

## VACCINATION STRATEGY AGAINST COVID-19 IN BELGIUM

JULY 2020 SHC № 9597-9611



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Federal Public Service Health, Food Chain Safety and Environment

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# ADVISORY REPORT OF THE SUPERIOR HEALTH COUNCIL no. 9597 & 9611

### Vaccination strategy against Covid-19 in Belgium

In this scientific advisory report, which offers guidance to public health policy-makers, the Superior Health Council of Belgium provides recommendations on risk groups in the context of vaccination against Covid-19 for the Belgian population.

This report aims at providing policy-makers with specific recommendations on risk groups, priority groups and an estimation of number of vaccines needed if a vaccine against Covid-19 becomes available.

This version was validated by the Board on 1 July 2020

Amended version on 7 July 2020

Annex (letter of advice no. 9611) added on 7 October 2020

### I INTRODUCTION AND ISSUE

The development of a vaccine against Covid-19 is rapidly evolving. A few vaccines candidates are already in clinical evaluation and lots of them are in the pre-clinical stage. As of 8 June 2020, the following vaccines have entered in clinical development: <a href="https://www.raps.org/news-and-articles/news-articles/2020/3/covid-19-vaccine-tracker">https://www.raps.org/news-and-articles/news-articles/2020/3/covid-19-vaccine-tracker</a>

Belgium is participating in a EU joint procurement for COVID-19 vaccine to secure access to it. In order to define the needed doses, all member states are asked to define their target population for vaccination.

On 6 May 2020 and 21 May 2020 the Superior Health Council (SHC) received a request from Dr Paul Pardon, the president of the Risk Management Group (RMG), to define the priority groups and number of doses needed for vaccination against Covid-19.

This advisory report will provide recommendations on the risk groups and an estimation of the number of doses needed if a vaccine will be available.

Additional questions from Minister Maggie De Block were received in September 2020 and addressed in a letter of advice in October 2020. Both documents are annexed to this report.



#### **II RECOMMENDATIONS**

The SHC recommends to prioritize the following groups for vaccination against Covid-19 based on the available data and statistical evidence:

- All workers in the health care sector to secure their health and a working health care sector during a potential next COVID-19 wave or pandemic;
- All people above 65 years of age;
- Patients between 45 and 65 years with the following comorbidities which are at risk for developing severe COVID-19: obesity, diabetes, hypertension, chronic cardiovascular, lung, kidney and liver diseases and haematological malignancies up to 5 years from diagnosis and all recent solid cancers (or recent cancer treatments).

Further prioritisation inside the above groups may be considered if a limited amount of vaccine is available.

This recommendation can be changed according to new data and information on immunogenicity of the type of vaccine(s) that will be available. For instance, we will further follow data regarding pregnant woman, other immunocompromised patients as well as the impact of socio-economical and ethnic background.

Furthermore, the impact and the need of vaccination against Covid-19 to manage an outbreak will be evaluated when more information will be available on the new vaccine(s).

An estimation of around 4 000 000 number of people are in the risk and priority groups for vaccination against Covid-19 in Belgium (Chapter 4.4).

We can assume that at least 20 and 30 % in the priority and risk groups will refuse vaccination (Chapter 4.5).

### Keywords and MeSH descriptor terms<sup>1</sup>

MeSH terms*	Keywords	Sleutelwoorden	Mots clés	Schlüsselwörter
Coronavirus	Coronavirus			
infections*/immunology	Covid-19			
	Vaccination			
Pandemics*	Comorbidity			
Coronavirus	Risk group			
infections*/prevention	Prevention			
& control				
Viral	Priority group			
vaccines/administration				
& dosage				
Humans	Humans			

MeSH (Medical Subject Headings) is the NLM (National Library of Medicine) controlled vocabulary thesaurus used for indexing articles for PubMed: <a href="http://www.ncbi.nlm.nih.gov/mesh">http://www.ncbi.nlm.nih.gov/mesh</a>.

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<sup>&</sup>lt;sup>1</sup> The Council wishes to clarify that the MeSH terms and keywords are used for referencing purposes as well as to provide an easy definition of the scope of the advisory report. For more information, see the section entitled "methodology".

#### III METHODOLOGY

After analysing the request, the Board and, when appropriate, the Chair of the area Vaccination identified the necessary fields of expertise. An *ad hoc* working group was then set up which included experts in epidemiology, vaccinology and infectiology. The experts of this working group provided a general and an *ad hoc* declaration of interests and the Committee on Deontology assessed the potential risk of conflicts of interest.

