COVID-19 Testing strategy
Update May 2023

RAG meeting 08/05/2023

CONTEXT AND QUESTION ADDRESSED

The current testing strategy is based on the RAG advice from September 2022:

- PCR or RAT tests are only recommended in case of respiratory symptoms for health care personnel or people in close contact with vulnerable persons.
- Testing for COVID-19, when respiratory symptoms, in the general population, is generally not recommended but remains available if prescribed by a GP or via the online self-assessment tool. In these cases, a RAT test is recommended, not a PCR.
- Screening before hospitalization can still be performed for people hospitalized in wards with patients at high risk of severe COVID-19, upon local risk assessment by the Infection control department of the hospital.
- Screening in collectivities is not recommended.
- Self-tests remain available for all.

Even though the indications for testing have been restricted to some extent from October 2022 onwards, a substantial amount of (PCR) tests are still being performed. Hence, there is a need to review the testing strategy, and the RAG was explicitly asked to review the current testing indications for the general population. This document will discuss COVID-19 testing strategies for the general population, while the advice from the CSS/HGR will address the testing/screening strategy in healthcare settings.

RECOMMENDATIONS

- In view of the current epidemiological situation, COVID-19 should be managed as any other respiratory infections. Therefore in the general population, a PCR/RAT test performed by a health care professional **is not recommended** anymore
    - This advice includes people in close contact (e.g. in the family) with severely immunocompromised patients[1].
- The **self-assessment tool is no longer recommended**, but can be reactivated if needed.
- Self-tests remain available for the general population and can be used when in contact with vulnerable people.
- The testing strategy for the general population is not linked to the management levels. However, in the event of a new variant with different characteristics (higher proportion hospitalizations/ICU), the testing strategy might be reviewed again, within the frame of the preparedness strategy as

[1] Definition see table p 2: https://www.who.int/publications/i/item/WHO-2019-nCoV-vaccines-SAGE_recommendation-immunocompromised-persons

described in March 2022[2]. Upscaling of the test capacity should therefore remain possible. The alarm signal for a possible need for upscaling testing will come from the RAG epidemiology, based on the epidemiological situation.

- The RAG highlighted the urgency of an advice on testing strategies in healthcare settings, including:
    - Screening for COVID-19 in hospitals
    - Testing of symptomatic health care workers for COVID-19
    - Guidance on test indications for diagnosis of severe respiratory infections in general, including indications for reimbursement of multiplex PCRs.

ELEMENTS OF DISCUSSION

- During the COVID-19 epidemic, the purpose of the test strategy has been to identify infected persons, to isolate them and stop further spread, limiting thus the total number of infections and (more importantly) the number of severe cases (with overload of the hospital capacity). However, in the current context, with an absence of general measures (e.g. mask wearing and isolation) in the general population, the initial purpose of the testing strategy appears inadequate. Therefore, considering the current epidemiological situation, testing should no longer be recommended among the general population.
- Although data on the number of infections is useful for epidemiological surveillance, this has never been the goal of testing. Information on virus circulation is collected based on other indicators than the number of positive test results (which largely underestimates the true number of infections), such as the viral concentration in wastewater. Data collected through the citizen-based survey Infectieradar will also be useful for follow-up of the epidemiological situation (of COVID-19 and other respiratory diseases).
- Previously, the RAG made recommendations regarding the use of multiplex testing for respiratory viruses (see advice 19/08/2020 and 14/12/2020): multiplex PCR tests, which simultaneously detect multiple respiratory pathogens, are useful during the influenza epidemic in patients with severe respiratory symptoms. The tests are recommended only in a hospital setting (emergency department patients and hospitalized patients) and if surveillance data effectively demonstrate a flu epidemic. In patients with very severe symptoms, it is recommended to use a maxi panel if possible (detection of a wide range of pathogens), in patients with less severe symptoms a mini panel is sufficient (only SARS-CoV2/ Influenza A/B, or only SARS-CoV2/ Influenza A/B and RSV). These recommendations remain valid, and clear guidance and indications for reimbursement are urgently needed.
- Currently, most neighboring countries do not recommend testing in case of respiratory symptoms, for the general population, but rather focus their COVID-19 testing strategy towards at-risk/vulnerable populations. One exception is France, where symptomatic persons among the general population are recommended to get tested but are only partially reimbursed (since 01/03/2023). Fully reimbursement still applies for certain at-risk/vulnerable populations.

