



COVID-19

CRISIS EXIT PLAN THE FRENCH CASE

**SEVEN STRATEGIC
RECOMMENDATIONS**

April, 13th 2020

Prelude

How are we going to organize the reopening of businesses, schools, universities, public places after the peak of the Covid19 epidemic? Will social life be as it was before?

Addressing these issues in the heart of the fight against the epidemic, when intensive care services are saturated in certain regions seems indecent to some. It would put the economy before Health, almost neglecting human life. In fact, it's essential!

The passing of the epidemic peak and the relative relief of efforts in hospital services will not mean a return to normal life. With a minority of the population immunized, we are far from the threshold of group immunity. There is therefore a long way to go before this objective is reached.

Considering that our exit from this crisis is long term (which is counted in months rather than weeks), if we miss the exit of the current collective lockdown, the human, economic and social tribute will undoubtedly be greater than what we have known for the past two months. Without a strong and clear strategic line and roadmap for all, our country, our society risks sinking into tragic moments. Without popular support from this strategic line, the plan to end the crisis will fail. It is therefore necessary to debate it now and participate actively in its implementation.

The Health Institute has conducted transdisciplinary research since the beginning of 2018 on the reformation of the French health system, leading to a program published in November 2019¹. We have underlined the urgency of making public health a priority of reforms for a sector that will be the most strategic of the 21st century and on which our country has assets to emerge among the leaders.

It seemed to us useful to draw on the network of expertise that the Health Institute has established to set up a crisis exit plan; the health, economic and social challenges of which are colossal. I warmly thank everyone who helped to build this plan.

This plan is also intended to be a message of hope, of optimism for a better world, of regaining control of our destiny so badly affected by this crisis!

Frederic Bizard
President of Health Institute

¹ See page 20

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Synthesis

The Health Institute has drawn up a crisis exit plan by considering four working hypothesis.

The first is based on epidemiological models and foreign experiences which suggest that the situation will be sufficiently under control to envisage an evolution of the current collective lockdown during the first fortnight of May, taking the hypothesis of May 4th, 2020.

The second hypothesis is based on group immunity which could only be achieved when an effective vaccine is made available, which can be envisaged during 2021. This implies that the crisis exit plan will last a long time, with a normal situation not before 2022. If more favorable options, such as the advent of effective therapy, arise, this will shorten the duration of the plan.

The third hypothesis is based on the capacity of the State and of civil society to set up the arsenal of anti-Covid19 products and services necessary to change collective lockdown on May 4, 2020. Out of the six groups of components required in the fight against Covid19, two depend on the results of the research in progress and must be anticipated.

Finally, the fourth hypothesis concerns the search for a triple health, social and economic efficiency of the crisis exit plan, which impacts the arbitrations carried out.

The plan contains 7 recommendations that are indivisible from each other for success.

The first recommendation is to strengthen the ongoing actions to produce and acquire the arsenal of products and services essential for the success of the plan. It is a real Marshall plan which is proposed, also intended to acquire national and European health independence. An estimate of these needs and their costs will be presented shortly.

The second recommendation is to bring the entire population out of collective lockdown on the first fortnight of May, we take as an hypothesis May 4th, 2020, which totals seven weeks of collective lockdown. Compelling this resolution stems from the need to register in the long term which means that this movement is only the beginning of new habits of life, imposed by the fact that the virus will still be present. Another reason is the need to treat people with

maximum equality in order to achieve the widest possible social acceptance. Finally, the desire to create a health democracy also argues for such a decision.

The third recommendation determines rules of conduct according to the immune status of people. It leads to the creation of three groups whose composition will change over time and to which specific protective measures are defined. This recommendation is based on a massive screening strategy. It contains a possibility of immediate end of lockdown of people positive to the serological test, which is a strong signal of hope for the population.

The fourth recommendation is the establishment of strict individual containment for confirmed cases and systematic PCR-type screening of suspect and contact cases. With the informed consent of the confirmed cases, the movements of the last days of the confirmed cases can be traced to identify all of the contact cases. These will all be screened in PCR tests. The lockdown period can be traced digitally if the person gives informed consent. In all cases, heavy penalties will be provided in the event of non-compliance with lockdown.

