

RECOMMANDATIONS SUR LE DÉPISTAGE DU SARS-COV-2 DANS LES PRISONS

RAG sous-groupe testing –15 Mars 2021

Note : Les recommandations actuelles sont susceptibles d'être modifiées en fonction de nouvelles informations et/ou de l'évolution de l'épidémie.

Recommandations:

- Maintenir la procédure actuelle selon laquelle tous les détenus entrants sont testés à la fin de leur période de quarantaine de 7 jours.
- Dans le contexte actuel de mesures de protection strictes, appliquer les procédures de test supplémentaires suivantes :
 - Pour les contacts à haut risque au sein de la prison, appliquez les mêmes procédures que pour les contacts à haut risque dans la communauté : un premier test dès que possible après l'identification, et un second test après 7 jours.
 - En cas de test plus étendu dans le cas d'un cluster, tester également les contacts à faible risque (contacts suspects et tous les détenus et le personnel de la même section du cas index) deux fois, une fois immédiatement après leur identification et une seconde fois après 7 jours. Si le premier test est négatif, la quarantaine n'est pas nécessaire.
- Dans le contexte actuel de mesures de protection strictes, les procédures de test supplémentaires suivantes sont considérées comme utiles, mais pas nécessaires :
 - Dépistage périodique du personnel en contact avec les détenus ; soit chaque semaine avec une RT-PCR sur salive ou sur un écouvillon combiné nez/gorge ; soit deux fois par semaine avec un test Ag rapide sur un écouvillon combiné nez/gorge.
Il est important de noter qu'il existe plusieurs autres populations pour lesquelles le dépistage périodique est également utile et qu'il n'est pas possible de l'appliquer à toutes. D'autres facteurs de nature psycho-socio-économique et opérationnelle (tels que l'acceptabilité et la faisabilité) doivent également être pris en compte dans la décision finale sur les populations à privilégier.
- Si les mesures de précaution sont relâchées pour des raisons psychosociales, des indications de tests supplémentaires pourraient être envisagées :
 - Dépistage des partenaires, par un test Ag rapide, avant une visite de contact intime, en tenant compte de toutes les conditions qui doivent être remplies pour l'utilisation des tests Ag rapides.
 - Si la logistique le permet et si les mesures de protection des visiteurs réguliers sont assouplies (par exemple, le contact physique est autorisé), le dépistage peut être étendu à tous les visiteurs âgés de plus de 12 ans.

Les personnes suivantes ont participé à cet avis :

Emmanuel André (KU Leuven-NRC); Bénédicte Delaere (CHU-UCL Namur); Olivier Denis (CHU-UCL Namur); Laura Cornelissen (Sciensano); Marie Pierre Hayette (CHU-Liège); Yves Lafort (Sciensano); Barbara Legiest (ZG); Tinne Lernout (Sciensano); Pieter Libin (UHasselt); Romain Mahieu (COCOM); Elizaveta Padalko (UZGent); Olivier Vandenberg (LHUB-ULB); Ann Van den Bruel (KU Leuven); Dimitri Van der Linden (UCLouvain); Steven Van Gucht (Sciensano); Pieter Vermeersch (UZ-Leuven).

CONTEXT

The current test capacity offers opportunities for a broader testing as a means to control the spread of SARS-CoV-2. In addition, the higher infectiousness of the new variants, that are becoming predominant, creates concerns. In this context, it is being assessed in which settings additional testing might be useful.

One of these settings are prisons. Penitentiary institutions are collectivities with a high risk of transmission, between prisoners, between staff and prisoners, and between visitors and prisoners. Strict protective measures are in place in Belgian penitentiary institutions, leading to tensions among inmates and staff and concerns about the rights of prisoners. Several COVID-19 outbreaks in Belgian prisons have been reported in the past weeks.

The RAG Testing therefore assessed possible testing strategies in prisons that could reduce the risk of transmission, and allow to a certain extent relaxations of some of the measures.

CURRENT COVID-19 MEASURES IN BELGIAN PENITENTIARY INSTITUTIONS

The Belgian Ministry of Justice has developed guidelines for COVID-19 prevention during visits to inmates (see below) (1).

Visitors

- Max. 1 regular adult visitor (≥ 16 years old) for a minimum of four weeks. After that, the visitor may change. It is the inmate who must request this.
- Max. 2 children (< 16 years), these do not always have to be the same children.

Rules of conduct during visits

- No physical contact between inmate and his/her visitors.
- Mandatory wearing of a personal mouth mask in the prison, except at the visiting table. Plexiglas screens provide protection. Children under 12 should not wear a mouth mask.
- Respecting the rules around keeping a distance.

