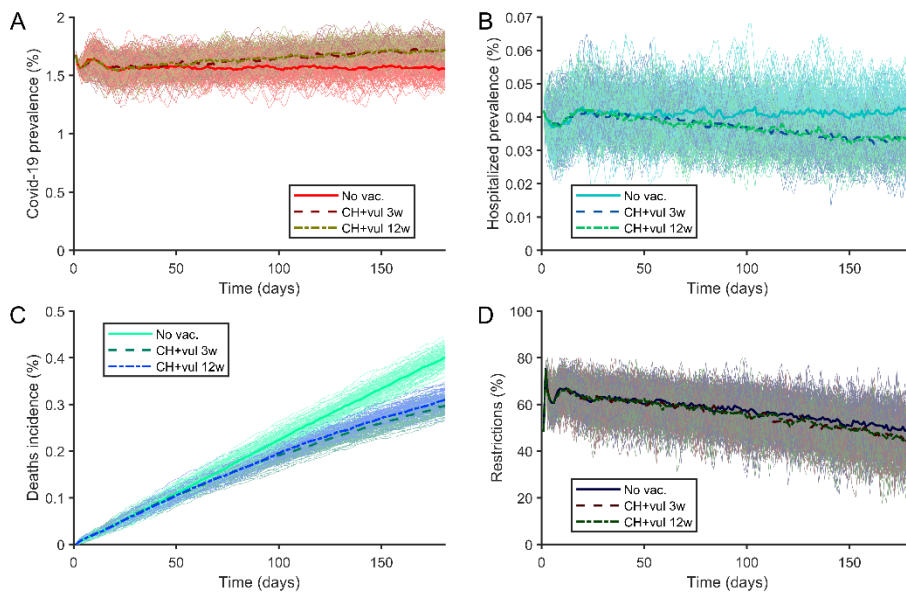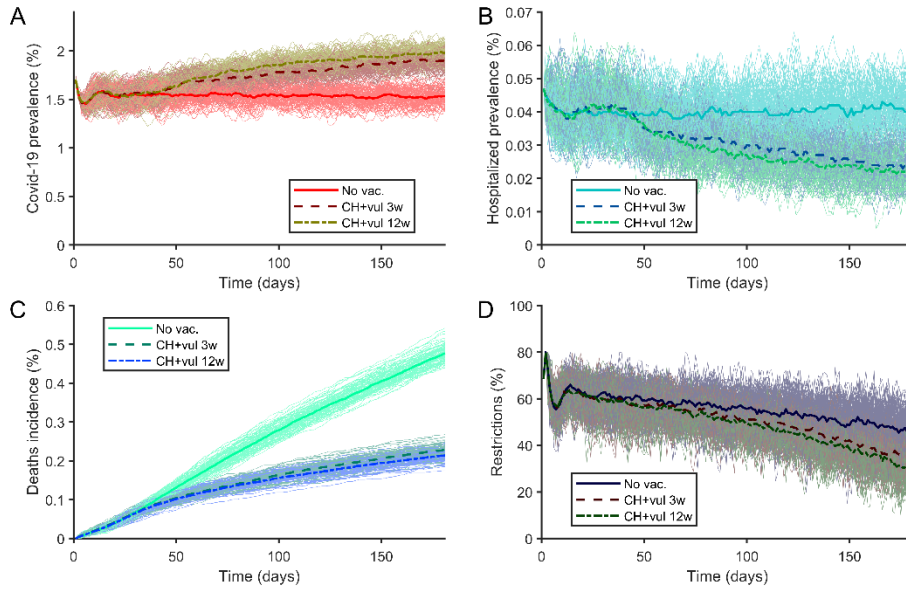

Figure 54. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for Pfizer vaccine using Latvia conditions described in table 1.

Figure 55. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for AstraZeneca vaccine using Lithuania conditions described in table 1.
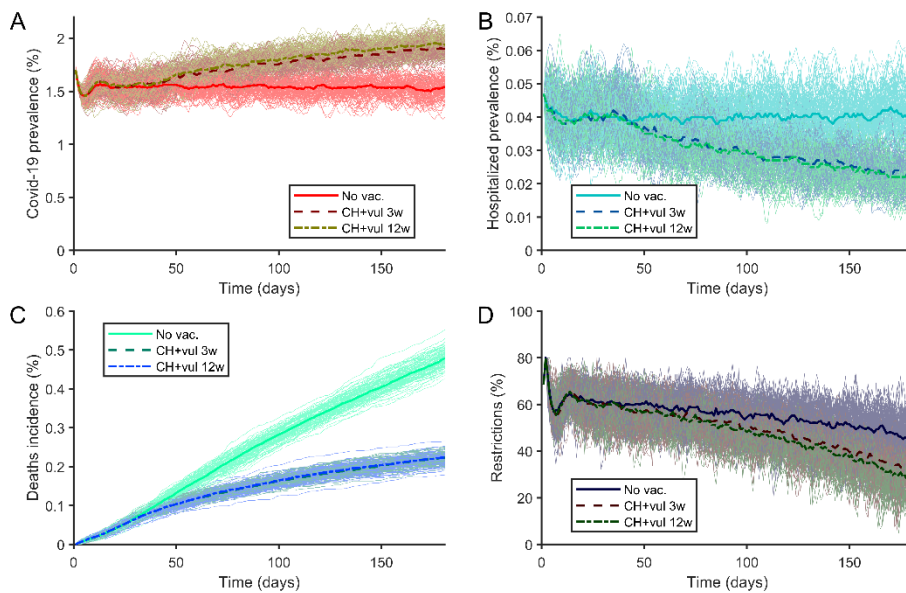

Figure 56. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for Moderna vaccine using Lithuania conditions described in table 1.
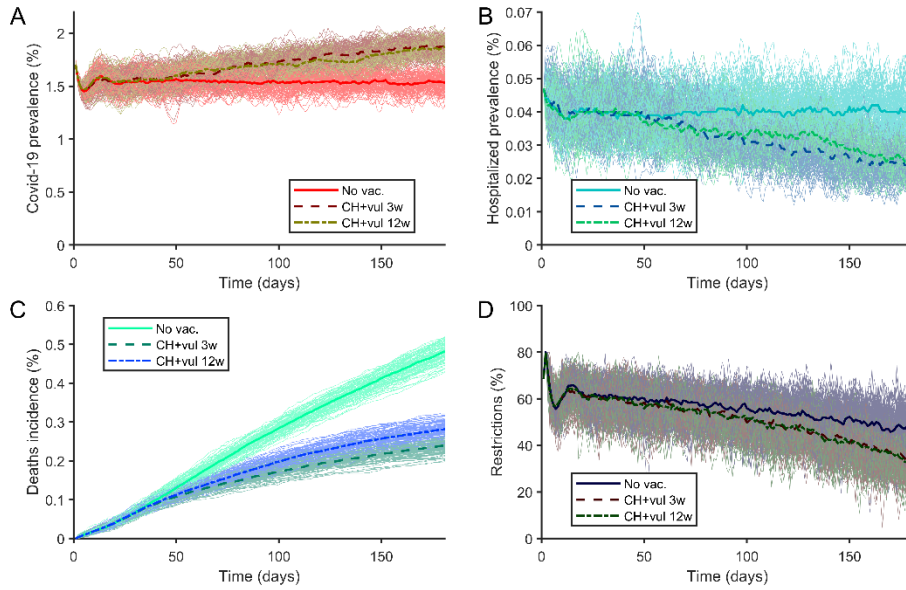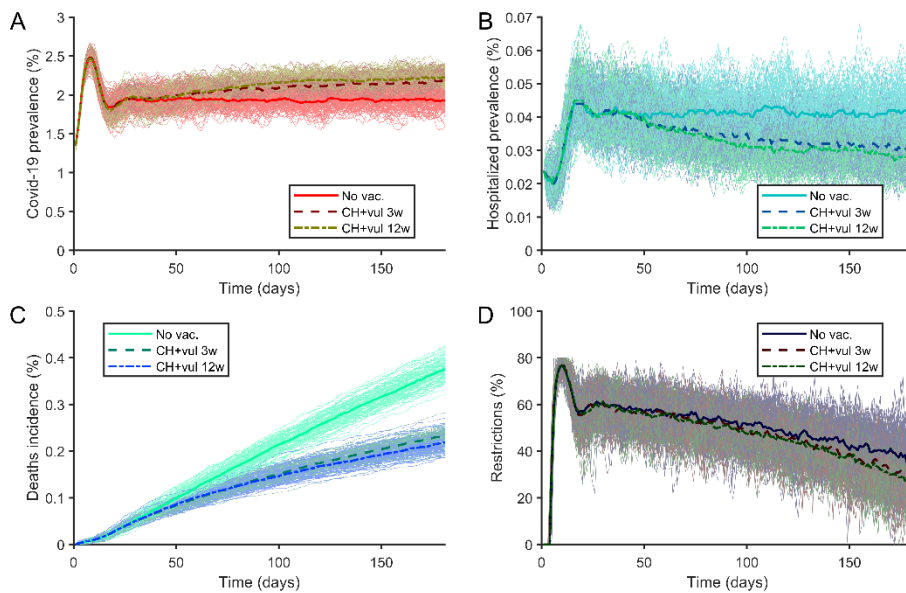
Figure 57. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for Pfizer vaccine using Lithuania conditions described in table 1.