This advisory report is based on analyses of Belgian data on COVID-19, scientific literature published in both scientific journals on European cases and reports from national and international organisations competent in this field, as well as on the opinion of the experts.

Once the advisory report was endorsed by the Belgian NITAG, it was ultimately validated by the Board.

### IV ELABORATION AND ARGUMENTATION

### List of abbreviations used

Covid-19 Coronavirus Disease 2019

ICU Intensive Care Unit

NITAG National Immunization Technical Advisory Group

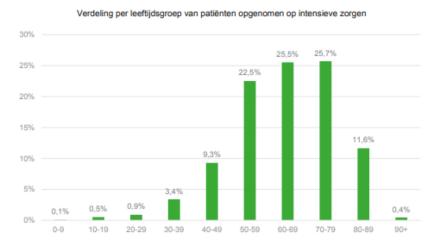
RMG Risk Management Group SHC Superior Health Council WHO World Health Organisation

### 1 Risk factors for severe Covid-19 hospitalisations in Belgium

The analyses are based on 2 major hospital endpoints: ICU admission and mortality during hospital stay for Covid-19 patients

1.1 Age distribution of ICU admission and mortality (data from Sciensano, COVID-19 weekly report, 29 May 2020)

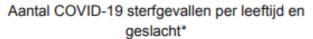
### 1.1.1 Proportion of ICU admissions by age group

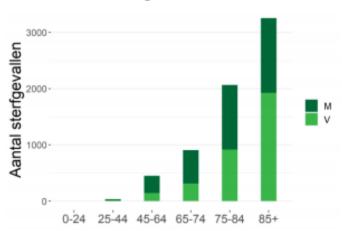


Half of the people on admitted in ICU were older than 65 years old.



### 1.1.2 Number of deaths by age group





<sup>\*</sup>Informatie over leeftijd en/of geslacht was niet beschikbaar voor 2718 sterfgevallen

Along all COVID-19 hospital deaths, less than 1 % were younger than 45 years old and 5 % were between 45 - 64 years old.

In summary, 50 % of the people admitted in ICU for COVID-19 and more than 90 % of the people dying from COVID-19 were older than 65 yrs.

1.2 Comorbidities in COVID-19 patients admitted in ICU and deceased (< 65 yrs old)

From 14 March 2020 on, all Belgian hospitals have, on a voluntarily basis, been invited by Sciensano to collect individual data on hospitalized patients with a confirmed COVID-19 infection, in order to identify risk factors for severe complications and to study hospitalized patient outcomes. The collected data include information on socio-demographic characteristics, comorbidities, admission in intensive care unit (ICU), final outcome (dead or discharged alive) and other information on clinical course and treatment. As of 24 May 2020 data were reported for 72 % of all known COVID-19 laboratory-confirmed admitted patients.

0 - 64 years					
	patients discharged alive (N = 3719)	deceased patients (N = 199)	ICU admissions (any outcome) (N = 568)		
Comorbidity	%	%	%		
Hypertension	20 %	34 %	35 %		
Diabetics	13 %	23 %	21 %		
Chronic renal failure	3 %	16 %	6 %		
Chronic liver disease	2 %	11 %	3 %		
Chronic lung disease	10 %	22 %	12 %		
Chronic neurological disease	0 %	0 %	0 %		
Cognitive illness	2 %	10 %	2 %		



Immunodeficiency (incl HIV)	3 %	9 %	4 %
Malign tumor	3 %	14 %	3 %
Blood cancer	1 %	2 %	2 %
Obesity	7 %	10 %	11 %
Number of comorbidities	%	%	%
0	53 %	19 %	35 %
>= 1	47 %	82 %	65 %

The descriptive data from 3918 patients hospitalized between 29 February and 10 May indicate that more than 80 % of the hospitalised patients younger than 65 years old who died, and 65 % of those admitted in ICU from Covid-19 presented at least 1 comorbidity.

## 1.2.1 Association between comorbidities and ICU admission and hospital mortality (< 65 yrs old), multivariate analysis

A multivariable Cox proportional hazards model estimated from these data time to two endpoints: ICU admission and vital outcome (discharged alive vs death).

