

# Severe RSV infections in children and elderly during 2017/2018 winter season

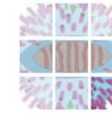
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REDE PORTUGUESA DE LABORATÓRIOS PARA O DIAGNÓSTICO DA GRIPES



## Background

Respiratory syncytial virus (RSV) is one of the most frequent and important respiratory viral agent that cause respiratory infection complications in younger children and elderly.

RSV has an autumn/winter peak seasonality detected in cocirculation with influenza and other respiratory viruses.

## Material and Methods

During 2017/2018 season, 14 hospitals from Portugal tested 4278 swabs for influenza, RSV and other respiratory viruses (Resp. virus). Data on age and hospital service were recorded. Samples were collected from patients with mild to severe respiratory infections. A case was defined as severe if it was hospitalized. The study aimed to determine the age groups that had experienced severe RSV infections during the 2017/2018 season with the need of hospitalization, including in intensive care units (ICU).

## Results

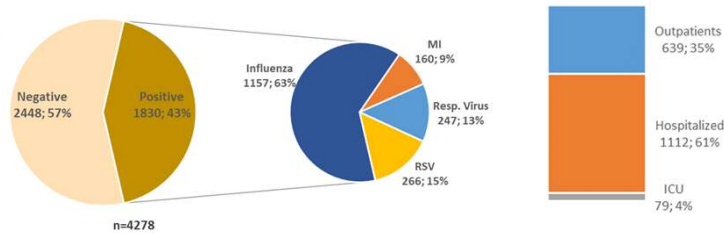


Fig.1. Detected viruses in swabs collected from outpatients, hospitalized and intensive care unit patients, during the 2017/2018 season. MI=mixed infections.

Table I. Detected viruses by age group during the 2017/2018 season.

Age groups	0-4	5-14	15-44	45-64	>=65	Total
RSV	108 (29%)	9 (8%)	25 (8%)	36 (10%)	88 (13%)	266
Resp. virus	86 (23%)	24 (21%)	46 (15%)	50 (14%)	41 (6%)	247
Mixed infections	92 (25%)	15 (13%)	16 (5%)	18 (5%)	19 (3%)	160
Influenza	83 (22%)	66 (58%)	214 (71%)	265 (72%)	529 (78%)	1157
Total	369	114	301	369	677	1830

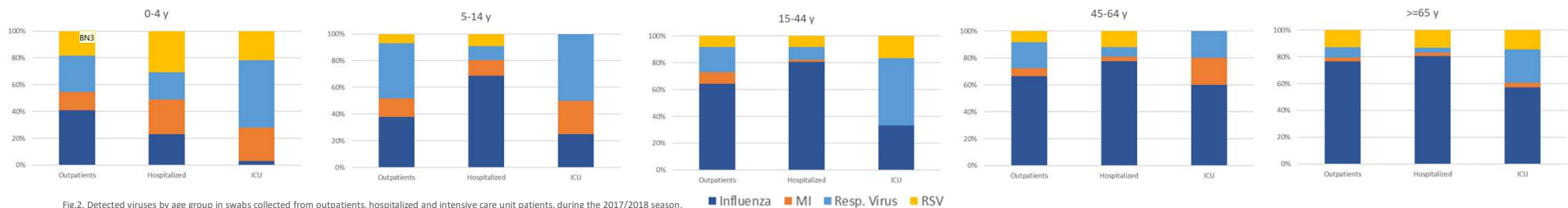
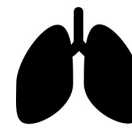


Fig.2. Detected viruses by age group in swabs collected from outpatients, hospitalized and intensive care unit patients, during the 2017/2018 season.



In hospitalized, <5 years old, **RSV** were detected in **31%** of the positive swabs being **1.3** and **1.5** times more frequent than influenza and resp. virus, respectively. In ICU, 40% of the cases were under 5 years old, influenza was confirmed in only 3% and **RSV** in **22%** of the cases.



In elderly >= 65 years, **RSV** was confirmed in **13%** of the respiratory infections. In hospitalized adults >= 65, although influenza was detected in 80% of the positive swabs, **RSV** was **3.5** times more frequently detected than resp. virus, higher than the observed in outpatients (RSV was 1.6 times more frequent than resp. virus).



## Conclusions

During 2017/2018, RSV was detected in severe respiratory infections. In young children (<4 years old) RSV was the most frequently detected respiratory virus. In elderly >= 65 years, besides influenza, RSV was frequently associated with severe respiratory infections. Prevention measures for RSV severe infections are essential not only in children but also among the elderly.

Authors had nothing to disclose

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## Diapositivo 1

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**BN3** sugiro colocar % de rsv em cada  
coluna para percebermos melhor qual a  
fração associada ao rsv

Baltazar Nunes; 23/10/2018