Figure 58. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for AstraZeneca vaccine using Luxembourg conditions described in table 1.
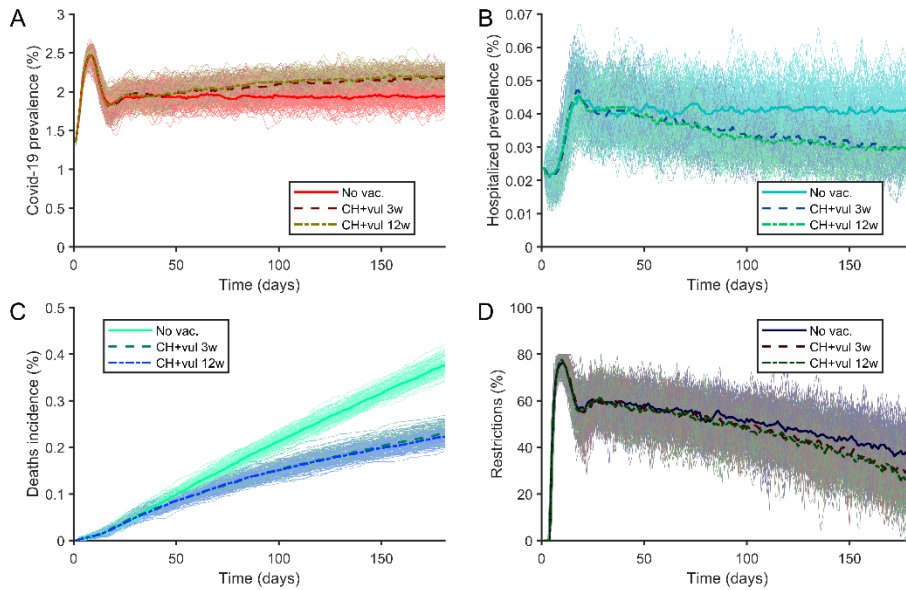
Figure 59. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for Moderna vaccine using Luxembourg conditions described in table 1.
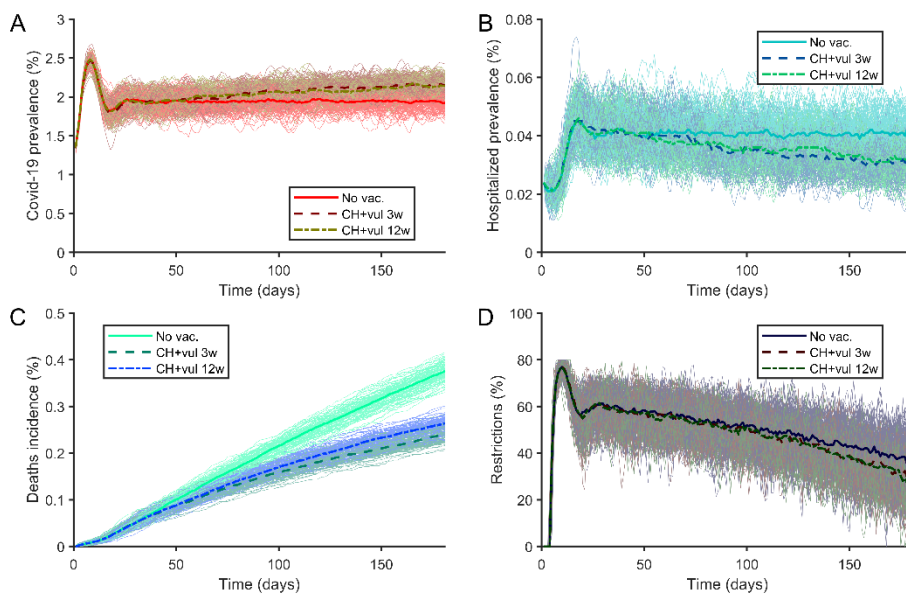

Figure 60. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for Pfizer vaccine using Luxembourg conditions described in table 1.
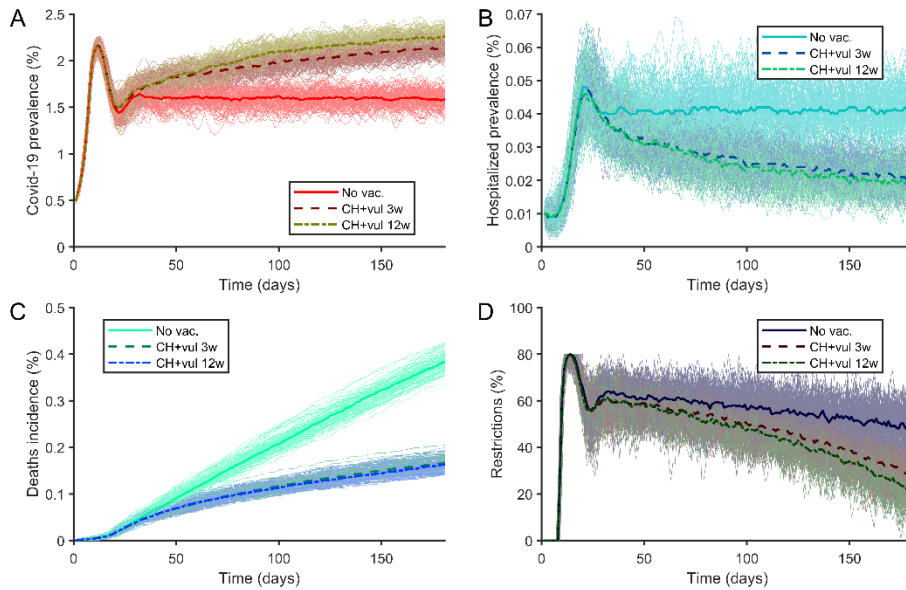
Figure 61. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for AstraZeneca vaccine using Malta conditions described in table 1.
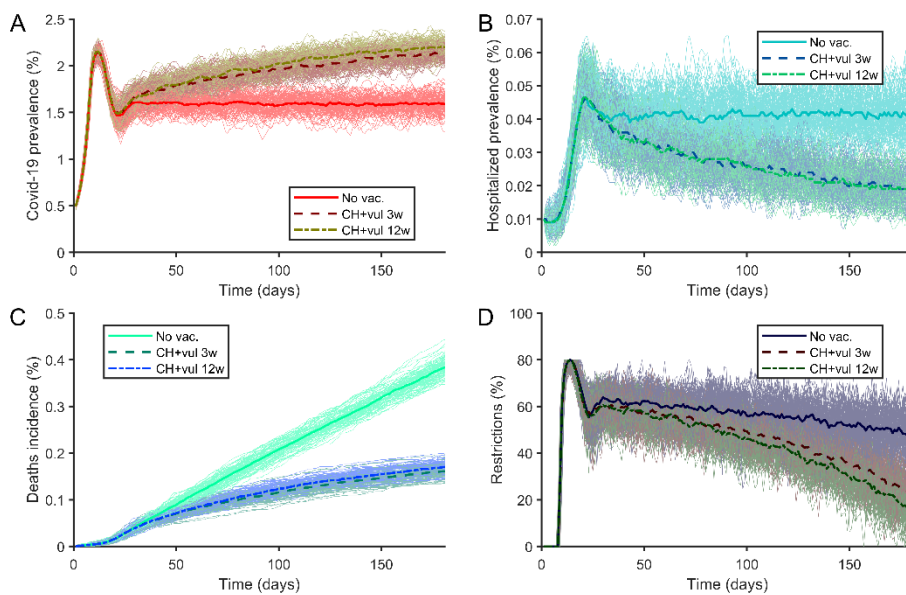

Figure 62. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for Moderna vaccine using Malta conditions described in table 1.
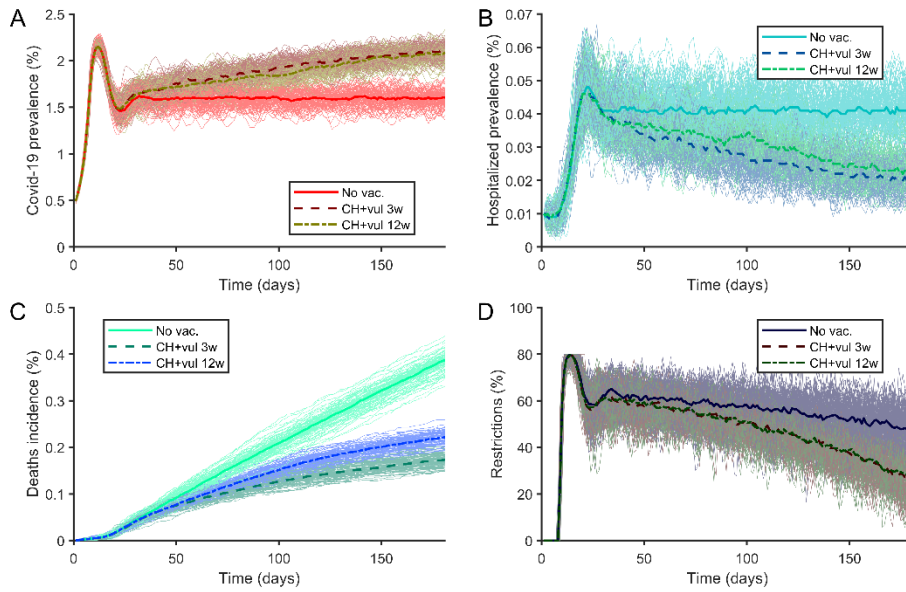
Figure 63. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for Pfizer vaccine using Malta conditions described in table 1.
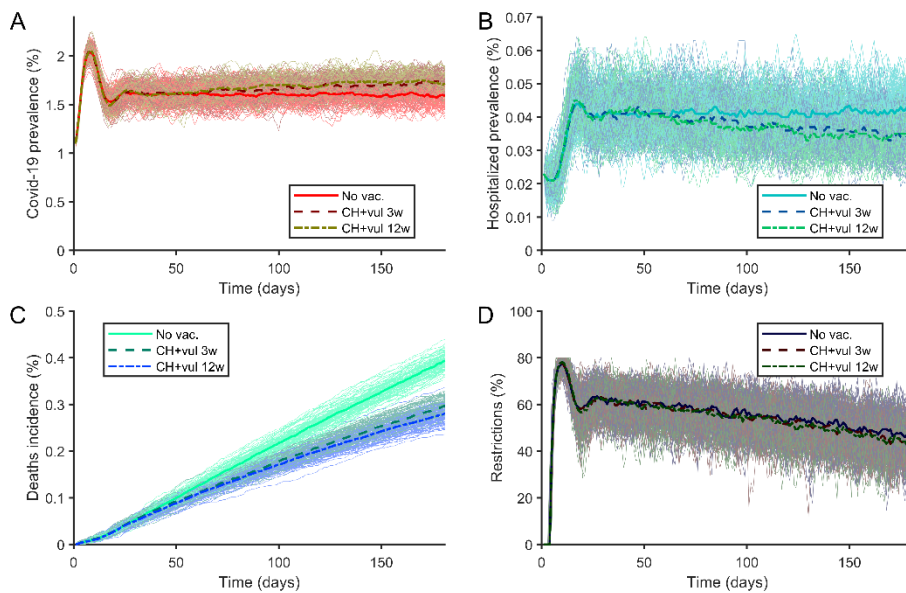