- Respecting the rules of the prison.
- No unnecessary movements in the visiting room. 1 visitor is allowed to move at a time and with a mouth mask (e.g. toilet visit).
- No eating/ drinking in the waiting and visiting room.
- Sign in according to the applicable instructions (wear a mouth mask, disinfect hands, sign in at reception, possible temperature measurement, etc.).
- Visitors declare on their honor that they:
 - have not been ill for the past 14 days,
 - have not returned from a foreign red zone in the last 14 days,
 - inform the prison if they fall ill within 2 days after the visit

With regard to testing, all incoming prisoners (newly incarcerated or returning from penitentiary leave/ exit permit) are put in quarantine and tested within one week. If testing negative, quarantine is ended, if testing positive they remain in isolation up to 10 days after arrival.

If an incarcerated inmate, who is not a new arrival, tests positive, an inventory is made of the high-risk contact inmates who are then put in quarantine and tested after 7 days. High-risk contact staff are communicated to Empreva (occupational health service) and external high-risk contacts to the contact tracing call center. If multiple detainees test positive, testing is extended to all presumptive contacts and all detainees and staff in the index case's department.

All testing is done with an RT-PCR on a naso-pharyngeal swab.

According to the Prisons Health Services of the Ministry of Justice, there are on average 10,500 detainees in 35 Belgian prisons, and approximately 15,000 new entries per year (personal communication). In the month of February 2021, 1,653 tests were conducted in prisoners. Since the beginning of the pandemic, 679 detainees had tested positive by March 9, 2021. In the week of 4-12 March, 102 positive cases were detected. This corresponds with an overall 7 day incidence over the past year of approximately 124/100.000 and 971/100.000 in the week of 4-12 March. There are currently 135 cases in quarantine, of which 2 are hospitalized. One infected detainee has died.

There are 7,771 staff members, corresponding with 6,529 full-time equivalents. Since the beginning of the pandemic, 887 staff members have tested positive, of which 119 are currently absent and 3 have died.

Since the beginning of 2021, 14 prison cluster outbreaks have been reported to Sciensano by March 9, 2021, 11 in Wallonia, 2 in Flanders and 1 in Brussels. Of 12 of these clusters the number of cases was reported. The majority had a low number (6 had only 2 cases and 4 between 3 and 6) and only two clusters were reported with a high number of cases, in Nivelles (28) and Namur (80).

DISCUSSION

- The current restrictions, in particular with regards to visits, are causing a lot of stress on inmates and staff. It is therefore likely that relaxation will be put in place in the near future. In the event of relaxations, additional testing could reduce the risk of SARS-CoV-2 transmission and cluster outbreaks.
- The current number of clusters and incidence is comparable with what is found in the general population, despite the measures in place. This confirms what has been established in studies elsewhere, that the risk of transmission in a prison setting is high.
- Systematic testing of new incoming prisoners (new arrivals, transfers from other institutions, or those moving on or off the premises), as recommended by ECDC, WHO and CDC, is already done. This consist of one (RT-PCR) test before leaving the 7 day quarantine period.
- The current approach in the event of a positive case is to test all high-risk contacts, once after 7 days. This is not consistent with the overall guidance on testing high-risk contacts, which is to test twice, a first test as soon as possible after being identified as a high-risk contact, and a second test the earliest after 7 days.
- In the event of more than one case (cluster), broader testing is already done (all presumptive contacts and all detainees and staff in the index case's department). The approach is the same as for high-risk contacts: all are put in isolation and tested after 7 days.
- No other testing approaches, such as repetitive testing or testing of visitors are currently in place.
 - In principle, repetitive testing of staff fulfills the criteria established in the RAG advice on repetitive testing (high risk of rapidly infecting a large number of people, and difficult to apply effective protective measures)¹.
 - The usefulness of a systematic screening of visitors, prior to the visit, is debatable with the current protective measures in place, and does therefore not fully complies with the criteria established in the RAG advise on one-time screening (risk of rapid spread of the infection to a large number of people, and no possibility to fully apply effective protective measures)¹. However, if, for psycho-social reasons, these measures are relaxed, screening might become useful. Screening is definitely useful before intimate contacts by partner visits.

