## Impact of COVID-19 social distancing on viral infection in France: a delayed outbreak of RSV

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## Abstract

COVID-19 pandemic and associated lockdown measures has deeply modified the natural course of seasonal viral infections, such as respiratory syncytial virus (RSV). Methods We analysed French national data from three networks: emergency departments (ED) of French hospitals, general practitioners (GP), and hospital laboratories. We compared the number of ED visits and GP visits for bronchiolitis in children <2 years of age, and the percentage of RSV positive tests in the 2020-2021 season with those of the two previous seasons (2018-2019 and 2019-2020). We used time series of the previous 5 years to calculate epidemic thresholds. Results During the 2020–2021 season, the epidemic begun in February (week 05) in the Ile de France (Paris and suburbs) region, 12 weeks later compared with the previous seasons and progressively spread across all the French metropolitan regions. The highest number of bronchiolitis cases in 2021 (week 12) occurred 10-12 weeks after the previous seasonal peaks of previous seasons, but the number of cases remained lower than in the previous seasonal peaks. Conclusion We identified a delayed RSV epidemic in the period that usually corresponds at the end of the epidemic season, raising concerns for the burden of RSV in the already strained healthcare systems during the COVID-19 pandemic

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Figure 1



## Figure 2