Figure 64. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for AstraZeneca vaccine using Netherlands conditions described in table 1.
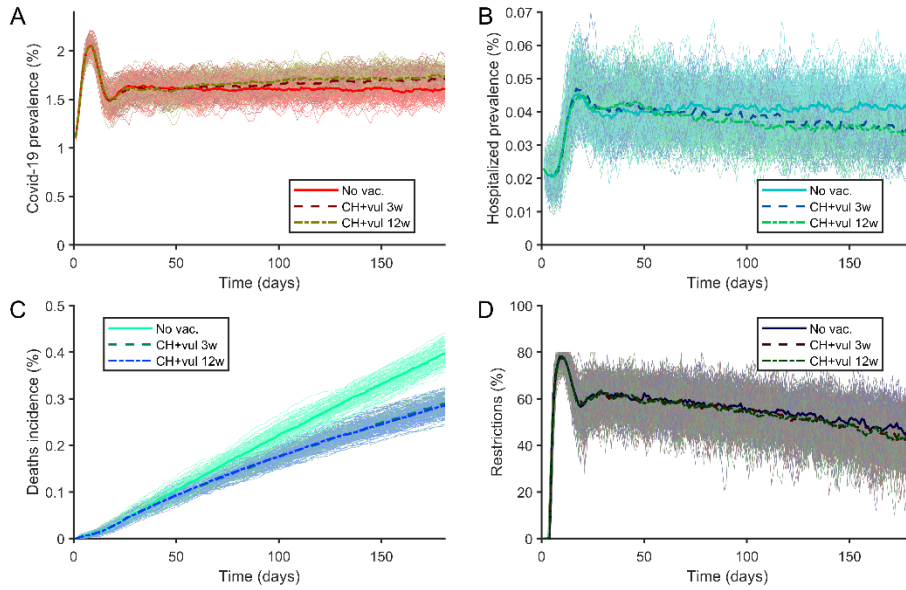
Figure 65. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for Moderna vaccine using Netherlands conditions described in table 1.
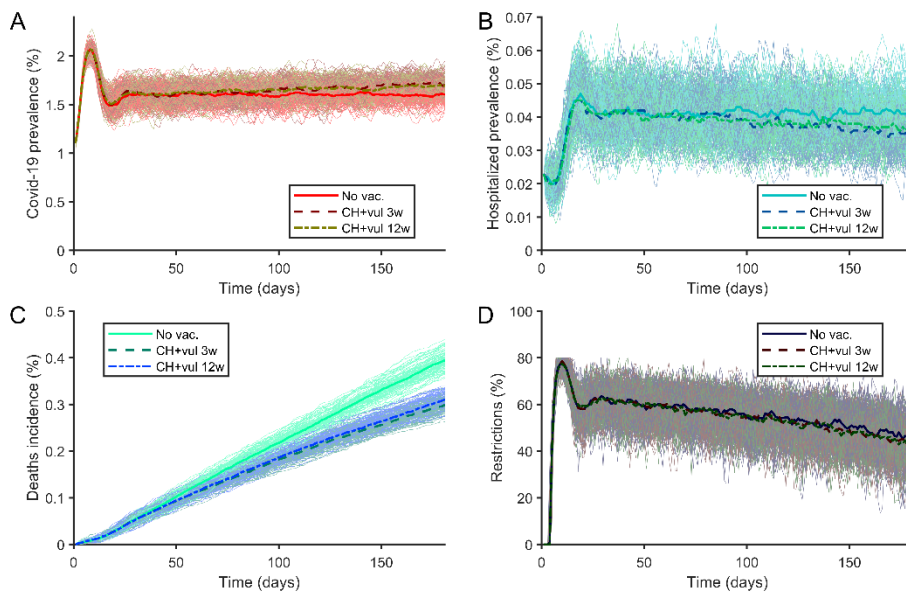

Figure 66. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for Pfizer vaccine using Netherlands conditions described in table 1.
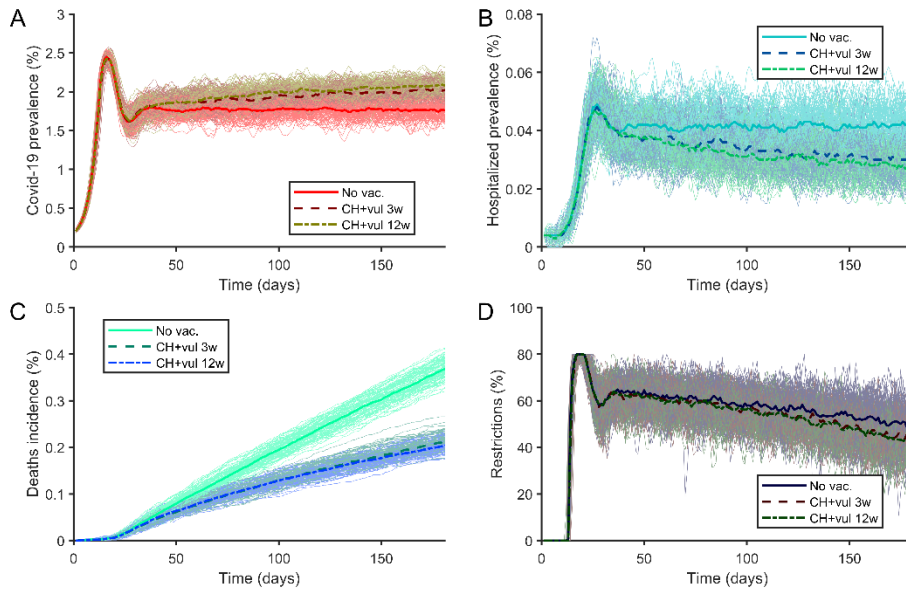
Figure 67. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for AstraZeneca vaccine using Norway conditions described in table 1.
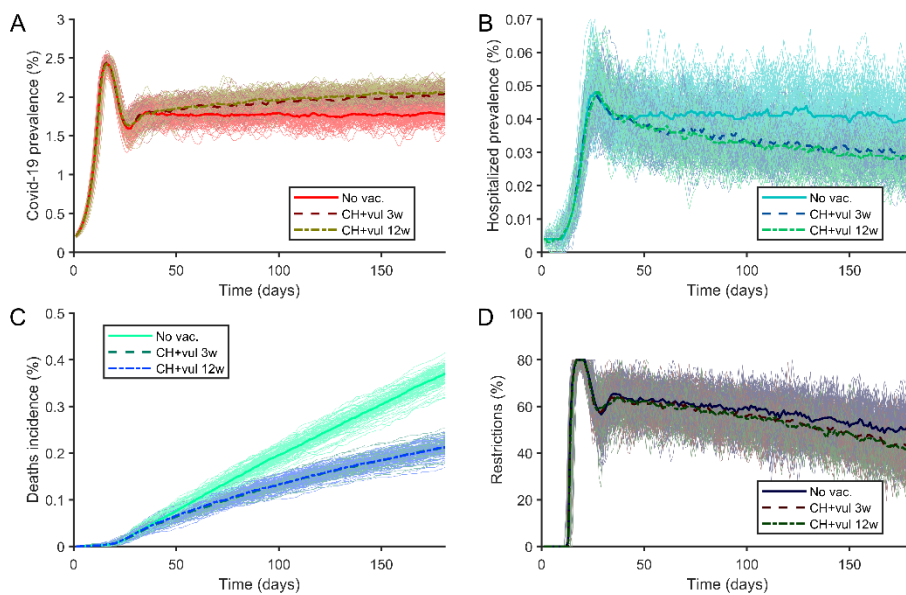

Figure 68. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for Moderna vaccine using Norway conditions described in table 1.
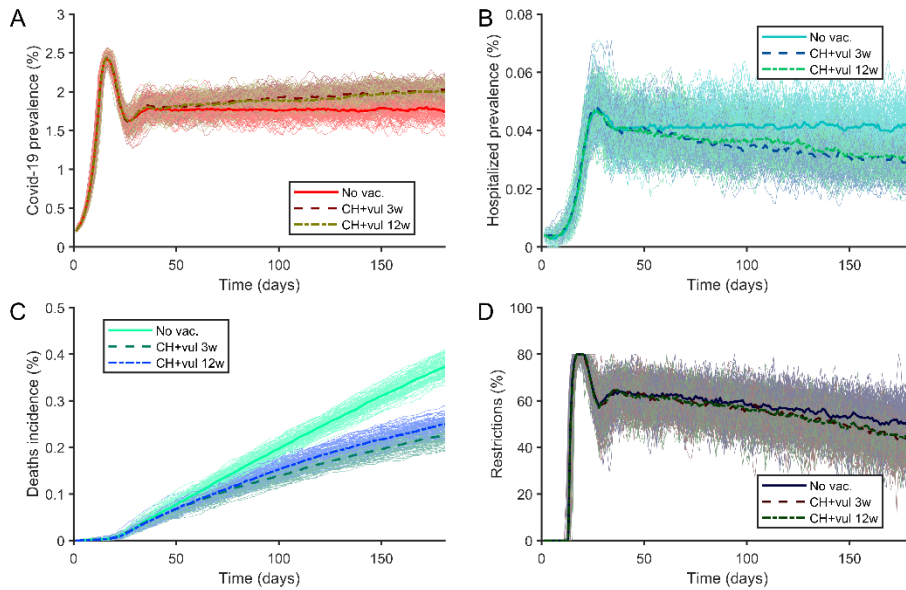
Figure 69. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for Pfizer vaccine using Norway conditions described in table 1.
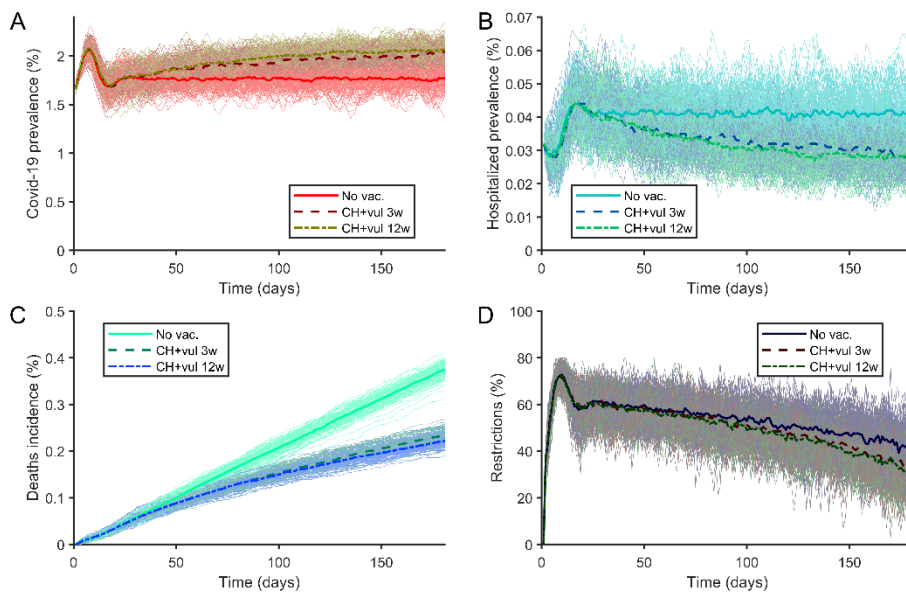

