Public Health Scotland

Why was there an increase in advanced stage (stage III) cervical cancer in 2020 in Scotland?

Publication date: 7 July 2025

In partnership with

MACMILLAN CANCER SUPPORT

Translations and other formats are available on request at:

phs.otherformats@phs.scot

Public Health Scotland is Scotland's national agency for improving and protecting the health and wellbeing of Scotland's people.

www.publichealthscotland.scot

Public Health Scotland (PHS) and **Macmillan Cancer Support** are working together to investigate why there were more cases of advanced stage (stage III) cervical cancer in 2020, despite the fact that the overall rate of cervical cancer fell.

Why

When there is a sudden change to cancer trends, it is important to understand the reasons why - especially when that change is in a more advanced stage of cancer. In 2020, there were fewer diagnoses of early stage (stage I and stage II) cervical cancer but more cases with advanced local spread (stage III; **PHS Cancer Incidence publication in Scotland, 2020**). During the COVID-19 pandemic, screening services were paused, which could have affected the detection of early-stage cervical cancer, potentially resulting in an underdiagnosis of early-stage cervical cancer and, proportionally, an increase in late-stage diagnoses.

However, the way cervical cancer stage is measured in the **Scottish Cancer Registry** changed in 2020 to using the International Federation of Gynaecology and Obstetrics (FIGO) 2018 system. One of the major changes in FIGO 2018 was the addition of stage IIIC - which was not used previously in Scotland. It is possible that the increase in stage III cervical cancer in Scotland was due to the change in how stage was reported in the Scottish Cancer Registry.

In this project, working with local clinical experts, we aimed to investigate these two possibilities.

What are we doing

We investigated this issue in two different ways.

We first used the Scottish Cancer Registry to calculate the total number and overall rate of cervical cancer by year (2010-2022) and stage. We then used data between 2010 and 2019 to predict how many cases (and the incidence rate) of each stage we

would expect to see in 2020-2022[i]. We then calculated the rate of stage III cancer - excluding stage IIIC - to see if this was different from the expected rate.

Secondly, the **West of Scotland Cancer Network** provided PHS with audit data which reclassified cancers diagnosed between 2014-2019 using the FIGO 2018 system. We then used this data to compare back to the Scottish Cancer Registry. This gave us a subset of data where we had cases of cancer that had the new staging system alongside the old one. This meant we were able to look at whether cancer staging differed in the two systems, and if they did, if there was a systematic difference in how cancers were staged.

Information on how PHS collects and processes data can be found at **https://publichealthscotland.scot/our-privacy-notice/your-rights/**.

Progress to date

Analysis suggests that overall, the increase in stage III cervical cancer in Scotland in 2020 is an artefact of the change in the way stage is measured in the Scottish Cancer Registry and not an impact of the COVID-19 pandemic.

We plan to distribute these results in more detail through presentation at appropriate conferences and through academic paper publication.

Acknowledgements

This work uses data provided by patients and collected by the NHS as part of their care and support.

[i] Estimated rates calculated using Poisson regression analyses

We would like to thank the following clinicians who worked with us and provided expert advice for this project: Kevin Burton, Ann-Maree Kennedy, Rhona Lindsay, Cameron Martin and David Smith.

We would also like to thank The West of Scotland Cancer Network for providing the audit data required for this analysis.

To find out more

If you want to know more about this work, or are working in a related area and would like to share your insights, contact us at **phs.macmillan@phs.scot** or **HealthData@macmillan.org.uk**