[2] https://www.health.belgium.be/sites/default/files/uploads/fields/fpshealth_theme_file/note_rmg_-_depistage_isolement_et_quarantaine_strategie_moyen_terme_20220307.pdf

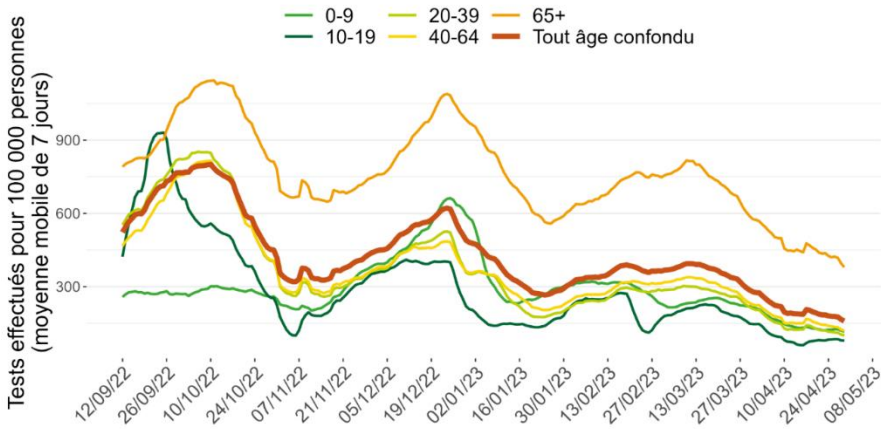
BACKGROUND INFORMATION

Current testing practices in Belgium

- The epidemiological situation is evaluated by the RAG (see reports NL and FR). The RAG proposed to decrease the management from level 2 to level 1 on April 13 2023, which was approved by the RMG and effective as of April 20 2023.

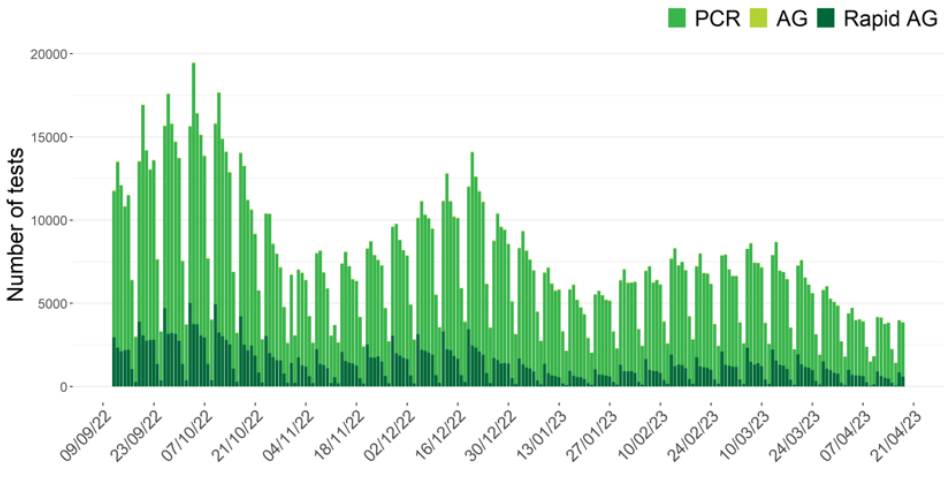
- The overall number of tests performed (PCR and RAT) has decreased since October 2022, in accordance with changes in the testing strategy, with an average of < 3 000 tests/day for the period 23-29/04/2023.

Figure 1: number of tests performed over time by age groups (source: eForms/CTPC)



- The majority of tests currently performed remain PCR, on average 87 % of the tests performed during the period 22-28/04/2023 were PCR.

Figure 2: *Number of tests by test method by day (source eForms/CTPC)*



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- Among tests for which the prescription reason is known, tests for possible cases of COVID-19 and tests for screening in hospital setting ("POSSIBLE_COVID19_CASE" and "SCREENING_HOSP") remain the most important indications for which a PCR test is done (although the proportion of tests for screening in hospital setting has decreased in comparison with the end of 2022 – 4 877 PCR tests in April 2023 vs 14 141 tests in November 2022).

- Tests for screening in hospital setting ("SCREENING_HOSP") remain almost exclusively (97%) PCR tests.
- Regarding tests for possible cases of COVID-19 ("POSSIBLE_COVID19_CASE"), 61,6 % of those tests performed are PCR and 38,2 % are RAT.
- For the majority of PCR tests (54 000/86 000), there is no linked prescription, and therefore no prescription reason available.