Figure 70. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for AstraZeneca vaccine using Poland conditions described in table 1.
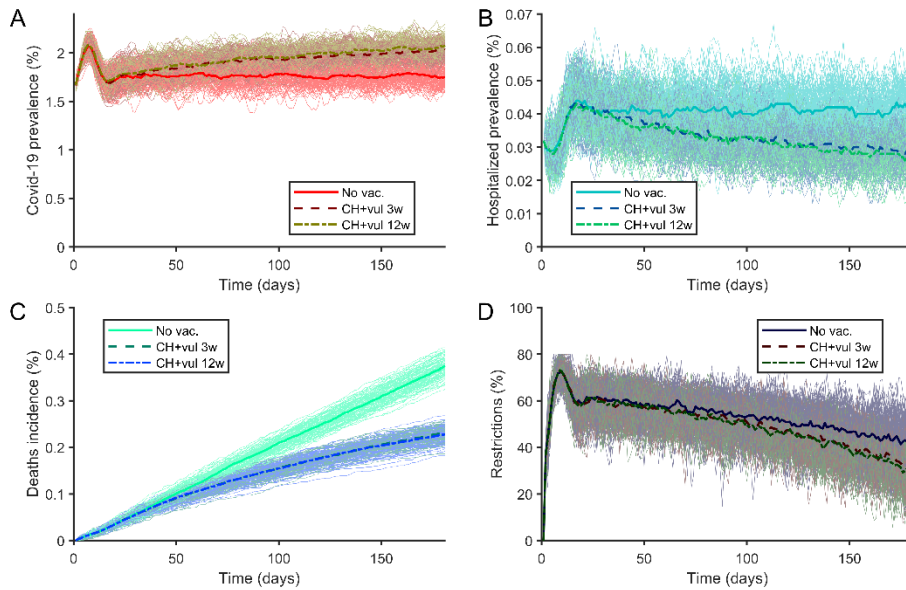
Figure 71. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for Moderna vaccine using Poland conditions described in table 1.
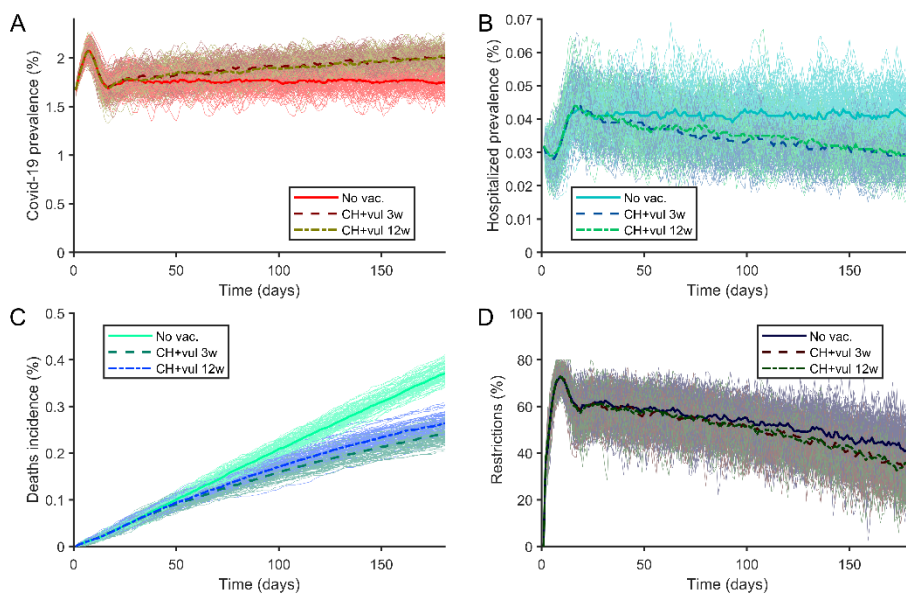

Figure 72. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for Pfizer vaccine using Poland conditions described in table 1.
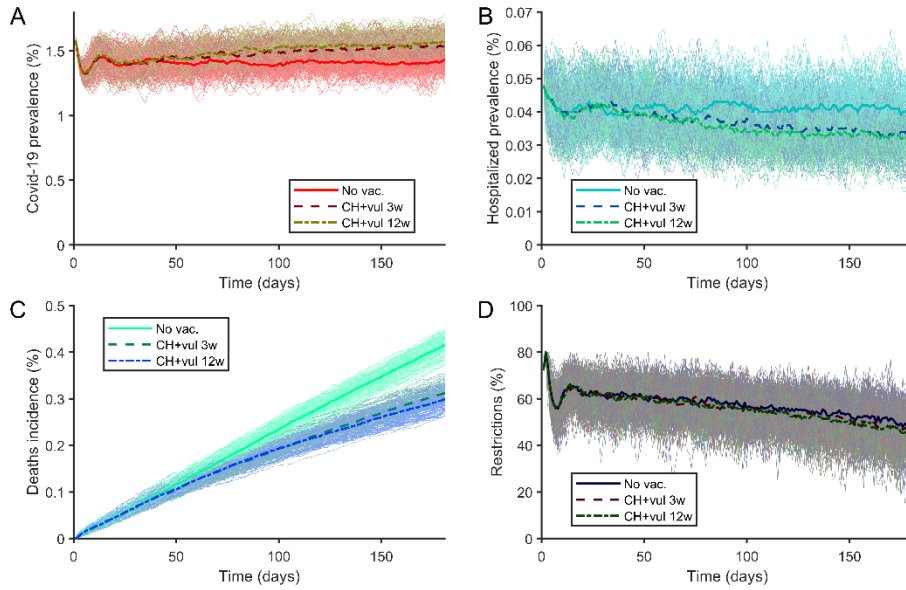
Figure 73. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for AstraZeneca vaccine using Portugal conditions described in table 1.
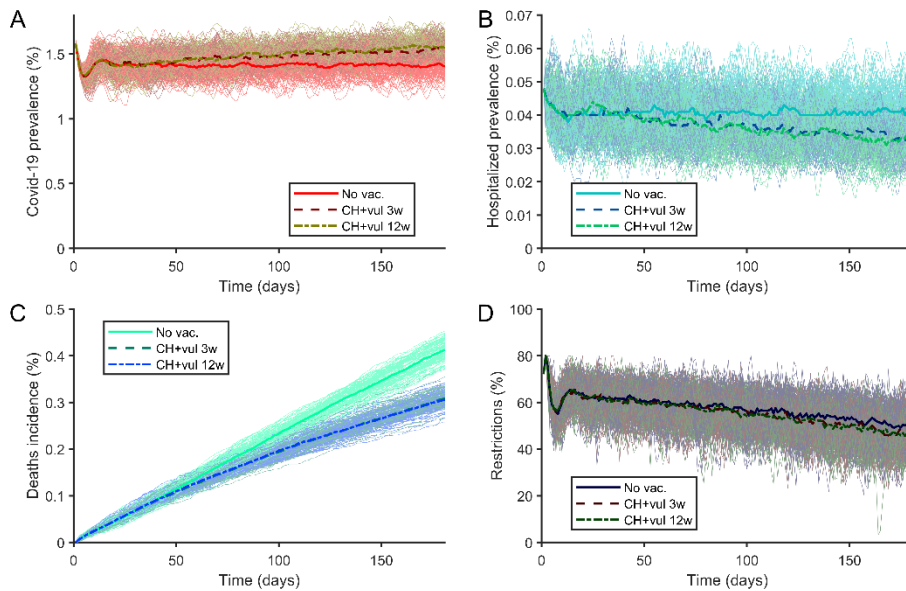

