## **Supplementary material**

Figure S1: Incidence per 100,000 per week of influenza-like illness and sick leave in twelve French regions, 2010-2017. The Christmas and summer school holidays (increased worker leave periods) are shown at the bottom

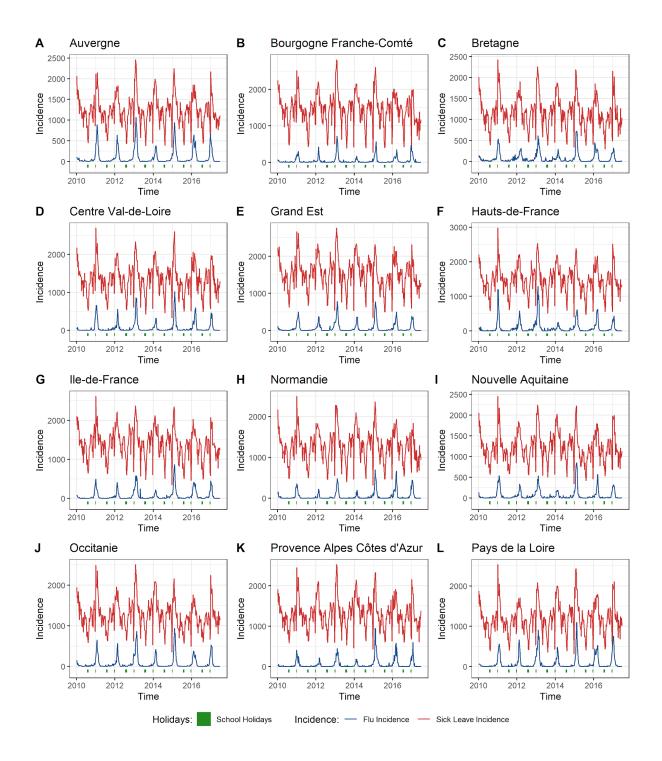


Figure S2: Incidence of influenza-like illness and sick leave, 2015-2017, and alerts from the Sentinelles and the sick-leave models, in twelve French regions. The Christmas and summer school holidays (increased worker leave periods) are shown at the bottom

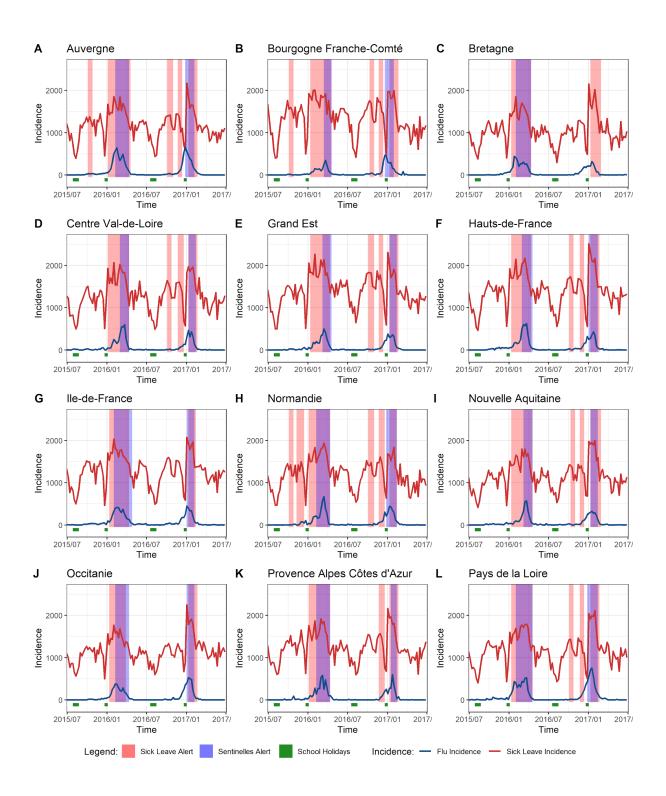


Table S1: Performance of the sick-leave model compared to the Sentinelles model

	Sensitivity Specificity		Youden Index	Detection time (weeks) before ILI peak	
Auvergne-Rhone-Alpes	0.87	0.81	0.68	1.5	
Bourgogne-Franche- Comte	0.64	0.80	0.44	3	
Bretagne	1	0.89	0.89	3	
Centre-Val de Loire	1	0.83	0.83	4	
Grand Est	0.91	0.84	0.75	4	
Hauts-de-France	0.83	0.84	0.67	3	
Ile-de-France	0.82	0.95	0.77	1	
Normandie	0.93	0.80	0.73	1.5	
Nouvelle-Aquitaine	1	0.85	0.85	4	
Occitanie	0.79	0.95	0.74	1.5	
Pays de la Loire	0.89	0.87	0.76	0.5	
Provence-Alpes-Cote-d'Azur	1	0.87	0.87	3	
Total mean	0.89	0.86	0.75	2.5	

For each region, the values of these indicators are averaged over the two years evaluated.