Table 1: Number of AG, RAT and PCR tests performed during the month of April 2023 (source eForms/CTPC)

prescription_reason	AG	AGR	PCR	perc_pcr
no_prescription	491	1654	53824	96.17
CLUSTER_INVESTIGATION	0	0	386	100
EXCEPTIONAL	0	4	48	92.31
HIGH_RISK_CONTACT	0	19	129	87.16
NEW_RESIDENT_COLLECTIVITY	1	4	118	95.93
OTHER	0	0	19	100
PAID_TEST_SCREENING	0	923	472	33.84
POSITIVE_SELF_TEST	0	0	99	100
POSSIBLE_COVID19_CASE	96	12145	19602	61.56
RETURNING_HR_REGION	0	9	4	30.77
SCREENING_COLLECTIVITY	0	7	102	93.58
SCREENING_HOSP	115	20	4877	97.31
SELF_ASSESSMENT_TEST	0	274	155	36.13
UNK	1	614	6220	91
total	704	15673	86055	84.01

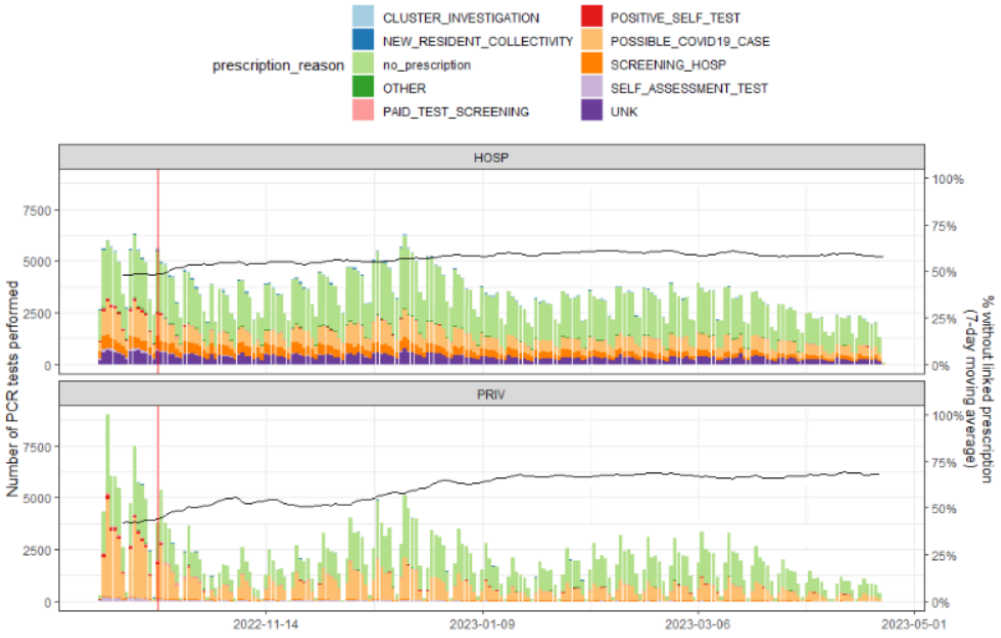
- The majority of PCR tests are performed in hospital labs

Table 2: Number of PCR tests per lab type, with and without prescription, April 2023 (source eForms/CTPC)

lab_type	no_prescription	prescription	perc_no_pres
	3	3	50
FP	2689	83	97.01
HOSP	34497	24332	58.64
PRIV	16635	7813	68.04

- The proportion of PCR tests without linked prescription has increased steadily for private labs. In hospital labs this proportion has only increased slightly.

Figure 3: number of PCR tests performed in hospitals and in private labs and proportion of tests without prescription, from Sept 2022 to end of April 2023 (red line indicates the change in test strategy (Oct 17 2022) (Source: eForms/CTPC)



International recommendations regarding testing

The current strategy for testing and isolation in some other countries is presented in the Table below.

Country	Testing strategy	Isolation
France	All symptomatic persons are recommended to get a test as soon as the symptoms start. Type of test: PCR, RAT, self-tests (positive self-tests always need confirmation with PCR) Since May 1st 2023, those test are only partially reimbursed. Exceptions remain for certain populations. → " Tracer- tester – protéger" strategy	No mandatory isolation. Recommendation to respect hygiene practices, to get tested and to avoid contact with vulnerable people.
Netherlands	No recommendation of testing for symptomatic persons.	No mandatory isolation.
United Kingdom	There are no coronavirus (COVID-19) restrictions in the UK. PCR/RAT is not recommended in the general population. Most people can no longer access free testing for COVID-19. Testing is only recommended for	No mandatory isolation.

	individuals and settings at highest risk from COVID-19. Type of tests: PCR, RAT, self-test	
Germany	No systematic testing for symptomatic persons. Possibility to have a PCR test based on GPs prescription.	No mandatory isolation.
Sweden	PCR/RAT testing is not recommended in the general population. Exceptions remain for populations at risk.	5 days (until feeling better and fever-free for at least 48 hours).
Norway	No systematic testing for symptomatic persons. Exceptions remain for at-risk population.	No mandatory isolation.

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