These analyses showed that among persons aged younger than 65 years, the risk of inhospital death was significantly higher among persons with the following comorbidities: obesity, solid cancer, chronic liver disease, chronic lung disease, chronic kidney disease and cognitive disorders.

Furthermore among persons aged younger than 65 years, the risk of admission to ICU was significantly higher among persons with obesity or diabetes, and borderline significantly higher with cardiovascular comorbidity and high blood pressure.

### 2 Risk factors for developing severe Covid-19: international publications

- ECDC reported the following underlying health conditions among patients with COVID-19 and admitted to ICU: hypertension, diabetes, cardiovascular disease, chronic respiratory disease, immune compromised status, cancer and obesity. These proportions should be seen in light of the prevalence of these conditions in the underlying populations and cannot be interpreted directly as a risk factor.
- In a UK study from Docherty et al., 20 133 patients in hospital with Covid-19 were enrolled in a prospective observational cohort study. The risk factors defined by this study were chronic cardiac disease, chronic non-asthmatic pulmonary disease, chronic kidney disease, obesity, chronic neurological disorder (such as stroke), dementia, malignancy, and liver disease were also associated with increased hospital mortality (Docherty et al., 2020).
- Cecconi et al. studied 239 patients admitted in the hospital with Covid-19. 66.5 % had at least one coexisting medical condition. Hypertension (50.2 %), diabetes type 2 (21.8 %), coronary heart disease (CHD, 16.7 %), atrial fibrillation (11.3 %), active neoplasia (9.6 %) chronic obstructive pulmonary disease (9.2 %), and chronic kidney disease (8.4 %) were the most common comorbidities. Among those, only coexisting chronic heart disease was statistically significant predictor of clinical deterioration (ICU transfer or death) in hospitalized Covid-19 patients, as well as advanced age but not body mass index (Cecconi et al., 2020).



The openSAFELY collaborative looked at factors associated with COVID-19-related hospital death in the linked electronic health records of 17 million adult NHS patients. Most comorbidities were associated with higher risk of COVID-19 hospital death, including diabetes, asthma, respiratory disease, chronic heart disease, liver disease, stroke/dementia, other neurological diseases, reduced kidney function, autoimmune diseases (rheumatoid arthritis, lupus or psoriasis) and other immunosuppressive conditions.

Those with a history of haematological malignancy were at > 3-fold increased risk up to 5 years from diagnosis, and nearly double the risk thereafter. For other cancers, risk increases were largely observed among those diagnosed in the last year.

There was no association between hypertension and outcome (HR 0.95, 0.89 - 1.01). However, in sensitivity analyses, diagnosed hypertension was associated with slightly increased risk (HR 1.07, 1.00 - 1.15) while high blood pressure (≥ 140/90 mmHg) at the most recent measurement was associated with lower risk (HR 0.61, 0.56 - 0.67).

### 3 Recommendation for risk groups and priority groups

The SHC recommends to prioritize the following groups for vaccination against Covid-19 based on the available data and statistical evidence:

- **All workers in the health care sector** to secure their health and a working health care sector during a potential next COVID-19 wave or pandemic;
- All people above 65 years of age;
- Patients between 45 and 65 years with the following comorbidities which are at risk for developing severe COVID-19: obesity, diabetes, hypertension, chronic cardiovascular, lung, kidney and liver diseases and haematological malignancies up to 5 years from diagnosis and all recent solid cancers (or recent cancer treatments).

Further prioritisation inside the above groups may be considered if a limited amount of vaccine is available.

This recommendation can be changed according to new data and information on immunogenicity of the type of vaccine(s) that will be available. For instance, we will further follow data regarding pregnant woman, other immunocompromised patients as well as the impact of socio-economical and ethnic background.

Furthermore, the impact and the need of vaccination against Covid-19 to manage an outbreak will be evaluated when more information will be available on the new vaccine(s).

## 4 Estimation of number people in Belgium in the recommended risk groups and priority groups

4.1 Number of people over 65 years old

Based on the results of chapter 2 the SHC decided to include all persons above 65 year old as a risk group for vaccination against severe COVID-19 disease.

Belgium counted at the beginning of 2020 2 204 475 people over 65 years old (Statbel) (<a href="https://bestat.statbel.fgov.be/bestat/crosstable.xhtml?view=161080d2-d411-4e40-9a0f-a27db5e2b6e1">https://bestat.statbel.fgov.be/bestat/crosstable.xhtml?view=161080d2-d411-4e40-9a0f-a27db5e2b6e1</a>).