Figure 74. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for Moderna vaccine using Portugal conditions described in table 1.
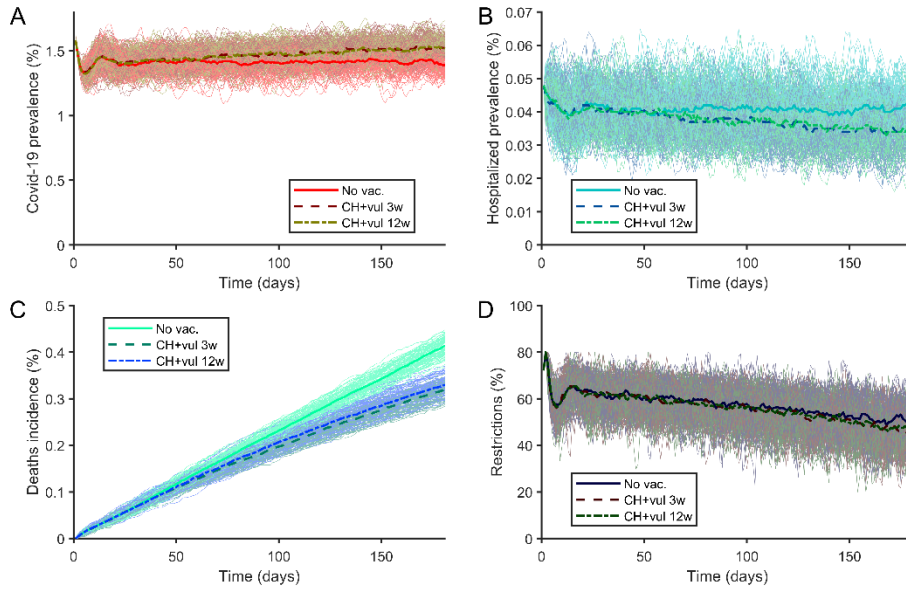
Figure 75. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for Pfizer vaccine using Portugal conditions described in table 1.
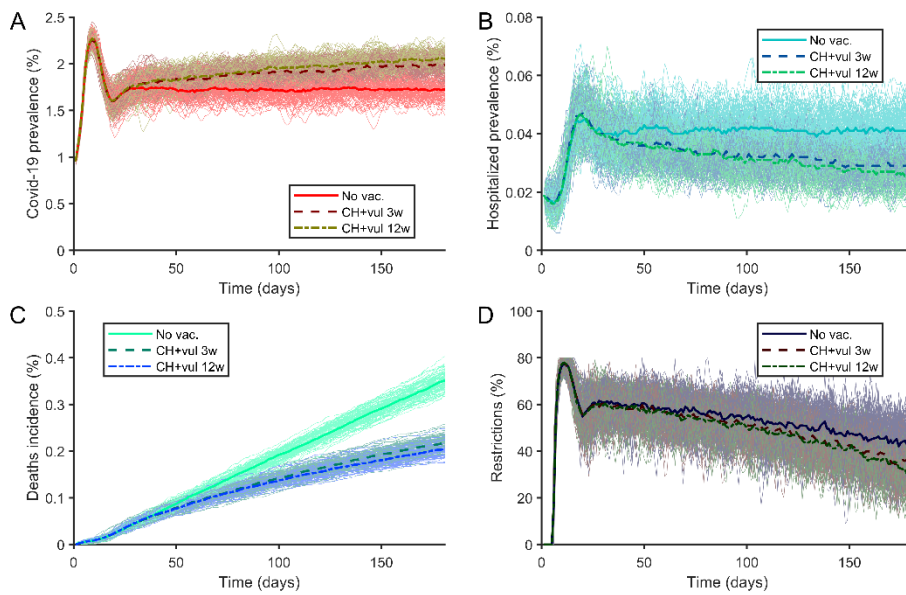

Figure 76. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for AstraZeneca vaccine using Romania conditions described in table 1.
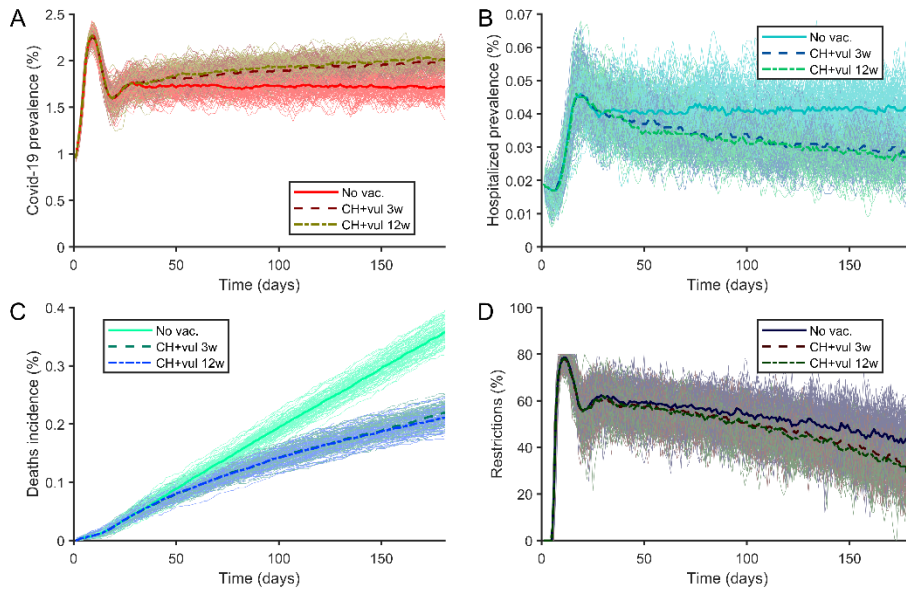
Figure 77. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for Moderna vaccine using Romania conditions described in table 1.
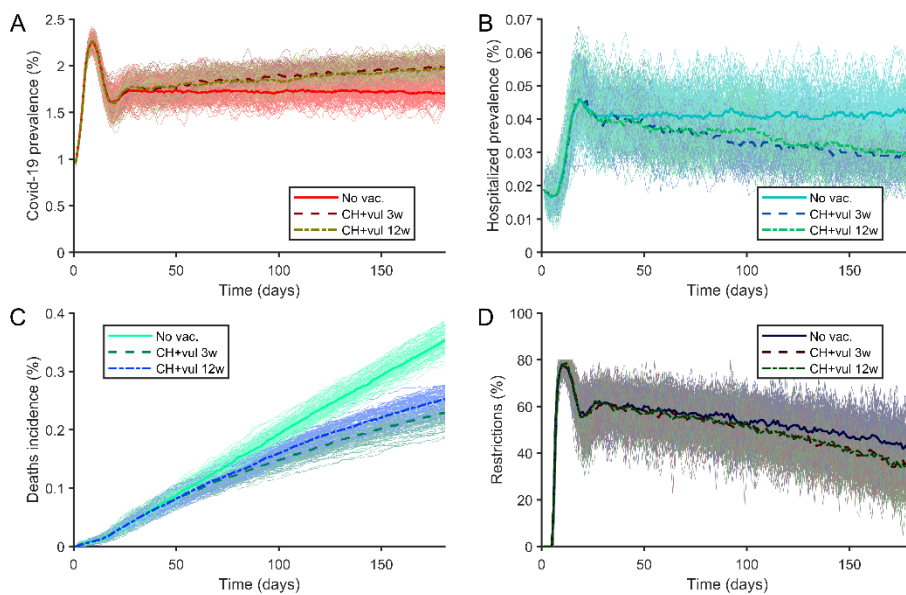

Figure 78. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for Pfizer vaccine using Romania conditions described in table 1.
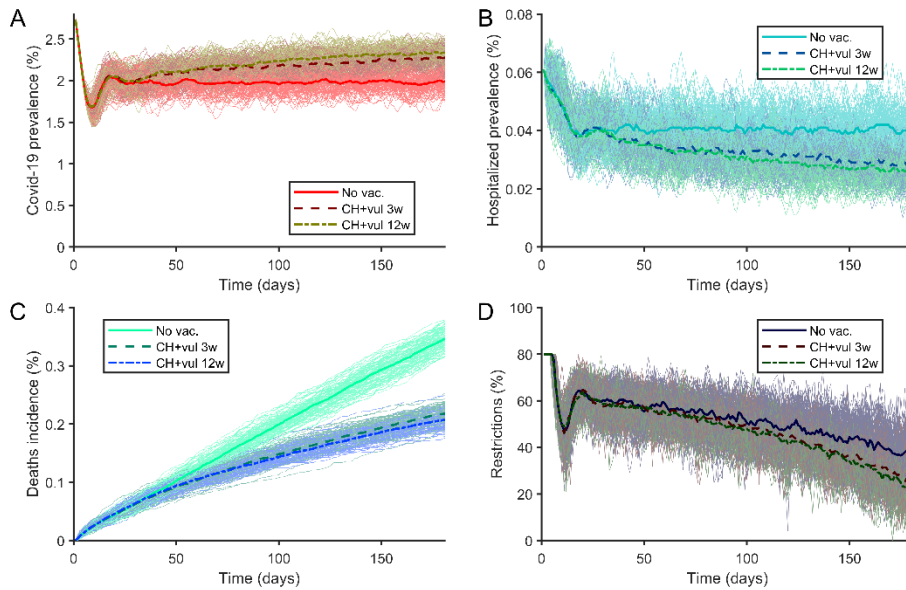
Figure 79. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for AstraZeneca vaccine using Slovakia conditions described in table 1.
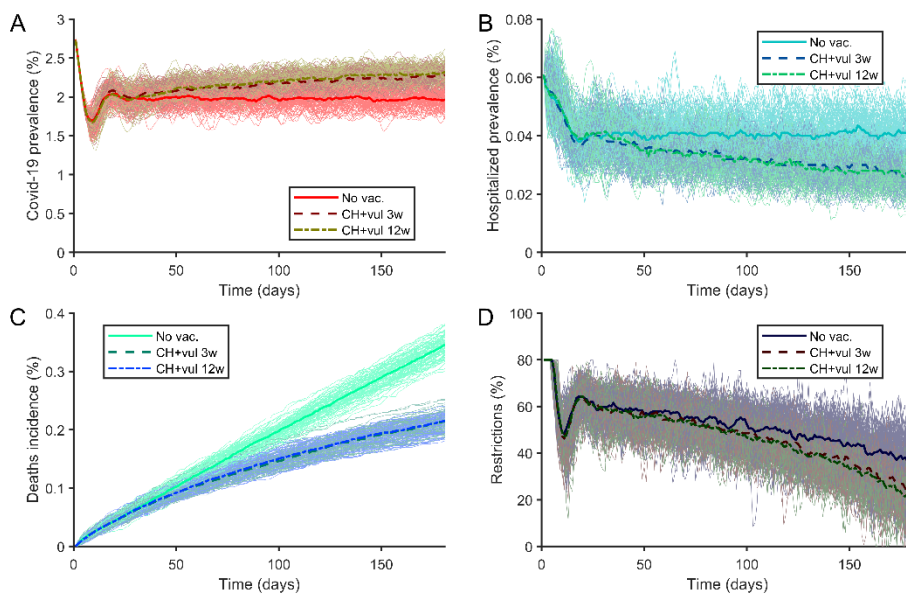