The fifth recommendation concerns a specific plan for activities and people with “high risk Covid19”. This plan is intended to allow the resumption of a social life under strict conditions guaranteeing respect for social distancing and barrier gestures. Respect for these rules must be guaranteed in all public and private places involving social interactions. Protecting the most vulnerable people from Covid19 risk requires specific measures dedicated to these people. Recognition of the impact of Covid19 on the work of all health professionals is taken into account in ways that are adapted to the situations of different sectors.

The sixth recommendation is to address the risk of Covid19 cases imported using strict border health controls. Upon arrival in the territory, each person will be checked and the information necessary to contact and locate them will be collected. Massive information at the nerve points of entry into the territory will be available in the main languages.

The seventh recommendation concerns the overhaul of our health system, the strengths and weaknesses of which have been revealed by the health crisis. In the same way as the National Council of the Resistance had built during the war the social reformation program for the post-war period, a National Committee for health reformation will be created to lead at the end of 2020 to a program widely debated in society. The construction of a strong health democracy and decentralized governance from defined health areas will be part of the objectives of this Committee.

I/ The four basic assumptions for building the plan

From international literature and the state of research, we have tried to make the most realistic hypotheses to establish a central scenario for managing the crisis exit plan.

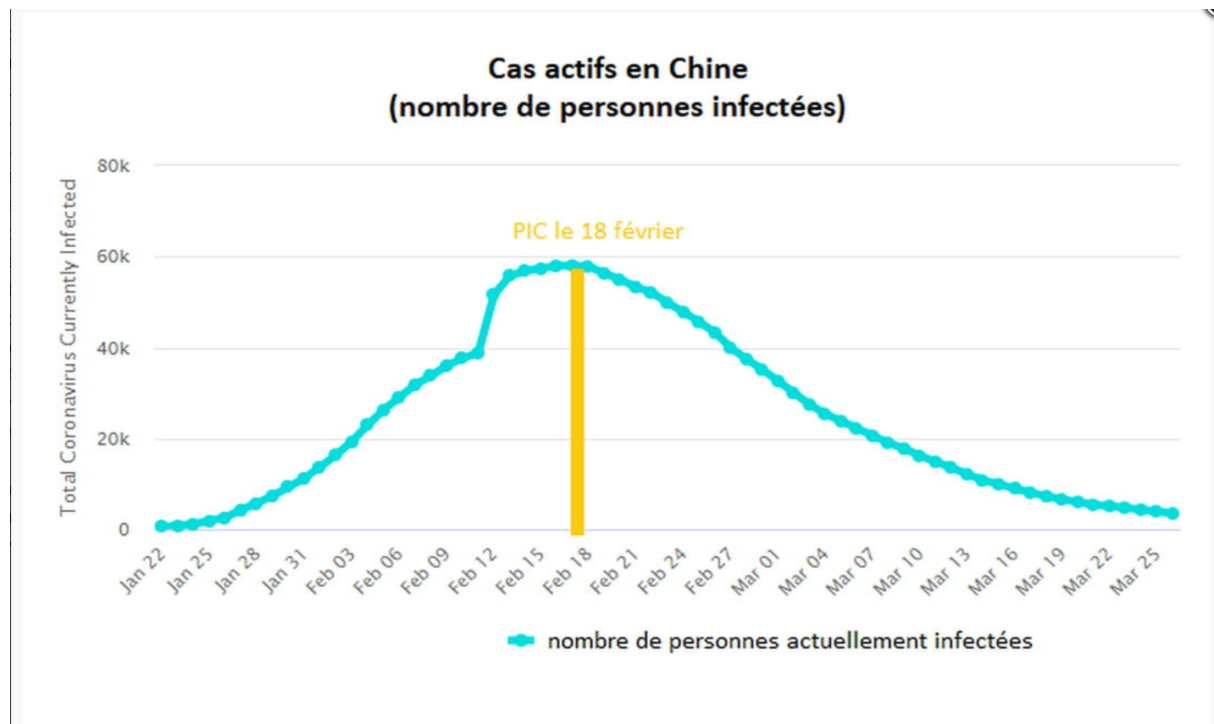
1/ Visibility over the duration of the current lockdown situation

According to current research on the evolution of the epidemic, France should experience a peak in the first half of April. In Ile de France, the most affected region, the peak would occur around April 10th while in the Grand Est, the peak would have occurred the last week of March. According to the modeling carried out, the inflection point of the epidemic curve could occur between April 15 and 25. Uncertainty remains about the speed of the decline of the number of new cases, even if the curve will evolve in plateau in an unfavorable hypothesis.