4.2 Estimated number of people with comorbidities at risk for developing severe COVID for people < 65 yrs old

The national health interview survey 2018 provides an estimation of the prevalence of a number of risk factors and comorbidities in the Belgian population.

In the general population aged 45 - 54 years, the estimates for the prevalence of each of the comorbidity associated with increased risk of in-hospital death or ICU admission in COVID-19 patients are obesity (19%), hypertension (17%), diabetes (4%) cardiovascular disease (4%), chronic obstructive pulmonary disease (3 %), cancer (3 %), chronic kidney disease (1 %) and chronic liver disease (1 %).

In the general population aged 55 - 64 years, the same prevalences are obesity (20 %), hypertension (28 %), diabetes (9 %) cardiovascular disease (10 %), chronic obstructive pulmonary disease (6 %), cancer (3 %), chronic kidney disease (0.3 %) and chronic liver disease (2 %).

Respectively 24 % and 28 % of the general population in the age groups 45 - 54 years and 55 - 64 years had at least one of the comorbidities that place them at increased risk for in-hospital death due to COVID-19.

Likewise, respectively 36 % and 50 % of the general population in the age group 45 - 54 years and the age group 55 - 64 years, had at least one of the comorbidities that place them at increased risk for ICU admission due to COVID-19.

Table: Estimated number of people with comorbidities at risk for developing severe COVID for people < 65 yrs old.

Prevalence i the general population	n Estimation number of (N)		Risk factors in mortality (%)		nission	Persons with risk factors for ICU admission (N)
45 - 54y	1 571 828		24 %	36 %	Ļ	565 858
55 - 64y	1 476 046		28 %	50 %	1	738 023
		•		Total		1 303 881
Sources:	Sciensano,	SPMA	mid-year	population	2018-2019	(https://s9xib.wiv-

population Sciensano. mid-year isp.be/SASStoredProcess/guest?\_program=/SPMA/SP/pop) and Health Interview Survey 2018.

(https://s9xjb.wiv-

An estimated 1 303 881 persons < 65 years with comorbidities are at higher risk for developing severe COVID-19, based on risk factors for ICU admission.

4.3 Estimation of number of people working in a the health care sector

To secure a working health care sector during a potential next COVID-19 wave or pandemic, the SHC recommends to vaccinate all workers in the health care sector including everybody working within a long term care facility.

In the table below an estimate is made based on various Belgian sources. As many data were not available in the short time for making this advice, some extrapolations have been done from one data source or one profession to another. In particular:

- We used estimates from 2018 INAMI/RIZIV per health profession when available, and 2019 STATAN data (SPF/FOD) of active professionals when other data were not available.
- When the proportion of registered professionals who are practising or the proportion of professionals above 65 years of age were not available, these have been



- extrapolated between similar professions (e.g. from nurses to caregiver) from INAMI/RIZIV and/or SPF/FOD sources.
- The number of persons working per FTE has been extrapolated from the total workers to each category of staff, and from nursing homes of Wallonia to those of Flanders and Brussels.
- In hospitals and nursing homes, it has been estimated that all workers were < 65 years of age. The proportion of volunteers, interns and students has been extrapolated from Wallonia to the other regions.

Because the +65 year old working in the Health Care sector are included in the first group (Chapter 3) at risk, this age group was excluded from the estimates below.

Table: Estimated number of professionals working in health care services < 65 years of age.

Sectors and categories	Estimates	Source
Health care professionals: - Medical doctors, dentists, physiotherapists, pharmacists,	111 223	INAMI/RIZIV 2018, 2017 data for age < 65 years
paramedics - Nurses, midwives, caregivers, clinical psychologists, paramedics, technicians and assistants	224 656	SPF/FOD STATAN 2019 (active professionals),§ INAMI 2017 data for age*
Other (non-health) workers in nursing homes, including volunteers, internships and students	93 000	SPW, rapport bisannul 2014^ and FTE; Belfius-MARA report 2015; extrapolated for the ratio persons/FTE and for Brussels
Other workers in hospitals: salaried non physicians, administrative and others	69 504	SPF/FOD FinHosp <sup>£</sup> ; extrapolated for the ratio persons/FTE on the total hospital staff
Other workers in other institutions	Unknown	
Informal carers	Unknown (20 % population > 50 yrs)	Share OECD study 2015
Total	498 383	

<sup>\*:</sup> https://www.inami.fgov.be/SiteCollectionDocuments/statistique\_2018\_ss\_proff\_tableau1.pdf §: https://www.health.belgium.be/fr/sante/professions-de-sante/statistiques-et-planning

Estimation of 498 383 people working in the Health Care Sector, not including non-health staff from other institutions and informal carers 50 - 64 years of age.