Figure 80. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for Moderna vaccine using Slovakia conditions described in table 1.
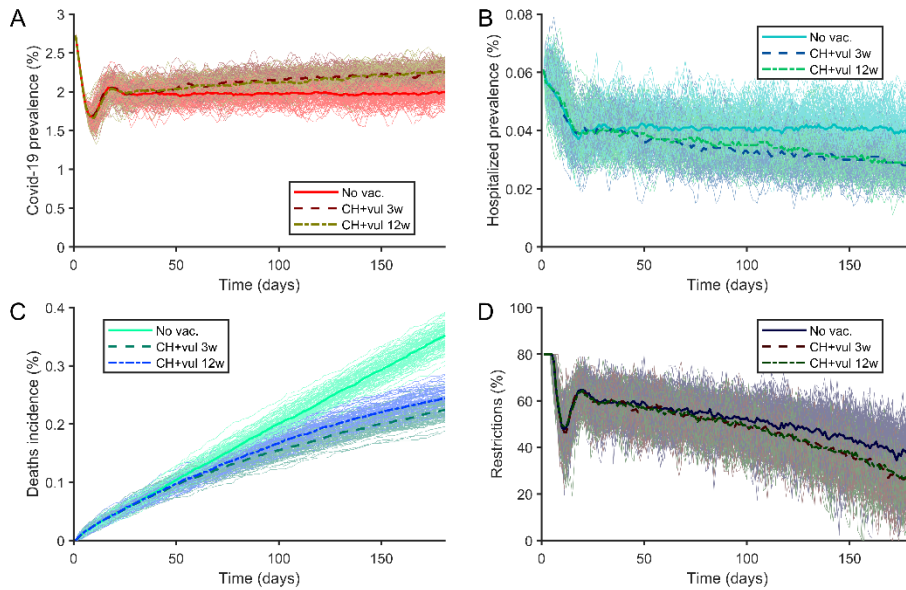
Figure 81. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for Pfizer vaccine using Slovakia conditions described in table 1.
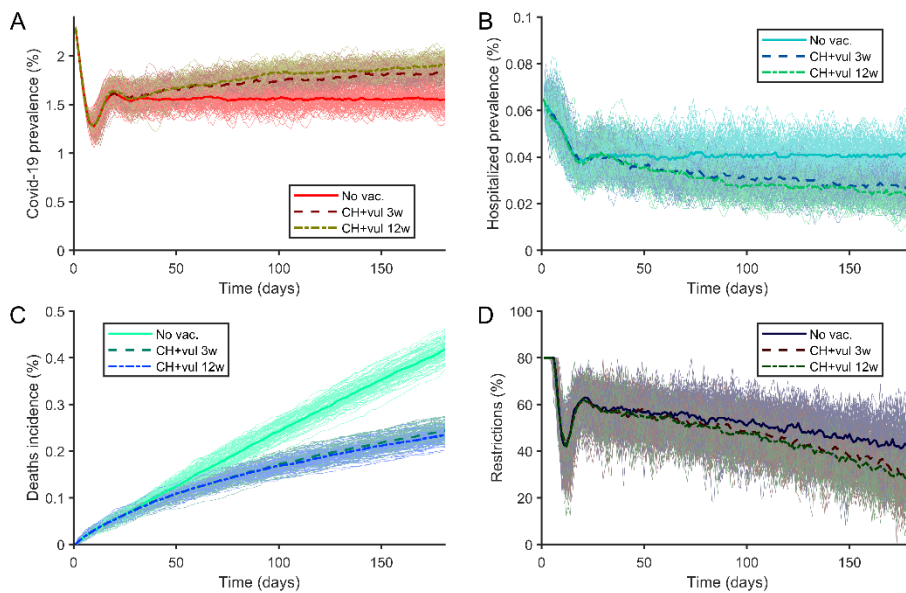

Figure 82. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for AstraZeneca vaccine using Slovenia conditions described in table 1.
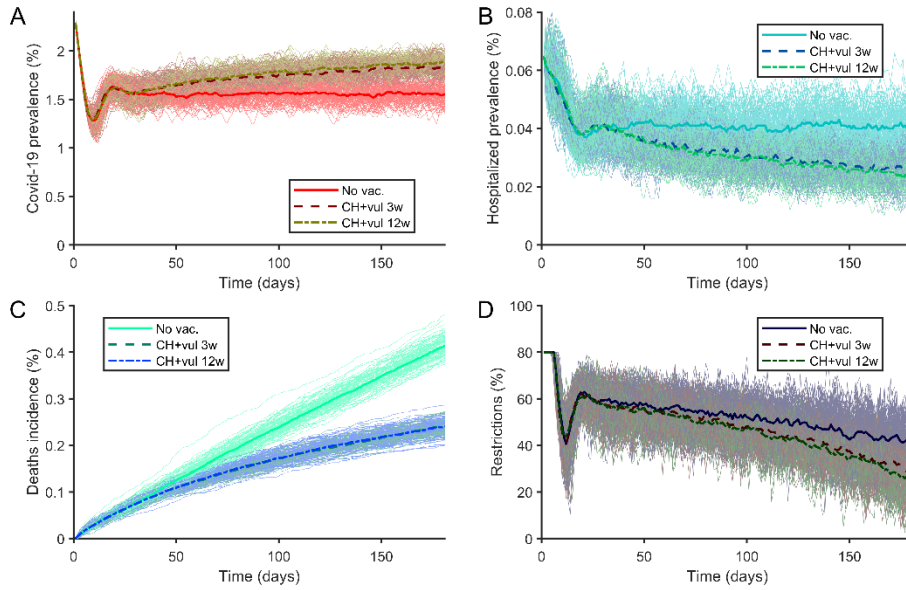
Figure 83. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for Moderna vaccine using Slovenia conditions described in table 1.
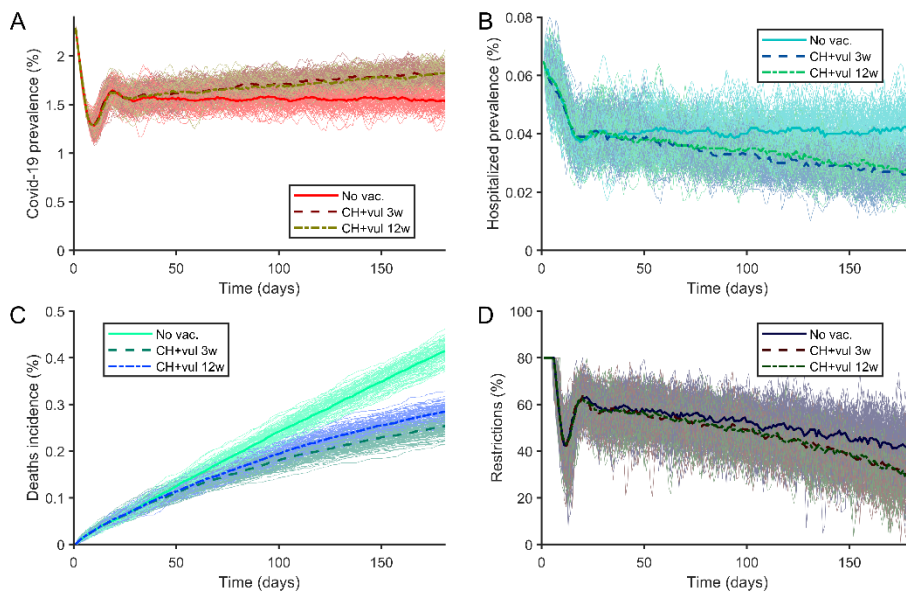

Figure 84. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for Pfizer vaccine using Slovenia conditions described in table 1.
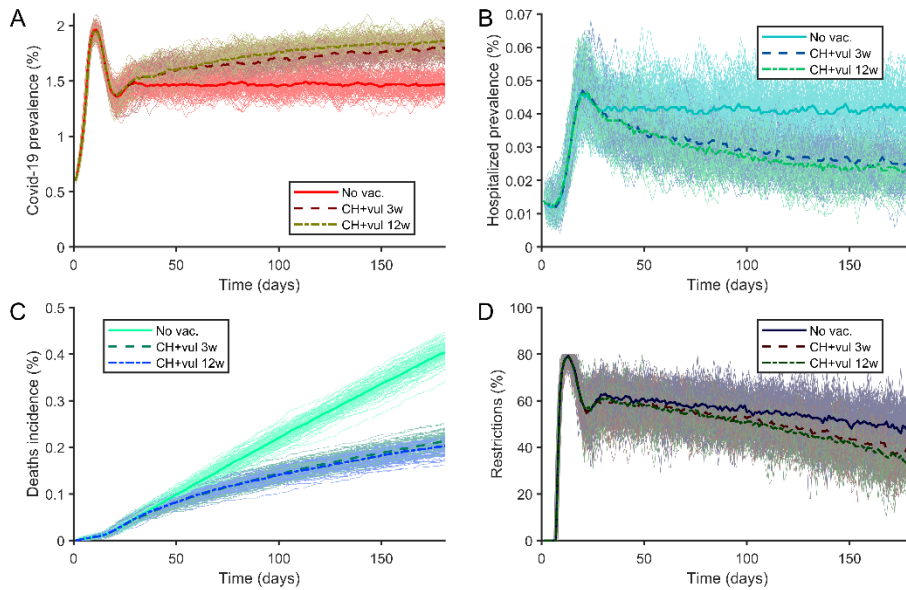
Figure 85. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for AstraZeneca vaccine using Spain conditions described in table 1.
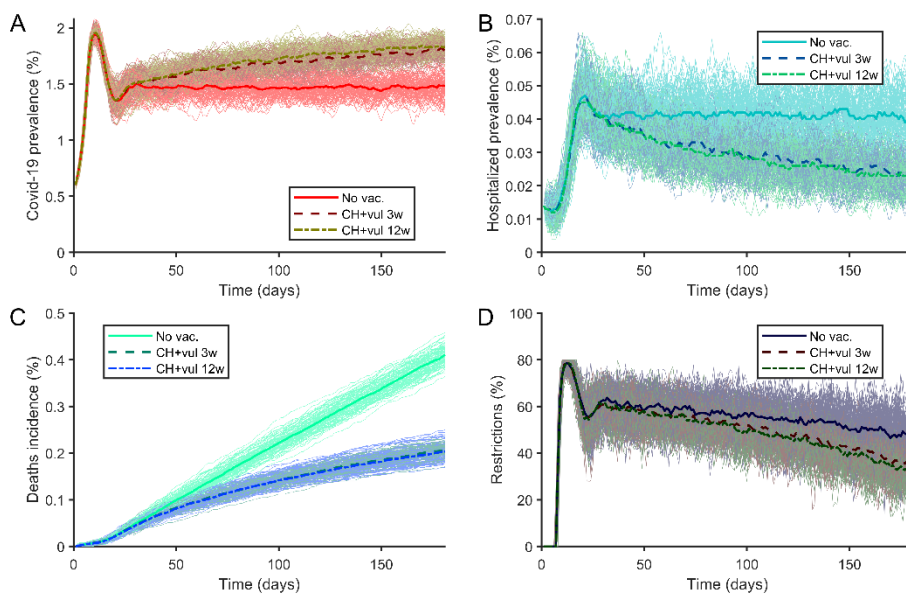