A study published in the Lancet² predicted a worldwide peak between April and May. Observing the evolution of the epidemic in China is instructive to echo the aftermath.

It shows that 2.5 weeks after the peak, the number of infected cases was divided by 3 and 5 weeks after, there were only a few cases left. This was done in a period of strict lockdown from January 23th until April 8th in the epicenter city of the epidemic, Wuhan. The rest of Hubei province entered lockdown a little later, and left it on March 24th, about 7 weeks in total and 5 weeks after the Peak.

² Study "Nowcasting and forecasting the potential domestic and international spread of the 2019-nCoV outbreak originating in Wuhan, China: a modelling study", published, 29th, February, 2020, The Lancet.



Source : *Worldometers.info*

If it is impossible to predict with precision the inflection point of the curve of infected cases in France, it seems difficult to envisage an evolution of the current situation of general lockdown before May.

Hypothesis 1: an exit from the current situation of general lockdown from the first fortnight of May, we take the hypothesis of May 4, 2020.

2/ Visibility over the duration of the crisis

A small number of new cases infected in early May does not mean that the epidemic risk has disappeared. The virus is still present on the territory and a large majority of the population is not immunized.

We will exclude any unregulated strategy leading to collective immunity, which would lead to excessive mortality and lasting and unbearable strain on the French health system.

The end of the health crisis corresponds to the achievement of collective immunity (60% of the population), which can only be achieved when the population has the widest possible access to a vaccine. According to the researchers, this vaccine may not be available until early 2021. The launch of a

vaccine largely accessible would present the most stable situation and reduce the risk enough to return to near normal living conditions.

The other possible route is the therapeutic solution that would cure or at least alleviate clinical cases. By reducing the viral load, it would help break the chain of contamination. If one or more treatments prove to be effective, the Covid 19 epidemic would become a classic virosis, with or without a vaccine, which will be managed in a context of normal life.

Our assumption is that the current epidemic risk situation for Covid 19 will not change significantly until we have a vaccine. This therefore leads us to consider living with this risk for 1 year (time estimated as a minimum by the European drug agency).

Hypothesis 2: This post-crisis situation will extend over the whole of 2020, if not longer. We will have to learn to live on a new normal during this period.

3/ Have the necessary arsenal for the exit of the crisis period

Following the forecast of an exit from the current general containment situation in early May, we consider (hypothesis 3) that at this period, France will have sufficient capacities of the arsenal products existing on the market.

This phase of constitution of the health arsenal is strategic to succeed the crisis exit plan but also to rebound from this crisis by constituting our national and European health independence and by rebuilding a more efficient health system.

We have identified 6 groups of components of this arsenal, some of which are dependent on the outcome of current research projects:

- **Protection (group 1):** Protective equipment and products: surgical masks, FFP2 masks, craft masks, protection kits (aprons, over-alls, dispersible bonnets, eye and foot protection, hydro alcoholic gel, disinfectant products);
- **Screening (group 2):** Means for screening sick people (PCR-tests) and immunized people (serological tests); equipment to detect where necessary people with high temperature;

- **Hospital medical equipment (group 3):** respirators and all the consumables used to treat Covid-19 patients.
- **Digital (group 4):** Digital applications allowing individuals to define their immune status from an application and to geolocate sick individuals who are tested positive after their informed consent.
- **Medicines (group 5):** therapeutics whose clinical trials have shown a favorable benefit / risk ratio on Covid-19 to avoid progression from mild to severe forms for some and to treat severe forms for others;
- **Prevention (group 6):** an effective vaccine on Covid-19.

4/ Have a global approach in an indivisible plan

The trade-offs that have been made in the recommendations are based on an approach that prioritizes the protection of human life. Considering the impact on human life of economic crises, in particular through unemployment and the loss of income of the middle and working classes, considering the high level of social injustice in general lockdown, the crisis exit plan aims for triple health, economic and social effectiveness.

