In this newsletter, you can read about the latest highlights on the Dutch screening programme for cervical cancer. The Dutch Health Council recently made recommendations about the screening programme. The screening results of last year are presented and show the impact of Covid19. Also, several activities for 2022 are presented.

HEALTH COUNCIL ADVICE 2021

In 2017, the Dutch screening programme on cervical cancer was renewed. Smears are now primary tested for Human Papillomavirus (HPV) and triaged with cytology when the HPV-test is positive. In addition, self-sampling was introduced for testing on the presence of HPV. In October of this year, the Dutch Health Council published an advisory report about options for further improving the screening programme.

In this advisory report, the main recommendations were given on self-sampling, the criteria for referral and computer-assisted screening. This is briefly described below and in more detail in the summary report here.

Self-sampling

With self-sampling, the screening programme can be made more accessible. It can reduce the screen-related burden and lower the barriers to participate in screening. Since 2017 it is possible to request a self-sampling kit, especially for persons who hesitate to participate with a smear and would therefore not participate. Thus, the current main goal of self-sampling is to reach non-responders.

The Health Council now states that self-sampling is equivalent to a cervical smear and can be offered accordingly. Also, the Council recommends sending a self-sampling kit to all persons who receive the invitation. By giving complete freedom of choice and the convenience of not having to apply for the self-sampling kit, the barriers of participating in screening should mitigate. This should increase the detection of cervical cancer at an early stage.

The Dutch Ministry of Health has commissioned the RIVM to make an implementation plan, while regarding the reduction of loss to follow up and to limit the wasting of self-sampling kits.

Criteria for referral

Since the implementation of primary HPV screening, more participants are being referred to the gynaecologist. In quite a few cases neither cervical cancer nor any precancerous lesions are found. These participants are burdened with unnecessary anxiety and possible overtreatment.

The Health Council advises to distinguish hrHPV types with a clearly increased risk from those with a moderately increased risk. Cases with a clearly increased risk, HPV 16 and 18, should already referred if cytology shows atypical cells (ASCUS). Cases with a moderately increased risk, other hrHPV types, should only be directly referred if cytology shows more abnormalities (HSIL).
HPV-positive participants with no referral, are invited for follow-up cytology, which can be extended from 6 to 12 months according to the Council. Participants with ASCUS+ at the follow-up cytology should still be referred.

The Dutch Ministry of Health has commissioned the RIVM to implement these recommendations as soon as possible.

**Computer-assisted screening**

Cytology triage in the Netherlands is a manual process and limited by resources, however the assessment could be partly automated by computer-assisted screening systems. The laboratory technician or pathologist will then still make the final decision of the assessment.

The Health Council recommends that computer-assisted screening should be explored. It can be introduced, under the condition that a pilot has shown that the method is equivalent to the current manual process.

**COVID19**

Due to Covid19, the screening programme was put on hold for several months in 2020. In this period no primary invitations were sent and people were discouraged to attend to the GP for a smear or submit a self-sampling kit. This resulted in a backlog of 280.000 invitations. Since the fall of 2020, 120% of the invitations were send and in December of 2021 the backlog of invitations has been resolved.

During the COVID-pandemic, the participation rate was lower, especially around the time of the shutdown in the spring of 2020. Therefore, in 2022 the persons who were invited during the Covid19 pandemic will receive a reminder of their invitation. Starting with the persons who were invited the earliest.

**HIGH ACCESSIBILITY**

The screening programme pursues a high accessibility. Everyone in the target group who wants to participate, should (be able to) participate, with little perceived barriers. In the past years several studies were conducted to better inform the target group. For example, a target group research and a client satisfaction survey were performed.

The invitation letter has been simplified in order to be more accessible, understandable and appealing. Click [here](http://www.rivm.nl/en/cervical-cancer-screening-programme) for an example of the invitation letter. The letter contains links to translated information in 4 languages and a QR-code which links to a [page](http://www.rivm.nl/en/cervical-cancer-screening-programme) with videos about the screening procedure. The information documents and videos are available in four different languages (Dutch, English, Turkish and Arabic). Some videos are also available in Berber Tarifit.