Figure 86. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for Moderna vaccine using Spain conditions described in table 1.
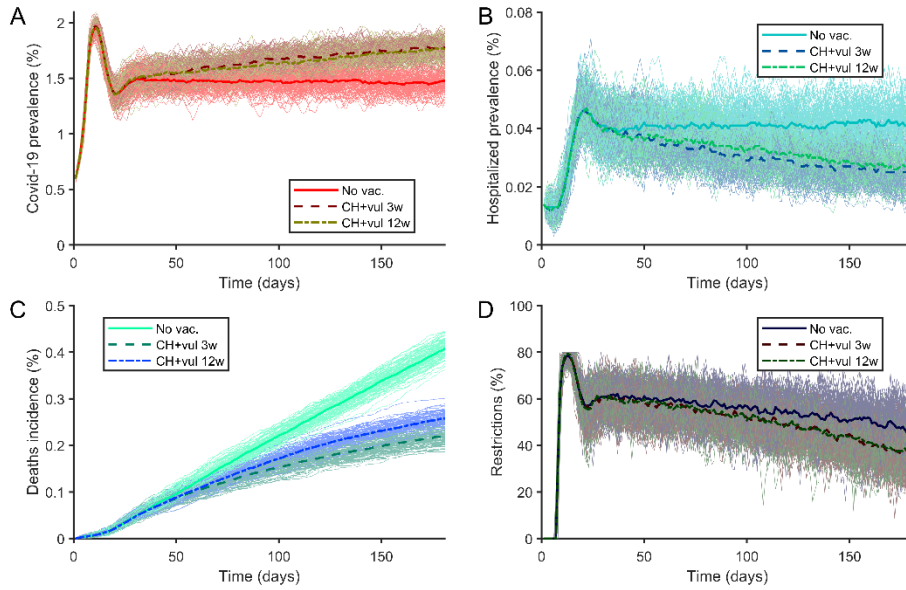
Figure 87. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for Pfizer vaccine using Spain conditions described in table 1.
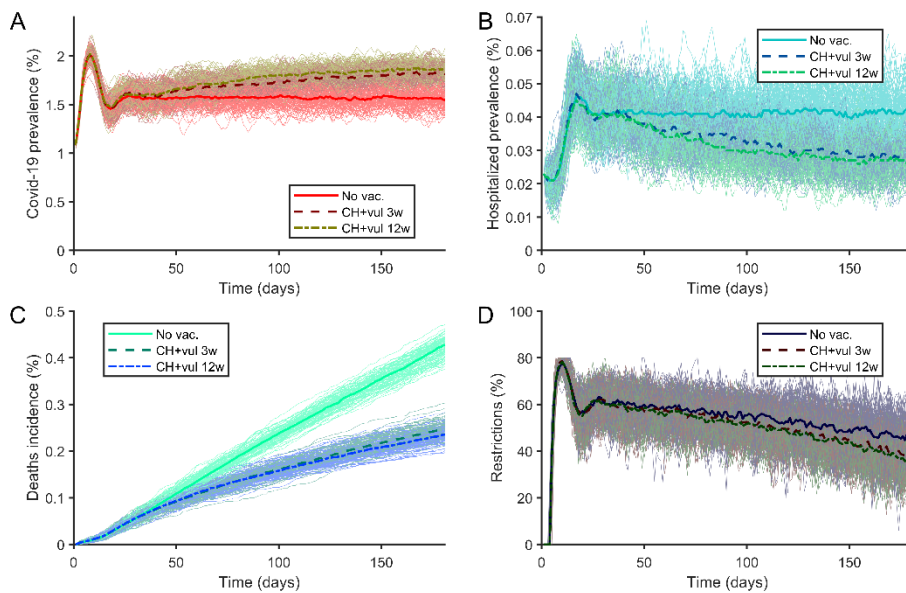

Figure 88. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for AstraZeneca vaccine using Sweden conditions described in table 1.
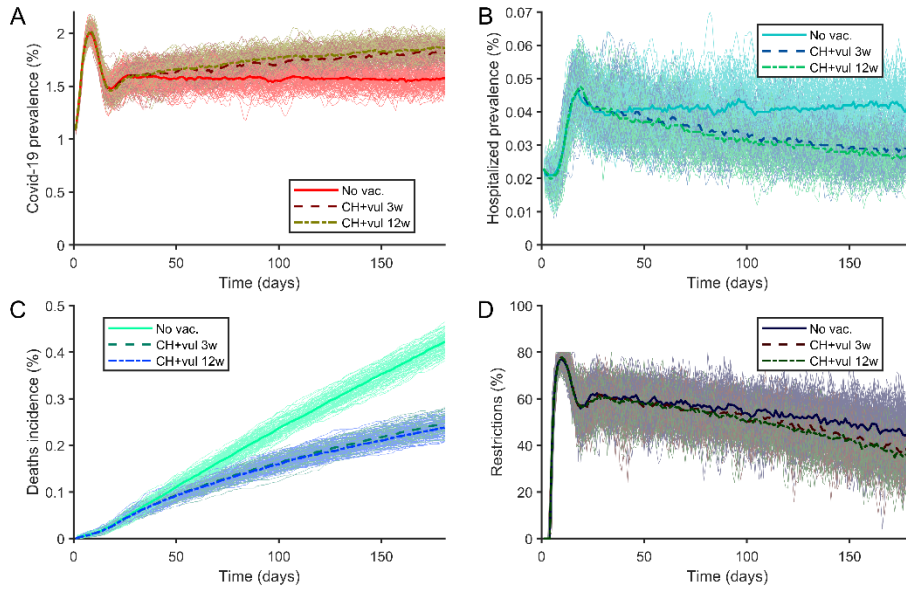
Figure 89. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for Moderna vaccine using Sweden conditions described in table 1.
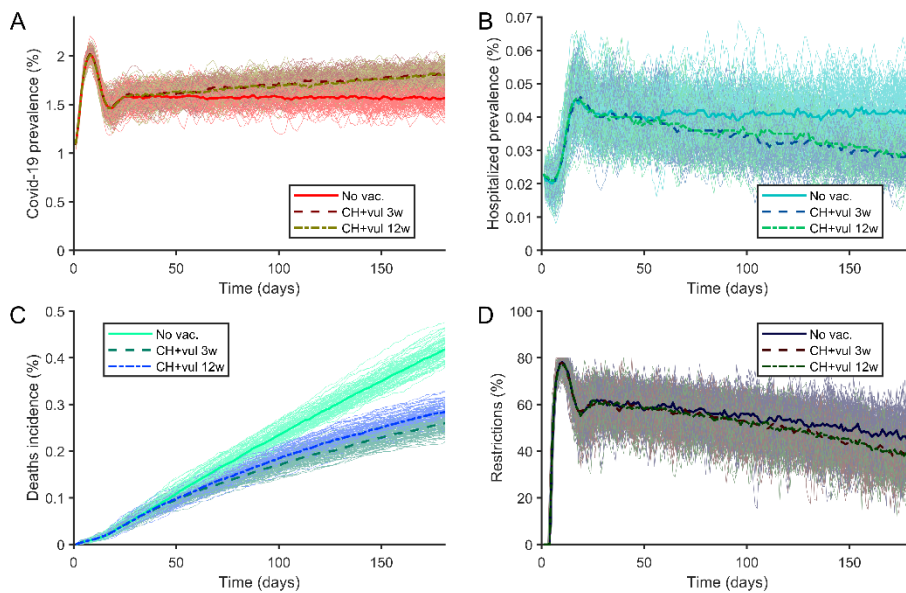