To do this, the plan includes seven recommendations which cannot be separated from one another and whose effective application of each condition will enable the overall success of the plan.

II/ Plan to end the crisis: the 7 strategic recommendations of the Health Institute

Recommendation 1

Strengthen the production and acquisition plan for the anti-covid19 arsenal

- For the six groups identified above comprising the arsenal to end the crisis, France should immediately launch a Marshal plan for the research, production and acquisition of this arsenal;
- In order to ensure its long-term health independence and to practice immediate Keynesian recovery, the Health Institute recommends maximizing national production capacities for each component of the arsenal as far as possible:
 - Partial or complete, temporary or final reconversion of certain production sites capable of producing in France the protection elements of groups 1 to 4 of the arsenal;
- Establishment of reciprocal and recurring international commercial agreements with other countries by favoring the purchase at a fixed price of certain quantities of products and the sale at a fixed price of products made locally in France of components from groups 1 to 3 of the arsenal;
- Establishment of a national industrial consortium, on the model of that set up for respirators by the President of the French Republic, dedicated to the screening elements of group 2;
- Creation of an international consortium between Switzerland, the United Kingdom, Germany and France for example to invest massively in research and the production sites necessary for the production of the future vaccine and reduce the time of access to future vaccine market.

Recommendation 2

Remove the entire population from current lockdown on May 4th, 2020

- The Health Institute recommends from the first fortnight of May, with an hypothesis on May 4th, to remove the entire French population from collective lockdown in place since March 17 which totals 7 weeks of collective lockdown. Immunized people (positive serological test) can end their lockdown period as soon as the test is carried out (see reco 3).
- The immediate exit of their lockdown period for people in group A (recommendation 3) is to be studied.
- The reasons which make us decide in this direction are of three kinds:
 - **The long term nature of the exit of the crisis:** If the possibility of finding a therapy in the short term exists, allowing for the return to an almost normal life, the hypothesis adopted by the Health Institute is to have to wait for the existence of a vaccine to really stabilize the health situation. In addition, it will be a long term requirement that the entire population adapt their habits and lifestyle to the requirements of this period of post-crisis;
 - **A plan based on individual responsibility and a sense of general interest:** any strategy of partial end of the lockdown period (targeted at groups or regionalized) will create a feeling of injustice and a form of passivity on the part of the confined population who put the success of the plan at risk. To succeed, this plan needs everyone's civic commitment to regain possession of its destiny. Knowing that this health shock will have a societal consequence, the plan to end the crisis can be likened to a social project which must therefore treat each citizen equally (republican approach).
 - **An opportunity to build a strong health democracy (see reco 7)** through an accelerated awareness that health is a matter of individual and collective responsibility.

Recommendation 3

Establish different rules depending on people's immune status

- The Health Institute recommends differentiating the rules of conduct according to the immune status of people:
 - **Group A:** people immunized with Covid-19 following a positive serological test;
 - **Group B:** People who are part of the population tested positively by the PCR test and who must remain strictly confined or be hospitalized,
 - **Group C:** people not immunized with Covid-19 following a negative serological test or without known status following an absence of serological screening.
- Group A should be formed now using mass screening of everyone who reports having had Covid-19 symptoms using serological testing. Each person in group A will receive a **nominative certificate** (digital and paper) proving their immunity and belonging to group A.
 - In the absence of contraindications from scientific experts, the members of this group are in principle without risk of contaminating others or of being contaminated. They will therefore have fewer constraints imposed in their movement but by civility and security, they will have to strictly respect the barrier gestures.
 - The members of this group will be able to fulfill missions requiring recurrent social interaction.
 - Once the serological tests have started, the members of this group can be immediately end their lockdown period, which is an important positive movement for the population.