4.4 Estimation of total number of people in the risk and priority groups for vaccination against Covid-19 in Belgium:

Priority groups	Number of people
Total number of +65 year old in Belgium (Chapter 4.1)	2 204 475
Estimation of 45 - 64 year olds with comorbidities at risk for developing severe Covid-19 in Belgium (Chapter 4.2)	1 303 881
Estimation of number of people working in the Health Care Sector in Belgium (Chapter 4.3)	498 383
Total	4 006 739

An estimation of 4 006 739 number of people are in the risk and priority groups for vaccination against Covid-19 in Belgium.



<sup>^:</sup> http://sante.wallonie.be/?q=node/4428

<sup>£:</sup> https://www.health.belgium.be/fr/sante/organisation-des-soins-de-sante/hopitaux/chiffres-et-rapports (FTE) and https://www.health.belgium.be/fr/51-evolution-du-nombre-detp-payes-par-categorie-de-personnel (number persons)

The number of needed doses will depend on the type of vaccine. If one or more doses are needed.

### 4.5 Vaccination acceptance

Not everybody will accept this vaccination in the risk groups. If we look to seasonal flu vaccination, at least 30 % of the people > 65 yrs old were not vaccinated in the last influenza season in Belgium (62 % coverage in 2018). The vaccination acceptance of people < 65 yrs old with comorbidities is low, with influenza vaccine coverage at 27 % in 2018 in the 15 - 64 years of age (HIS 2018).<sup>2</sup>

For the health care workers, flu vaccination coverage is estimated at around 40 - 50 %, according to Belgian studies among GPs and more recently among 5 141 Belgian HCWs from 13 hospitals and 14 nursing homes (40 % in the hospitals and 45 % in the nursing homes) (Boey et al., 2018; KCE, 2011).

In addition, data from France suggest that 1/4 of people will refuse vaccination against Covid-19 (Coconel, Lancet 2020).

Therefore, we can assume that at least 20 and 30 % in the priority and risk groups will refuse vaccination.

### 5 Other target groups to be considered for vaccination against Covid-19?

The SHC provides recommendations for the general public health in Belgium. A list of risk groups is defined on who should be vaccinated in priority against Covid-19 based on the available data at this moment.

The SHC wants to address that there are other target groups who can be considered for vaccination against COVID-19 such as critical or essential service providers.

These other target groups are not addressed by the SHC in this report, this should be defined by other authorities than the SHC.

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<sup>&</sup>lt;sup>2</sup> Asthma, COPD, heart infarct, ischaemic heart, high blood pressure, diabetes or serious renal disorder.

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#### VI COMPOSITION OF THE WORKING GROUP

The composition of the Committee and that of the Board as well as the list of experts appointed by Royal Decree are available on the following website: <u>About us.</u>

All experts joined the working group *in a private capacity*. Their general declarations of interests as well as those of the members of the Committee and the Board can be viewed on the SHC website (site: conflicts of interest).

The following experts were involved in drawing up and endorsing this advisory report. The working group was chaired by **Yves VAN LAETHEM**; the scientific secretary was Veerle MERTENS.

VAN LAETHEM YvesInfectiology, vaccinologyCHU Saint-PierreMALI StephanieVaccine Spearheads coordinatorFAGGBOSSUYT NathalieEpidemiology, infectiologySciensanoHANQUET GERMAINEEpidemiologyKCE

The standing working group Vaccination (NITAG) has endorsed the advisory report. The NITAG was chaired by **Yves VAN LAETHEM**; the scientific secretary was Veerle MERTENS.

