EPIDEMIOLOGICAL UPDATE COVID-19
AND ASSESSMENT OF THE NEEDS
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Probable first cases in China: 08/12/2019
Closing province Hubei: 23/01/2020
Cumulative incidence 23/01/2020 in Hubei = 7,62/1,000,000
-> Flight between Wuhan and Paris, Roma, London= several times/day
-> Flight between China and Brussels= 3x/week

First case outside China: 21/01/2020
First case in EU: 25/01/2020 in France

Main affected countries in EU:
• Italy, France, Germany.
**Changes in the epidemiological situation**

Since end February:
1. More countries are reporting cases, on all continents: Israel, Lebanon, Iran, Mexico, Nigeria and Egypt: 60/193 (31%)
2. Proportion of world population in countries having 1 cases: 53%
3. Cumulative Incidence higher than 9/1,000,000 (Cumulative incidence China – Hubei)=
   - Singapore: 15/1,000,000, among 89 cases (mainly related to three clusters)
   - South Korea: 15/1,000,000 among 764 cases (more than ½ cases related to one cluster)
4. EU countries: 14 countries and mainly in Italy, Germany and France

-> impact for Belgium: more probability that we will have cases
Imported cases in Belgium are expected and the spread in the population not excluded because:
- Some patients have mild symptoms
- Asymptomatic contacts can be carriers
- The shedding of the virus is high at the beginning of the symptoms
- Population is susceptible

The Belgian authorities have therefore decided to focus on proportioned containment measures through two lines of action proportionate to the epidemiological situation and severity of the diseases:
1. Preventing spread within hospitals and among health care personnel
2. To protect the most vulnerable people (at-risk groups)

The objective is to delay the spread of the virus after the seasonal flu epidemic.
Epidemiological evolution in China

Cumulative number of cases in China

New reported cases in China
Distribution in EU/UK/Switzerland

Distribution of laboratory-confirmed cases of COVID-19 in EU/EEA and the UK and Switzerland (ECDC)
Cohort 72,314 patients (ccdc weekly, vol 2):

- 62% confirmed
- 80% mild cases (non pneumonia and mild pneumonia)

-> 14% severe

-> 5% critical (49% case fatality rate)

Rough estimation for Belgium without correction for age, length of stay, … :

If 10/1,000,000 as cumulative incidence in rest of China= 110 cases, 15 severe, 5,5 critical
If 50/1,000,000 as cumulative incidence in China= 550 cases, 77 severe, 27 critical
If 1000/1,000,000 as cumulative incidence in Hubei= 11000 cases, 1540 severe, 550 critical
If 4000/1,000,000 as cumulative incidence in Wuhan= 44000 cases, 6600 severe, 2200 critical

-> on a 5 weeks period

<table>
<thead>
<tr>
<th>Health care workers in China</th>
<th>Number of cases</th>
<th>Deaths</th>
<th>CFR</th>
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<tbody>
<tr>
<td></td>
<td>1716</td>
<td>5</td>
<td>0.3%</td>
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Severity: Case fatality rate among COVID-19 cases

Case fatality rate among laboratory confirmed cases

Date

Case fatality rate
Influenza

Based on GP sentinel surveillance:
- +/- 700,000 cases/year
- Case fatality rate: 100 to 600/year
- +/- 1/2500 ILI cases

Case fatality rate in patients hospitalized for SARI due to Influenza: 6%

Case fatality rate in patients older than 85 y hospitalized for SARI due to Influenza: 13%
Procédures


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