¹ See: [20201214_Advice_RAG_teststrategy_updateDecember_FR.pdf\(sciensano.be\)](#) and [20201214_Advice_RAG_teststrategy_updateDecember_NL.pdf\(sciensano.be\)](#)

RECOMMENDATIONS

- To maintain the current procedure of testing all incoming prisoners at the end of their 7-days quarantine period.
- In the current context of strict protective measures, the following additional test procedure is recommended:
 - Apply for high-risk contacts within the prison the same test procedures as for high-risk contacts in the community: a first test as soon as possible after identification, and a second test after 7 days
 - The current test procedures, in the event of a positive case among incarcerated inmates (make an investigation, quarantine and test systematically all high-risk contacts, more extended quarantining and testing if more than one case) is appropriate. However, it is recommended to apply a similar approach as in other collectivities and:
 - to test all high-risk contacts twice instead of once (see above);
 - if extended testing is indicated, also test the low-risk contacts (presumptive contacts and all detainees and staff in the index case's department) twice, once immediately after their identification and a second time after 7 days. If the first test is negative, quarantine is not necessary.
- In the current context of strict protective measures, the following additional test procedures are considered useful, although not necessary:
 - Repetitive testing of staff that is in contact with inmates. This setting fulfills the criteria established by the RAG testing to be considered useful, but not necessary:
 - A risk of rapid spread of the infection to a large number of people; AND
 - No possibility to fully apply effective protective measures

As stipulated in a previous RAG advice on repetitive testing in specific populations², there are several settings in which it is useful and it is not possible to apply repetitive testing in all these populations. In the final decision which populations to prioritize for repetitive testing, other factors of psycho-socio-economic and operational nature (such as acceptability and feasibility) need to be considered as well.

If repetitive testing is done, different testing options are acceptable:

- Weekly self-collection of a spitted saliva or a gargled sample for testing with an RT-PCR.
- Weekly collection of a combined nasal/oral swab for testing with an RT-PCR. The swab is preferably collected by health staff or self-collected under supervision of health staff.

² See: [20210204_RAG_Advice_Herhaald_testen_in_bepaalde_doelgroepen_NL.pdf \(sciensano.be\)](#) and [20210204_RAG_Advice_Testing_répété_dans_certaines_populations_FR.pdf \(sciensano.be\)](#)

- Twice a week collection of a combined nasal/oral swab for testing with a rapid Ag test. The swab is preferably collected by health staff or self-collected under supervision of the health staff. The rapid Ag test is done by health staff.
- If protective measures would be relaxed for psycho-social reasons, additional test indications could be considered:
 - Screening of partners before intimate contact visits. If measures are relaxed and intimate partner visits allowed, the context fulfills the criteria established by the RAG Testing. A similar algorithm could be applied as for visitors to nursing homes, whereby the visitor is tested with a rapid Ag test prior to the visit. The same conditions would need to be fulfilled:
 - Only antigen tests that are sufficiently validated and meet minimum requirements may be used. The specificity (compared to an RT-PCR) must be at least 97% and the sensitivity must be at least 95% in subjects with a high viral load ($\geq 10^5$ RNA copies/mL or Ct value < 25). These threshold values must be confirmed by at least three independent evaluations.
 - All results of tests performed, or at least the positive ones, should be reported to the contact investigation centers through Health/data.
 - All tests should be performed on prescription and under the responsibility of a physician.
 - The persons performing rapid Ag tests must have received proper training.
 - All conditions regarding sufficient space, necessary equipment and personal protective equipment must be fulfilled.
 - All tests are voluntary. The visitor chooses whether or not to take it.
 - People testing positive are not allowed the visit and follow all standard procedures with regards to isolation and contact tracing.
 - It should be free of charge.
 - If logistically feasible and if protective measures are relaxed for regular visitors (for example physical contact allowed), screening could be extended to all visitors ≥ 12 years old.

BACKGROUND INFORMATION

Scientific literature

That incarceration indeed leads to a higher risk of COVID-19 was demonstrated by Jiménez et al (2) who calculated an incidence rate among Massachusetts prison inmates and staff of 44.3/1000 — 2.91 (95%CI, 2.69-3.14) times higher than the Massachusetts general population and 4.80 (95%CI, 4.45-5.18) times the US general population in the same period. KhudaBukhsh et al. analyzed data of the Ohio Department of Rehabilitation and Corrections and found a basic reproduction number greater than 14, after a single initially infected inmate, and a super-

spreading event resulting in several hundred infected inmates, corresponding with a basic reproduction number of approximately three (3).

Scientific studies (published or in pre-print) assessing testing approaches in prisons or other places of detention are rather scarce, are mostly from the US, and almost exclusively in a context of containing outbreaks after detection of a positive case.

Wallace et al. found that serial testing of all detainees housed in the same dormitories of a COVID-19 case on day 0, day 4 and day 14 allowed rapid detection of additional cases and controlling the outbreak (4).