**BLUMENTAL Sophie** UKZKF Pediatrics, Infectiology **CALLENS Steven** Infectiology, Internal medicine UZ Gent **CHATZIS Olga** Pediatric infectious disease UCL **DE LOOF Geert** General medicine **BCFI FLAMAING Johan** Geriatrics KU Leuven **GOETGHEBUER Tessa** Infectiology **ULB** LEROUX-ROELS Isabel Vaccinology, Microbiology UZ Gent **LEURIDAN Elke** Vaccinology **UAntwerpen MANIEWSKI Ula** Travel medicine, vaccinology **ITG MICHIELS Barbara** General medicine **UAntwerpen PEETERMANS Willy** Internal medicine, Infectiology, UZ Leuven Vaccinology **PELEMAN Renaat** Internal Medicine, Infectiology UZ Gent **SOENTJENS Patrick** Travel medicine ITG **SPODEN Julie** General medicine SSMG **SWENNEN Béatrice ULB** Epidemiology, Vaccinology **THEETEN Heidi** Vaccinology **UAntwerpen TUERLINCKX David** CHU UCL Namur Pediatrics, vaccinology **VAN DAMME Pierre** Epidemiology, vaccinology **UAntwerpen VAN DER LINDEN Dimitri** Pediatrics, infectiology UCL **VANDERMEULEN** Epidemiology, vaccinology KU Leuven Corinne **VERHAEGEN Jan** UZ Leuven Microbiology, Bacteriology WAETERLOOS Quality of vaccines and blood products Sciensano Geneviève WYNDHAM-THOMAS Sciensano Infectiology Chloé



The following administrations and/or ministerial cabinets were heard:

CARRILLO SANTISTEVE ONE

Paloma

CORNELISSEN Tine Kind en Gezin

DAEMS Joêl RIZIV

DE SCHUTTER Iris Zorg en Gezondheid

MAHIEU Romain CCC

TOP Geert Zorg en Gezondheid

VEKEMAN Veerle Kind en Gezin

WUILLAUME Françoise FAGG



### **About the Superior Health Council (SHC)**

The Superior Health Council is a federal advisory body. Its secretariat is provided by the Federal Public Service Health, Food Chain Safety and Environment. It was founded in 1849 and provides scientific advisory reports on public health issues to the Ministers of Public Health and the Environment, their administration, and a few agencies. These advisory reports are drawn up on request or on the SHC's own initiative. The SHC aims at giving guidance to political decision-makers on public health matters. It does this on the basis of the most recent scientific knowledge.

Apart from its 25-member internal secretariat, the Council draws upon a vast network of over 500 experts (university professors, staff members of scientific institutions, stakeholders in the field, etc.), 300 of whom are appointed experts of the Council by Royal Decree. These experts meet in multidisciplinary working groups in order to write the advisory reports.

As an official body, the Superior Health Council takes the view that it is of key importance to guarantee that the scientific advisory reports it issues are neutral and impartial. In order to do so, it has provided itself with a structure, rules and procedures with which these requirements can be met efficiently at each stage of the coming into being of the advisory reports. The key stages in the latter process are: 1) the preliminary analysis of the request, 2) the appointing of the experts within the working groups, 3) the implementation of the procedures for managing potential conflicts of interest (based on the declaration of interest, the analysis of possible conflicts of interest, and a Committee on Professional Conduct) as well as the final endorsement of the advisory reports by the Board (ultimate decision-making body of the SHC, which consists of 30 members from the pool of appointed experts). This coherent set of procedures aims at allowing the SHC to issue advisory reports that are based on the highest level of scientific expertise available whilst maintaining all possible impartiality.

Once they have been endorsed by the Board, the advisory reports are sent to those who requested them as well as to the Minister of Public Health and are subsequently published on the SHC website (<a href="www.hgr-css.be">www.hgr-css.be</a>). Some of them are also communicated to the press and to specific target groups (healthcare professionals, universities, politicians, consumer organisations, etc.).

In order to receive notification about the activities and publications of the SHC, please contact: <a href="mailto:info.hgr-css@health.belgium.be">info.hgr-css@health.belgium.be</a>.





### Minister van Sociale Zaken en Volksgezondheid, en van Asiel en Migratie MAGGIE DE BLOCK

Prof. dr. Yves Van Laethem Voorzitter werkgroep COVID-vaccinatie Hoge Gezondheidsraad Victor Hortaplein 40 1060 Brussel

Uw kenmerk

Ons kenmerk

Bijlagen

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MDB/2020/BW/MW/BM - 582822

Datum Brussel,

0 2 SEP. 2020

Betreft: Het advies van de Hoge Gezondheidsraad met oog op een vaccinatiestrategie tegen COVID-19

Geachte Voorzitter,

In zijn advies nr. 9597 geeft de Hoge Gezondheidsraad (HGR) een eerste overzicht van mogelijke doelgroepen die prioritair in aanmerking komen voor een COVID-vaccin eens dat beschikbaar is. Het advies kwam tot stand nadat de Risk Management Group hierover een specifieke vraag stelde.