Figure 90. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for Pfizer vaccine using Sweden conditions described in table 1.
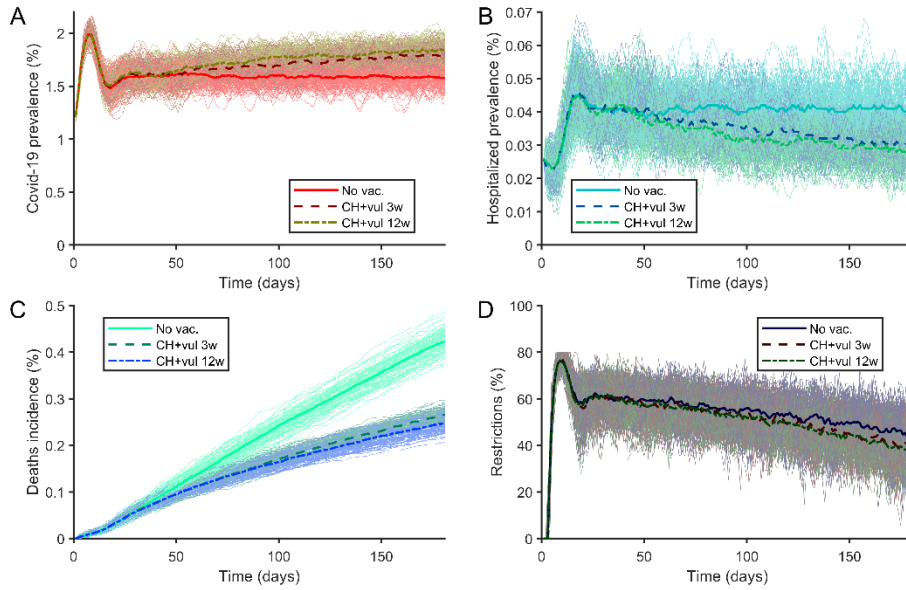
Figure 91. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for AstraZeneca vaccine using Switzerland conditions described in table 1.
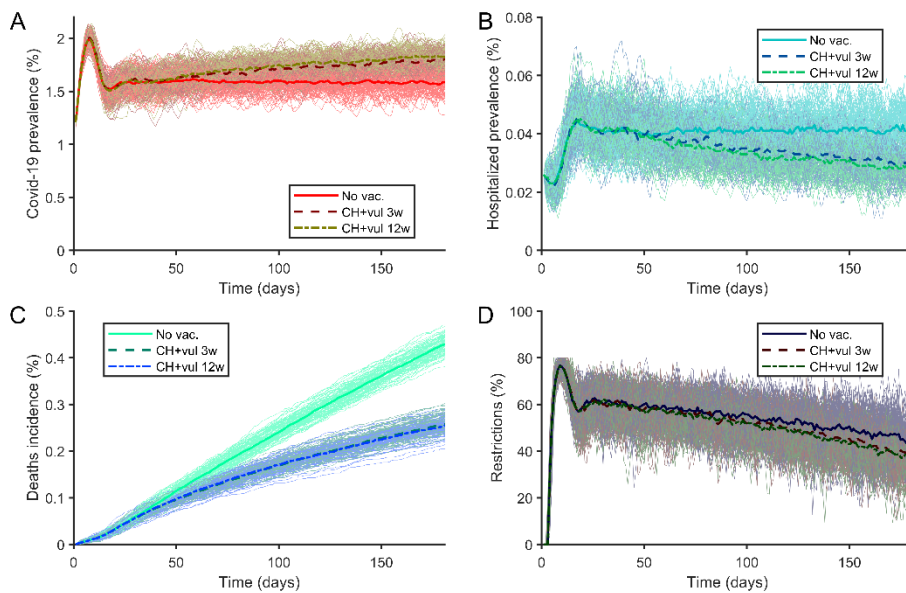

Figure 92. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for Moderna vaccine using Switzerland conditions described in table 1.
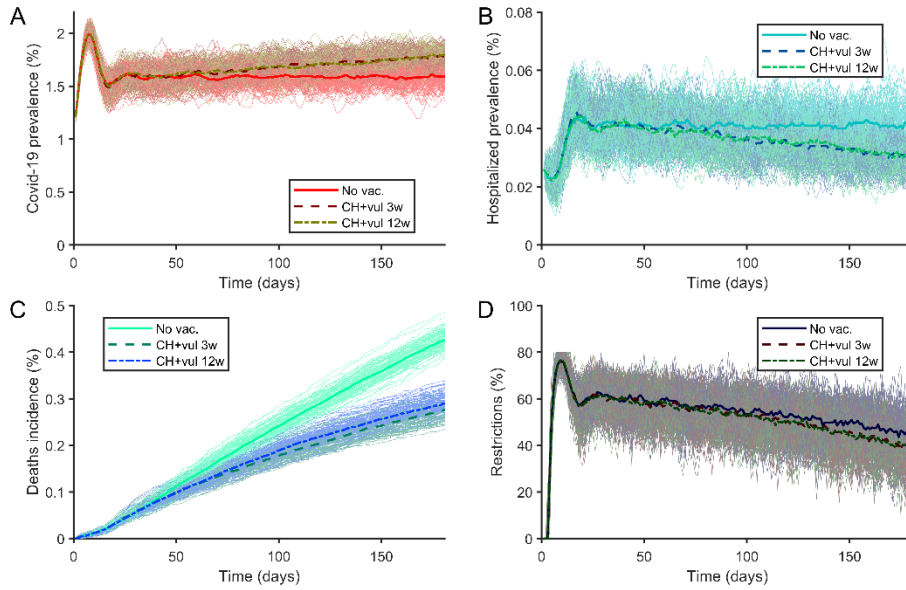
Figure 93. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for Pfizer vaccine using Switzerland conditions described in table 1.
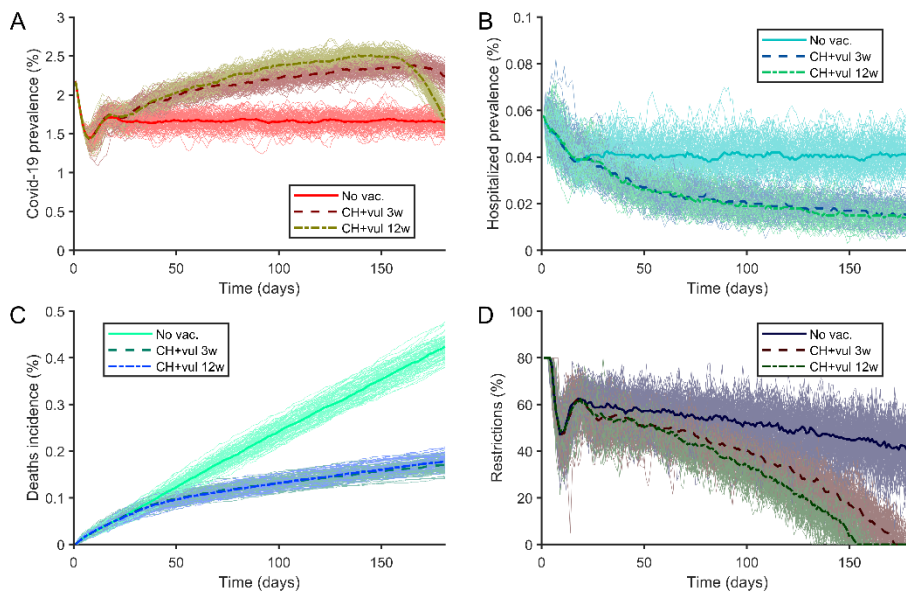

Figure 94. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for AstraZeneca vaccine using United Kingdom conditions described in table 1.
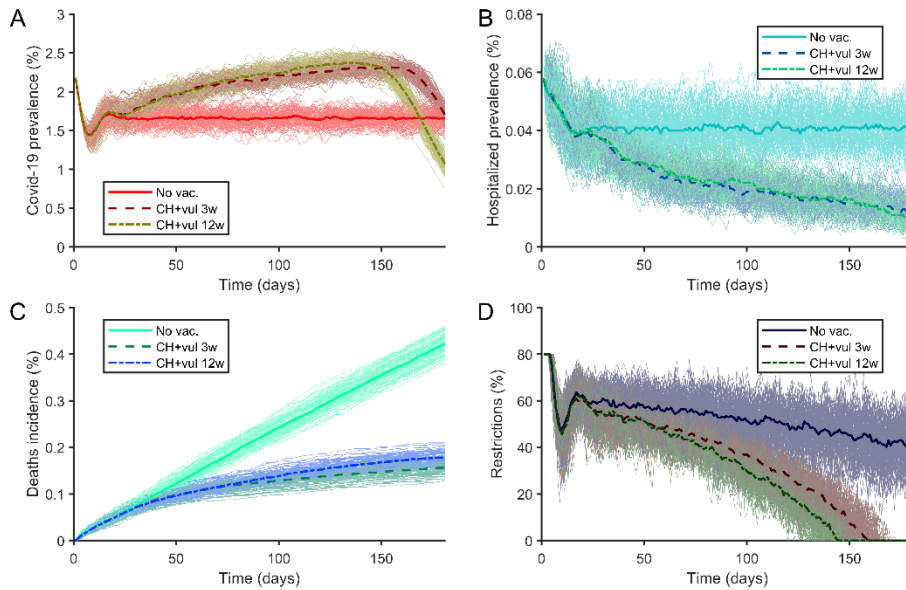
Figure 95. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for Moderna vaccine using United Kingdom conditions described in table 1.
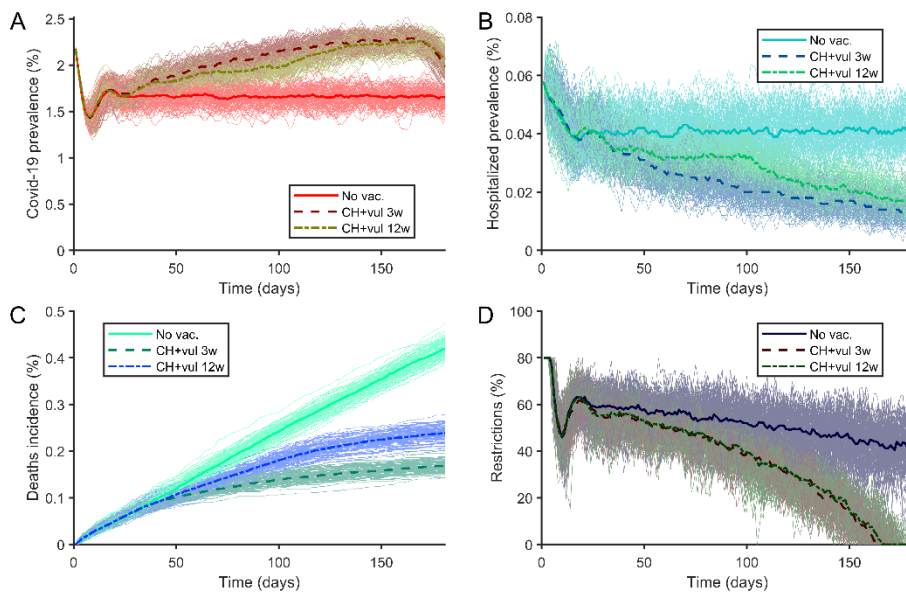

Figure 96. (A) Prevalence of covid-19 cases. (B) Prevalence of hospitalized covid-19 patients. (C) Covid-19 deaths. (D) Restrictions. Solid line for a non-vaccinated population. Dashed line for a population where they are vaccinating first care homes then vulnerable population. Dashed line for doses separation of 3 weeks. Dash-dot line for doses separation of 12 weeks. Figures for Pfizer vaccine using United Kingdom conditions described in table 1.

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