The participation rate is lowest in the youngest age group. Therefore, in 2022 an advance notice will be implemented for the group who will be invited for the screening programme for the first time, the 30-year-olds. From 2023, the first HPV-vaccinated
persons will become 30 and thus fall into this group. The advance notice will better prepare and inform the 30-year-olds before they receive the actual invitation and gives them time to discuss with family and friends whether to participate in the screening.

Other improvements in the communication will follow in the coming years.

**HPV-VACCINATED WOMEN**

The first HPV-vaccinated participants will enter the Dutch screening programme in 2023. It is likely they have a lower chance of getting cervical cancer. Therefore, other screenings strategies are explored for this group. However, implementation of a possible different screening strategy is not foreseen before the second screening round for HPV-vaccinated women in 2028.

Currently, several screening strategies for vaccinated persons are being modelled. The focus lies on different screening intervals, based on the current moments of invitation. Two research groups use their models to conduct this analysis, the Erasmus MC and Amsterdam UMC. In 2022 we expect the results of this first modelling analysis. After 2023, the actual outcomes of the first HPV-vaccinated women in the screening programme will be used to validate the results of the first modelling and assess the most optimal screening strategy for this group.

In our communication we will emphasize that it is still important for vaccinated persons to participate in the screening programme, because the vaccination does not fully protect against cervical cancer.

In the Netherlands, the bivalent vaccine is given to girls in the National Vaccination Programme. As from 2022, the vaccination will also be available for boys and given around the age of 9-10 instead of 12-13.

**NATIONAL MONITOR 2020**


Due to the Covid19 pandemic the screening programme was put on hold for about 3.5 months in 2020. Therefore, only 75% of the invitations were sent that year. Also, in the period before and after the shutdown of the programme, not everyone could go to their own GP for a cervical smear or some hesitated to go. The participation rate of 50% in 2020 is therefore lower than in previous years. The participation with self-sampling is 8.1%, that is 3% higher than in 2019. Self-sampling remains highest among the youngest and oldest group.

<table>
<thead>
<tr>
<th>Participation rate 2020</th>
<th>Smear</th>
<th>Self-sampling</th>
<th>No participation</th>
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<tbody>
<tr>
<td>41.6%</td>
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<td>8.1%</td>
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Newsletter Dutch cervical cancer screening programme – December 2021

Positive hrHPV tests
In 2020, 9.5% of the participants have a positive hrHPV test. The percentage of positive hrHPV tests is higher in the youngest age group and among participants who opted for the GP smear (9.8%) than among participants who use the self-sampling kit (8.4%).

Referral
The direct referral rate is 2.9% based on the total number of participants and 31.8% based on all hrHPV-positive participants with cytology results. In these participants abnormal cells (Pap 2+ / ASCUS+) were found. This corresponds with 8,700 participants who are referred to the gynaecologist. Participants who use self-sampling and are hrHPV-positive are more likely to have a HSIL result than participants who participate with a cervical smear.

Detection
In 2020, a (pre-)cancerous lesion of cervical cancer (CIN 2+) is found in 1.2% of the participants. This corresponds to 3,413 persons. Due to the short reference period, the detection rate of 2020 is preliminary and expected to be higher in the next monitor. For 2019, the detection rate is 1.1% with the same reference period and 1.3% with a reference period of 12 months longer.

The positive predictive value of the screening programme, the chance that a person is correctly referred to a gynaecologist, is 32% in 2020.

Furthermore...
- From 2022, the 10 year interval will start, meaning that 45 and 55 years old with a hrHPV-negative result in the previous round, will not be invited. Furthermore, 65 years old who were hrHPV-positive at 60 and had no referral, are invited once more.
- We would like to draw your attention to two new factsheets. One about the screening programme and the other about self-sampling. Both factsheets will soon be available on our website: [www.rivm.nl/en/cervical-cancer-screening-programme](http://www.rivm.nl/en/cervical-cancer-screening-programme)
- A Dutch Expert meeting will be held in January to discuss the recommendations of the Dutch Health Council.

Finally, we wish you happy holidays and stay save!