Beknopt gesteld, identificeert de raad de doelgroepen die prioritair voor een vaccin in aanmerking genomen dienen te worden, zoals weergegeven in de tabel.

Priority groups	Number of people	
Number of +65 year old		2,204,475
45-54 y	565858	
55-64y	738023	
Estimation of 45-64 year old with		
comorbidities at risk		1,303,881
Artsen, tandartsen, kinesist,		
Apothekers en paramedici tot 65y	111223	
Verpleegkundigen, wroedkundige, zorgkundige, psychologen, paramedici technici, etc.		
Niet-geneeskundig personeel ziekenhuizen	224656	
-	69504	
Estimation of number of people working in the		
Health Care Sector		498,383
TOTAL		4,006,739



Tevens geeft het advies aan dat naarmate in de wetenschappelijke literatuur of via internationale instellingen zoals de WGO en ECDC er meer data beschikbaar komen, de prioritaire groepen verder verfijnd kunnen worden. Hierbij wordt onder meer verwezen naar zwangere vrouwen en immuungecompromitteerde patiënten. Het blijft ons inziens belangrijk deze evolutie van nabij op te volgen.

Traditioneel wordt bij de beroepsgroepen die een hoog risico lopen, terecht gekeken in de richting van de mensen die actief zijn in de gezondheidszorgsector. Zij ondervinden immers een grote blootstelling en hebben zo een verhoogde kans op besmetting. Bovendien moet een vaccinatie van het zorgpersoneel er voor zorgen dat er voldoende capaciteiten in het zorgsysteem beschikbaar blijven. Het is hierbij van belang dat 'mensen actief in de zorgsector' voldoende precies omschreven worden. Gegeven de bijzonderheid van het virus SARS-COV-2 maakt dat ook andere essentiële beroepen mogelijk een verhoogd risico kunnen lopen. Ik denk hierbij bijvoorbeeld aan de mensen actief in de begrafenissector. Kan de raad nagaan welke essentiële beroepsgroepen eveneens een verhoogd risico hebben en waarbij prioritering in de vaccinatie eveneens aangewezen zou kunnen zijn?

Op dit ogenblik zijn er nog heel wat onbekenden om goed te kunnen invullen hoe de vaccinatie het beste plaatsvindt. Welk vaccin geniet de voorkeur? Hoeveel dosissen zijn aangewezen? Op welk ogenblik wordt een persoon het best gevaccineerd? Wat is de toxiciteit? Al dit type van vragen zal pas een antwoord kunnen krijg eens er meer gegevens uit de klinische studies beschikbaar zullen zijn over hoe effectief een bepaald vaccin is. Toch ontslaat de situatie ons niet van de opdracht om na te gaan welke elementen in acht dienen genomen te worden bij het opzetten van een vaccinatiestrategie.

Gelet op context van de ontwikkeling van het vaccin zullen er heel wat klinische studies lopen. België tracht binnen in deze studies aanwezig te zijn. Een dergelijke benadering geeft de mogelijkheid om categorieën van mensen vroegtijdig toegang te geven, eventueel in de fase van ontwikkeling zelf. Kan de HGR nagaan in welke mate deze benadering aangewend kan worden in het kader van een omvattende vaccinatiestrategie?

Gegeven de situatie dat in de aanvangsfase het vaccin sowieso in zeer beperkt mate beschikbaar zal zijn, komt het er op aan deze maximaal effectief in te zetten. Een benadering kan zijn om over te gaan tot vaccinatie rond zones gevoelig voor broeihaarden van infectie. Het organiseren van een ringvaccinatie bij uitbraken kan een dam opwerpen in de verspreiding van het virus. Graag hadden wij vernomen in welke mate deze benadering gehanteerd kan worden in de strijd tegen COVID-19.