- Group B is made up of patients under lockdown or hospitalized. Once the 14 days of lockdown have been completed, for those who recover, they will move to group A.
- Group C is made up of the rest of the population who have not been in contact with the virus and who are therefore likely to be infected. Because of the large number of asymptomatic or paucisymptomatic cases, this population represents a real risk of being a virus carrier and of maintaining the chain of contamination. It represents a risk all the more important that the people met will be considered themselves at high risk according to the criteria of age and preexisting medical conditions known.
 - This group must therefore comply with strict rules in public spaces, namely:
 - Respect for social distancing;
 - Mandatory wearing of mask;
 - Regular hand washing with hydroalcoholic gel and other barrier gestures;
- Any social or economic activity will have to adapt to comply with the protection rules vis-à-vis covid19. It will be the responsibility of employers and event organizers to allow compliance with the protection rules for people in group C.
 - The right of withdrawal of people in group C may apply if it is justified;
 - Certain events will require special authorizations showing their ability to enforce barrier gestures (see Reco 5).
- Each citizen will be able to define his immune status using a digital application or on paper in 3 possible cases:
 - Immunized (Group A);
 - Sick Covid19 (Group B);
 - Not immune not sick (Group C).

Recommendation 4

Establish strict individual lockdown of reported cases and systematic screening of suspect and contact cases

- Anyone with symptoms of covid19 must take the PCR screening test within 24 hours
 - Either it is positive and the person must lockdown themselves for 14 days, under penalty of heavy sanctions (type € 1,500, 6 months suspended jail).
 - Subject to the informed consent of the confirmed covid19 case:
 - ✓ Their journey over the past few days can be traced thanks to the geolocation of his mobile phone in order to best identify the contact cases;
 - ✓ Their lockdown period can be traced by digital monitoring;
 - The person then joins group A and is issued her Covid19 immunity certificate;
 - Either the test is negative and the person remains subject to the rules of group C.
- Anyone who has been in contact with a confirmed case must be screened for PCR within 24 hours:
 - Either it is positive and the person will follow the decision tree presented above;
 - Either the test is negative and the person remains subject to the rules of group C.

Recommendation 5

A specific plan for activities and people at “high risk Covid19”

- **Education:** A part of the students will go to school on the 4th of May and the rest will continue education at home until the end of the 2020 school year. After reassessing the situation in June 2020, decide whether or not to resume classes as usual for everybody in September 2020.

- If the conditions allowing the respect of the rules of distancing and other barrier gestures prove possible in the university environment and any higher education, the normal resumption of teaching is possible there as of May 4th. On the other hand, the resumption of classes for primary to high school for everybody in May is not reasonable;
- The criteria for choosing students who will return to school on May 4th must be clearly defined now to ensure a resumption in order and quality education. One might think that pupils in difficulty with distance education, single-parent families and parents without telework or possible guards are relevant criteria;
- Childcare services must be set up in each commune with people from group A preferably;
- Telework is preferred for any parent who needs to keep their children at home.

- **Meetings (sports, cultural, religious, professional, etc.):** special authorization will be subject to the ability to enforce the rules for the protection of people, in particular strict social distancing;

- **Public transport:** All transport circulating on the national territory must allow the rules of social distancing and uphold physical safety barriers without which they will not be authorized to circulate. People from group A must be privileged to enforce the rules of social distancing;

- **Economic activities at Covid19 risk:** due to strong social interaction and the permanent presence of the public, certain activities such as restaurants, bars, sports halls, etc. can only reopen if they have been authorized Covid19 sanitary facility, proving that sufficient security measures have been taken. A departmental health force dedicated to issuing Covid19 health authorizations and ensuring that they are respected over time is to be created now;
- **Active people suffering from long-term conditions putting them at high risk Covid-19:** prioritize telework. If the type of activity is impossible in telework, the person has the right to partial unemployment if they wish:
 - o A monthly health insurance contact with patients suffering from long-term conditions is to be established to help city doctors to ensure continuity of care and limit hospitalizations;
 - o The occupational physicians are to be involved in the management of Covid19 in companies.
- **Nursing homes and homes for people with disabilities:**
 - o Screening with serological tests of all people in all establishments having had at least one case:
 - o Immunized people have no special rules to follow;
 - o People who are not immunized must be given priority care by people in group A or, failing that, with protective measures adapted to their vulnerability without being totally confined;
 - o For the staff of the establishments, pass a PCR test to each then apply the decision tree already mentioned above;
 - o Each visitor and member of these establishments is bound by reinforced protection rules adapted to the vulnerability of the people in these establishments;

- **City medical and paramedical care:**

- Set up a medical and paramedical home care system in each territory, composed essentially of immune caregivers (group A) and dedicated to people in lockdown (group B) and to people at high risk covid-19 from group C ; telemedicine is to be prioritized over group B.
- Reinforced protective measures must be defined and applied to allow the rest of the population to visit medical and paramedical offices with sufficient confidence to avoid postponement of care.

