

INFLUENZA, PNEUMOCOCCUS, ROTAVIRUS

Protecting yourself to preserve health resources

Introduction

The annual influenza vaccination campaign began on 13 October in the usual way for the risk groups targeted by the recommendations in the 2020 vaccination calendar. Each winter period is generally marked by the circulation of viruses that cause respiratory and/or digestive symptoms, such as influenza viruses, respiratory syncytial virus (RSV) in infants and rotaviruses that cause gastroenteritis in infants, as well as pneumococcus, which often complicates influenza. The circulation of the coronavirus SARS-CoV-2, responsible for COVID-19, which continues to wreak havoc, raises fears of an extremely complicated health situation next winter, especially for the most vulnerable people. Health professionals, authorities, health centers, academies, patient associations, we are all concerned. The National Academy of Pharmacy hopes that the authorities will quickly take decisions that are justified, reasoned and reasonable, but firm.

- Every year, between two and eight million French people suffer from a flu syndrome responsible for between 8000 and 14500 deaths, with its complications. Seasonal flu is characterized by a short incubation period of about 48 hours, general signs with a fever that can reach or exceed 40°C, respiratory signs with a constant cough that can last two to three weeks; digestive signs are infrequent and observed especially in the elderly.
- The co-circulation of influenza viruses and SARS-CoV-2 virus may complicate differential diagnosis and delay management of COVID-19, due to a similar clinical picture, initially not very specific and then marked by respiratory manifestations, but with a wide variety of symptoms. While some subjects remain symptomatic or have mild symptoms, others present severe manifestations or even die. In the case of COVID-19, the incubation period is longer, on average six days; according to the WHO, 80% of infections are mild or asymptomatic, especially in children under 12 years of age; 15% are serious infections requiring oxygen therapy and 5% of critical infections requiring ventilation in the intensive care unit; the most vulnerable people are elderly people (over 70 years), subjects with co-morbidities inducing a higher risk of mortality than seasonal influenza.
- Like SARS-CoV-2, respiratory viruses are transmitted mainly through close contact with a person infected by respiratory droplets (oral and nasal secretions), and the same

barrier measures (wearing a mask, distance and hand hygiene) must be reinforced more than ever as winter approaches.

- Apart from hygiene measures, annual flu vaccination remains the most effective way to protect against and reduce the risk of serious forms of influenza, including pulmonary complications. However, despite the awareness campaigns, adherence to influenza vaccination is insufficient, especially among health professionals: The lack of confidence in vaccination in general and doubt about the need for influenza vaccination led to the fact that only 45% of the target population (seniors aged 65 and over, chronically ill, pregnant women, morbidly obese people) were vaccinated last winter.
- Moreover, rotavirus gastroenteritis is responsible for 14,000 hospitalizations each year. According to the latest data published by Public Health France, over the winter period 2018-2019, more than 135,000 visits to hospital emergency departments were made for acute gastroenteritis cases, i.e. 2% of emergency department visits over the same period.

The prevention of rotavirus infections requires above all hygiene measures (hands), but also the vaccination of infants, which is not included in the Calendar of vaccination recommendations and is therefore not reimbursed.

- In France, pneumococcus is the leading cause of community-acquired bacterial pneumopathies (130,000 cases each year) and/or bacterial meningitis in adults, leading to frequent complications of influenza in frail people, both elderly people and children. They are responsible each year for 5,000 to 7,000 hospitalizations lasting an average of 14 days with an estimated mortality rate of between 10% and 30%. It is therefore crucial to offer pneumococcal vaccination to seniors aged 65 and over. As for children, since primary pneumococcal vaccination (two injections two months apart at 8 weeks and 4 months of age, followed by a booster dose at 11 months of age) has been made compulsory for all those born on or after 1 January 2018, vaccination coverage has reached over 90%.

Considering that :

- the circulation of SARS-CoV-2 continues, in addition to that of seasonal respiratory viruses (influenza, rotavirus, RSV, metapneumovirus, para-influenzae...) and pneumococcus, difficulties are to be expected not only for vulnerable people, particularly those over 65 years of age, but also for young children living in communities, who are particularly affected by these viruses every winter;
- the risks of the rebound of COVID-19 may lead to saturation of hospital intensive care unit capacity and increase the pressure on primary care and emergency services from this winter onwards;
- the proven seriousness of COVID-19 should not underestimate the potential severity of the coming influenza epidemic;
- the challenge is therefore to avoid respiratory viral epidemics crowding hospitals at the same time, as well as rotavirus gastroenteritis;

- the city's medical biology laboratories are already saturated, the concomitance of these different respiratory infections, which can only be differentiated between them by a virological test, risks further aggravating the situation;
- in combination with well respected barrier measures, flu vaccination can limit the co-circulation of the different infections responsible for flu-like syndromes;
- 15.6 million vaccine doses have been ordered by France, 30% more than last winter and more than 12 million people at risk of serious complications have already been invited to be vaccinated. It is unlikely that more doses will be available in the coming weeks, as too great a demand could lead to breaks as in the 2018-2019 season at the risk of not having enough doses to vaccinate the most vulnerable;
- there needs to be a law to oblige vaccination of health workers, which is not possible within the time frame;
- there is no recommendation for vaccination against rotavirus, which is neither recommended nor reimbursed, creating a terrible social injustice

The National Academy of Pharmacy:

1- With regard to vaccination against seasonal flu:

- recommends that vaccination of adults at risk should be intensified as a matter of highest priority;
- reiterates its recommendations concerning compulsory vaccination for all health system personnel, especially personnel in the medico-social sector, especially in nursing homes, long-term care institutions and retirement homes, and all professionals providing home care for the elderly or disabled;
- in the absence of compulsory vaccination, stresses the need to raise awareness very strongly among people who are vulnerable by virtue of their age, state of health or profession, as well as among people in direct contact with them;
- recommends the vaccination of children aged between 2 and 6 months as well as the family and friends of infants who present risk factors for serious influenza;
- stresses the need for full coverage of vaccination for these various categories

2. With regard to vaccination against pneumococcal infections:

- strongly recommends vaccination for immune-compromised people and patients with underlying disease at risk of invasive pneumococcal infection, according to the modalities described in the Vaccination Schedule and Vaccination Recommendations 2020 (BEH March 2020);
- stresses the need for full vaccination coverage, at least for these different categories.

3. With regard to vaccination against rotavirus infections:

- recommends the vaccination of infants between two and six months of age, according to the protocol in force;

- stresses the need for adequate training of health professionals (especially doctors, pharmacists, medical biologists, nurses, physiotherapists) on infectious gastroenteritis, especially rotavirus infections, and on vaccination, so that they can give relevant information and advice;
 - stresses the need for reimbursement of vaccination, at least for these different categories.
4. With regard to the prevention of all these infections, which are particularly worrying for the winter season 2020-2021:
- recalls the importance of reinforced compliance with barrier measures for the coming months, in order to limit the transmission of COVID-19 infection, but also that of winter infections.

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