Met de meeste hoogachting,

Maggie De Block



YOUR LETTER DATED 02 sept 2020

YOUR REF. MDB/2020/BW/MW/BM-582822

OUR REF. CSS 9611

DATE

ENCLOSURE(S)

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SUBJECT: Additional questions advisory report SHC 9597

Mme Maggie De Block Ministre de la Santé publique Finance Tower Boulevard du Jardin Botanique 50/175 1000 Bruxelles

### Madam Minister,

During its meeting on Thursday 17 September 2020, the "Vaccination" Working Group (NITAG, National Immunization Technical Advisory Group) of the Superior Health Council (SHC) discussed your additional questions to the SHC 9597 advisory report received on 02-09-20. Please find the answers to your questions in this reply by letter.

1. Monitor the development of the definition of priority groups. Does the advisory report need to be further developed or adapted with regard to the definition of priority groups?

As stated in its advisory report 9597, the SHC intends to continue monitoring the literature on this subject, but it has to be said that there is currently no additional data that would allow us to modify our report.

2. Can a more precise description be given about the "persons working in the care sector" priority group?

This "persons working in the care sector" group includes **all** persons involved and working (including volunteers and trainees):

- 1. in an acute and chronic care institution (with or without direct contact with patients). For example:
  - Caregivers
  - Medical staff
  - Technicians
  - Maintenance
  - Catering
  - Administrative staff
  - etc.
- 2. in preventive health services (e.g. ONE, Kind&Gezin)
- 3. and all healthcare professionals and their staff working outside the institution: in a doctor's office, in a pharmacy, at home. For example:



- Pharmacists
- Medical Doctors
- Nurses
- Physiotherapists
- Occupational therapists
- Speech therapists
- Ssychologists
- etc

## 3. What are the essential professions at increased risk for which priority vaccination would be indicated?

The SHC considers that the definition or choice of critical or essential professions is the responsibility of the political authorities. It seems clear to us, however, that not everyone within these yet to be defined structures is at equivalent risk.

To help with this definition, the SHC considers that occupational physicians should be directly involved in this process within these institutions.

They are in fact the health workers best suited to determine which are the "specific subgroups" that could be affected by this priority vaccination process, according to the work contingencies regularly encountered locally.

It seems to us, for example, that this "specific subgroups" prioritisation selection can be made according to:

- whether the professional activity is (only or not only) carried out in an outdoor environment/in a ventilated open indoor environment/in a non-ventilated confined indoor environment/etc.:
- whether the professional activity is carried out without respect for the recommended safety measures (e.g. physical distance of 1.50m);
- whether the professional activity is sometimes/rarely/frequently/continuously carried out in the presence of people wearing or not wearing a mask;
- the establishment of the individual risk of transmission (e.g. specific case of the "meat packer" {slaughterhouse cutter}).
- 4. Is there the possibility of giving certain categories of people earlier access, possibly during the development phase of the vaccine?

The SHC considers that, in view of the existence of preventive measures, the improvement of treatments to reduce mortality (systematic use of anticoagulants and dexamethasone), it is not useful and may even be potentially dangerous to consider the administration of vaccines before they have been fully clinically tested and approved.

5. There will be limited vaccine availability during the start-up phase of vaccination. Can the ring vaccination approach be used during an outbreak (epidemic)?





The SHC considers that there is currently no scientific data, in the current development of vaccines, that would allow us to consider a *ring vaccination* in identified cases.

Dr. Yves Van Laethem - Chair of the field of activity « Vaccination » of the SHC (NITAG)

Approved by the NITAG during the meeting of 17 September 2020<sup>1</sup> Validated by the SHC Committee during the meeting of 7 October 2020

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<sup>&</sup>lt;sup>1</sup> Attendees: Carrillo Santisteve Paloma (ONE), Chatzis Olga (UCL), Frère Julie (CHR Citadelle), Goetghebuer Tessa (ULB), Hanquet Germaine (KCE), Malfoot Anne, Maniewski Ula (ITG), Michels Barbara (UAntwerpen), Schelstraete Petra (UGent), Spoden Julie (SSMG), Swennen Béatrice (ULB), Theeten Heidi (UAntwerpen), Van Herck Koen (UGent), Van Laethem Yves (CHU Saint-Pierre), Vandermeulen Corinne (KULeuven), Waeterloos Geneviève (Sciensano), Wuillaume Francoise (FAGG), Wyndham-Thomas Chloé (Sciensano), Daems Joël (RIZIV), Mali Stéphanie (FAGG), Top Geert (Zorg en Gezondheid), Vekeman Veerle (Kind en Gezin).



