

## The pandemic is not over

Press release of the French National Academy of Medicine

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After a steady decline in the incidence rates for 6 consecutive weeks, the circulation of SARS-CoV-2 shows a new significant increase, the epidemic basic resumption being confirmed by the effective reproductive number ( $Re$ ) exceeding the value of 1 [1]. The average number of daily infections over 7 days has reached 86,600 and could exceed 100,000 before the end of March, according to the “*Institut Pasteur*” projections [2]. This resurgence has not yet had any adverse consequences for the health system, as the number of critical care hospital admissions and deaths continues to decline [1]. Several factors can be incriminated in this rebound: (1) the relaxation of precautions and barrier measures in the population, encouraged by the early government announcement of a reduction in sanitary measures (lifting of the obligation to wear masks in closed spaces and suspension of the vaccination pass) on March 14; (2) the persistent winter temperatures that favor the spread of the virus; (3) the greater transmissibility of the BA.2 sub-variant of Omicron [3] which, having supplanted the Omicron BA.1 variant, has become the majority in France and in several countries affected by the resumption of the epidemic, particularly in Europe and, to a large extent, in the Far East.

It thus appears that the Covid-19 pandemic, far from disappearing, settles over time and that SARS-CoV-2 has not yet adopted the behavior of a seasonal endemic virus like the influenza myxoviruses.

Fortunately, herd immunity exists in France for more than 90% of the population, as a result of successive waves of contamination, in particular the considerable extent of contamination by the Omicron variants, and thanks to vaccination campaigns. However, this immunity remains incomplete and insufficient for 3 reasons: (1) 4 million adults have not yet received any dose of vaccine, including many people at risk; (2) 5 million vaccinated people have not received the booster dose (3<sup>rd</sup> dose) essential for maintaining protection; (3) children aged 5 to 11 years are very poorly vaccinated (2.4%) and contribute significantly to the circulation of the viruses, as evidenced by the outbreak of epidemics when returning from school vacations.

The vaccine effectiveness of a booster injection (3<sup>rd</sup> dose) against severe forms requiring admission to an intensive care unit is proven, even against the Omicron variant, but this effectiveness decreases significantly after 3 months [4]. This observation justifies the practice of a second booster (4<sup>th</sup> dose) in the most vulnerable subjects. Since March 14, this second booster shot is offered to people over 80 or living in an EHPAD (nursing home), respecting a period of 3 months after the first booster. The French National Authority for Health (HAS) has extended this recommendation to people aged 65 and over, with a minimum period of 6 months after the first booster [5].

The national vaccination campaign must now pursue two objectives: to complete the vaccination coverage of the population, in order to protect it against the still possible emergence of a new variant of SARS-CoV-2, and to maintain post-vaccination immunity, which tends to decline in the elderly and/or immunocompromised people.

Despite the premature reduction of measures against Covid-19, **the French National Academy of Medicine reminds that the pandemic is not over and recommends to the elderly and people with co-morbidities:**

- **to continue strictly** applying the barrier gestures and wearing a mask (preferably FFP2) in closed or crowded situations, so as to protect themselves;

- to update their anti-Covid vaccination status without delay, the 3rd shot having to imperatively complete the vaccination scheme whatever their age, and the 4th dose to be envisaged from the age of 65 years according to the HAS recommendations.

1. Santé publique France. COVID-19 Epidemiological update of March 17, 2022.
2. Institut Pasteur. Impact of the BA.2 sub-variant and the relaxation of control measures in metropolitan France. Report dated March 10, 2022.
3. Lyngse FP et al. Transmission of SARS-CoV-2 2 Omicron VOC subvariants BA.1 and BA.2: 3 Evidence from Danish Households. 2022 (Pre-print).
4. Ferdinands JM et al. Waning 2-Dose and 3-Dose Effectiveness of mRNA Vaccines Against COVID-19-Associated Emergency Department and Urgent Care Encounters and Hospitalizations Among Adults During Periods of Delta and Omicron Variant Predominance - VISION Network, 10 States, August 2021-January 2022. MMWR Morb Mortal Wkly Rep. 2022; 71(7): 255-63.
5. Haute Autorité de Santé. Press release "Covid-19: a second recall reserved for those most at risk", March 18, 2022.