- **Hospitals and clinics:**

- In establishments having had at least one Covid19 case, carry out serological tests on all staff and patients:
 - Immunized people (group A) have no specific protection rules to follow;
 - Reinforced protection measures must be defined and strictly applied to secure the care of group B patients
- Depending on needs to be assessed and evaluated regularly, public and private hospitals must dedicate medical and intensive care services exclusively to Covid19 patients in their establishments;

- **Healthcare professionals in public establishments** who have taken care of Covid19 patients must be paid all the overtime hours accumulated in their time savings account before Covid19 and during Covid19. The bonus of 2,000 euros without tax and social security charges must be able to be distributed according to terms to be discussed between the director, the establishment medical committee and the union of each hospital.

- **Healthcare professionals from private establishments** who have participated in the care of Covid19 patients must also be able to benefit from the premium of 2,000 euros without social and tax charges according to the decision of the management of the establishment;
- **Self-employed healthcare professionals and all healthcare facilities** that have lost part of their turnover due to the Covid19 must obtain compensation from the social security.

Recommendation 6

Establish strict health controls at borders

- Anyone from a foreign country with cases of infection is subject to temperature control and must complete a form containing their contact details, their travel plans in the country so that they can be easily identified in the event of future suspected Covid19 cases (contact cases);
- Anyone with high temperature or other symptoms that may be related to Covid19 must immediately pass a PCR test in medical spaces:
 - o If the test is positive, the person is obliged to remain in a strict lockdown with heavy penalties for contravening rules set by the authorities. If it does not have lockdown accommodation, places dedicated to lockdown are offered to her by the Public Authorities;
 - ✓ Digital tracing is also proposed;
 - o If the test is negative, the person can enter the territory.
- Anyone entering the country, having had Covid19 in their country, must pass the serological test in France:
 - o If the test is positive, a certificate of immunity is issued and the person is subject to the same rules as those of Group A;
 - o If the test is negative, it is subject to the same rules as people in Group C;
- Massive information at each point of entry into the territory must allow each person entering the territory to know the protection rules applied in France.

Recommendation 7

Set up a National Committee to overhaul the French health system

- An exhaustive assessment of the strengths and weaknesses revealed by the covid19 crisis, as well as an international benchmark, must be carried out by the Ministry of Health or entrusted to a group of experts;
- A National Committee for the overhaul of the French health system (including medico-social and dependency) must be created to establish a manifesto of strategic and operational recommendations on this reformation. For this, it will be responsible for organizing:
 - o A national consensus conference on reformation with all stakeholders in the health system;
 - o The conclusions of this consensus conference will be debated and improved within regional consensus conferences with the regional representatives of the institutions represented in the first conference;
- These initial conclusions will be available on the internet and put up for public debate on a dedicated site. Public;
- A second national consensus conference will be organized during the last quarter to consolidate all the amendments made during the regional and public debates.
- Building a strong health democracy and governance from defined health territories will be one of the Committee's objectives.
- A major law on the transformation of our health system and will be presented to Parliament in the first quarter of 2021.



The Health Institute is a research organization founded in 2018 to create the conditions for a successful overhaul of the French health system.

The Health Institute is a civic, apolitical and independent organization, with the aim of: building a project to overhaul our health system adapted to the 21st century, for the benefit of all citizens and in compliance with our major republican principles; sensitize all health stakeholders on the challenges, the urgency and the content of the reformation ; promote a reformation program among the public authorities and the general public in order to make it a political priority in the short term.

The Health Institute is based on a collective intelligence made up of renowned personalities from the world of health and civil society.

The Health Institute published in November 2019 the results of its work on the reformation of our health system:

"So when is the comprehensive health reform? », Editions Fauves, 2019

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