Wadhwa et al. implemented two testing strategies after identification of a positive COVID-19 case (5). One group was offered tests at three time points over 14 days (day 1, days 3–5, and days 13–14) and another group was offered a single test and interview at the end of a 14-day quarantine period. In the serial testing group, out of 137, 17 new cases were detected, 16 on day one, one on days 3–5, and none on days 13–14; in the day 14 group, out of 87, 2 cases were identified. They concluded that cohort-based testing identified new SARS-CoV-2 asymptomatic and pre-symptomatic infections that may have been missed by symptom screening alone.

Hagan et al. conducted mass testing after a positive case in 15 correctional facilities (6). It resulted in a median 12.1-fold increase in the number of known infections among incarcerated or detained persons in these facilities, which had previously used symptom-based testing strategies only. High SARS-CoV-2 prevalence among persons retested 7 days after an initial negative result indicated that curbing transmission might require multiple testing rounds.

Also Njuguna et al. found that serial testing of contacts from shared living quarters (on day 1, day 4 and day 14) identified persons with SARS-CoV-2 infection who would not have been detected by symptom screening alone or by testing at a single time point (7).

International and national guidelines

ECDC

ECDC developed guidelines for infection prevention and control and surveillance for coronavirus disease in prisons in July 2020 (8). With regards to testing, it lists the following groups that could be considered for testing:

- All people in prison with symptoms compatible with COVID-19.
- Asymptomatic persons identified as high-risk exposure (close) contacts of cases during contact tracing.
- Incoming prisoners (new, transferred from other institutions or going in and out of the premises). Inmates returning from any hospital stay or medical procedure, including psychiatric treatments, should also be tested as a priority group.

- Wider testing of all prisoners and staff after a case is detected in staff/inmates, to identify asymptomatic cases and those in the early stages of infection to help guide isolation, contact tracing, infection control, implement ‘cocooning’ strategies and early clinical care.

WHO

WHO-Europe recently published an Interim Guidance on preparedness, prevention and control of COVID-19 in prisons and other places of detention (9). It states that testing should be considered primarily for people coming into prison (new arrivals, transfers from other institutions, or those moving on or off the premises), as an extra measure, in addition to quarantining, before they are allowed to join the general prison population. Where resources are not scarce and there is no need to prioritize testing, a “whole-prison” testing approach may be useful after identification of the first case, to be adopted in conjunction with other mitigation strategies (including case finding, contact tracing and other preventive measures). The rationale for this approach is based on the higher probability of within-prison transmission, which may be aggravated by the difficulty in maintaining physical distance. This facility-wide testing approach has been advocated for long-term care facilities, which share characteristics of congregate living and having service providers moving in and out on a daily basis.

United States

CDC’s guidance on SARS-CoV-2 testing in correctional and detention facilities dates from December 2020 (10).

Facilities in communities with moderate to substantial levels of community transmission³ can **consider** the following:

- Baseline testing for all current incarcerated or detained persons (IDP).
- Testing all new IDP at intake before they join the rest of the population in the facility, and housing them individually while test results are pending to prevent potential transmission. Some facilities may choose to implement a “routine intake quarantine” in which new IDP are housed individually for 14 days before being integrated into general housing.
- Testing for SARS-CoV-2 and reviewing results before transferring IDP to another facility or releasing them to the community, particularly if an IDP will transition to a congregate setting with persons at increased risk for severe illness from COVID-19. Consider combining pre-transfer/release testing with a 14-day quarantine (ideally in single cells) before an individual’s projected transfer or release date to further reduce risk of transmission to other facilities or the community.

³ Moderate= 10 to 49 new cases per 100,000 population in the last 7 days; positivity rate 5.0-7.9%.

Substantial= 50 to 99 new cases per 100,000 population in the last 7 days; positivity rate 8.0-9.9%.

If pursuing broad-based testing (after known or suspected SARS-CoV-2 exposure or when there is moderate to substantial transmission in the community), strongly consider a program that includes testing for both IDP and staff.

Residents and staff in correctional facilities are also listed among the groups to prioritize for expanded screening testing (11).

The Netherlands

The Dutch Ministry of Justice states that new inmates are by definition placed in a single cell during eight days. A test is only done in case of mild complaints (12)

France

The guidelines of the French Ministry of Health for COVID-19 prevention in penitentiary institutions do not include any additional test indications other than the general ones (13).

United Kingdom

In the UK, the Ministry of Justice and Public Health England developed guidance for preventing and controlling outbreaks of COVID-19 in prisons and places of detention in December 2020 (14). It states that all new and transferred prisoners or detainees should be isolated, and where PCR testing on day 0/1 and day 5 to 7 is in place for new entrants, the prisoner or detainee may move out of isolation following 2 negative test results.

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