## Changes to number of women and people with a cervix with cervical intra-epithelial neoplasia (CIN) and cervical cancer reported by Cervical Check 2008-2021

The figures below outline changes to the numbers of cases of CIN (particularly high grade CIN) and cervical cancer reported by Cervical Check since 2008. Please note this does not impact in any way on the women diagnosed with cervical cancer and CIN. There has been no delay for women in any aspect of their care because of this error. All women were informed of their results and they have all received the appropriate treatment and follow up. It is the way we counted the numbers of women up after they had had their diagnosis and treatment that is affected by the changes.

A systematic error in the analysis of extracts from the Cervical Screening Register was detected during data validation this year. This meant that *outcomes* (such as CIN and cancer) *per colposcopy attendance* were reported, instead of *outcomes per woman*. This means that a woman with high-grade CIN who had, for example, two attendances at colposcopy for high-grade CIN, could have been reported as being two different women with high-grade CIN. She should have been reported as one woman with two colposcopy visits for high-grade CIN.

Taking the example of Sept 2016-Aug 2017, it would be correct to say there were 7,503 attendances at colposcopy for high-grade CIN by 5,853 different women with high-grade CIN (see Figure 1 & 2.). In the 2016 annual report, this may have been interpreted as 7,503 individual women with high-grade CIN.

A human error related to the counting of women diagnosed with cancer was noted. A very small number of women who had been diagnosed with cancer were not counted or were counted twice. The corrected numbers of cases of women diagnosed with cervical cancer are also included in Figure 2. Again, these changes do not affect the women or any aspect of their care. It is the way we counted the women diagnosed with cancer that is affected.

These changes in reporting do not affect our colposcopy standards. They do not affect the number of cases of women diagnosed with cervical cancer reported by the National Cancer Registry Ireland, as they use different methods for obtaining data on cases of women diagnosed with cervical cancer.

Figure 1. Previously reported data on cases of CIN and cervical cancer treated at colposcopy in Ireland 2008-2020

|                | Sep'08-Aug'09 | Sep'09-Aug'10 | Sep'10-Aug'11 | Sep'11-Aug'12 | Sep'12-Aug'13 | Sep'13-Aug'14 | Sep'14-Aug'15 | Sep'15-Aug'16 | Sep'16-Aug'17 | Sep'17-Aug'18 | Sep'18-Aug'19 | Sep'19-Mar'20 | Total   |
|----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------|
| Low grade CIN  | 2,036         | 3,212         | 3,253         | 4,666         | 4,439         | 5,407         | 6,492         | 7,114         | 7,264         | 7,585         | 9,454         | 5,510         | 66,432  |
| High grade CIN | 4,037         | 5,518         | 5,296         | 6,462         | 5,421         | 7,034         | 7,649         | 8,885         | 7,503         | 6,656         | 6,308         | 3,748         | 74,517  |
| Cancer         | 100           | 145           | 129           | 151           | 160           | 175           | 222           | 187           | 131           | 120           | 110           | 88            | 1,718   |
| Total          | 6,173         | 8,875         | 8,678         | 11,279        | 10,020        | 12,616        | 14,363        | 16,186        | 14,898        | 14,361        | 15,872        | 9,346         | 142,667 |

Figure 2. Validated data on cases of CIN and cervical cancer treated at colposcopy in Ireland 2008-2020

|            | Sep'08-Aug'09 | Sep'09-Aug'10 | Sep'10-Aug'11 | Sep'11-Aug'12 | Sep'12-Aug'13 | Sep'13-Aug'14 | Sep'14-Aug'15 | Sep'15-Aug'16 | Sep'16-Aug'17 | Sep'17-Aug'18 | Sep'18-Aug'19 | Sep'19-Mar'20 | Totals  |
|------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------|
| Low Grade  | 1,652         | 2,947         | 3,939         | 4,885         | 4,334         | 4,658         | 5,618         | 6,217         | 6,263         | 6,702         | 8,357         | 5,078         | 60,650  |
| High Grade | 3,648         | 5,379         | 6,343         | 6,508         | 5,261         | 5,265         | 5,741         | 6,786         | 5,853         | 5,231         | 5,010         | 3,085         | 64,110  |
| Cancer     | 99            | 184           | 222           | 185           | 158           | 177           | 170           | 174           | 124           | 119           | 100           | 74            | 1,786   |
| Totals     | 5,399         | 8,510         | 10,504        | 11,578        | 9,753         | 10,100        | 11,529        | 13,177        | 12,240        | 12,052        | 13,467        | 8,237         | 126,546 |

To make sure this error in our figures doesn't happen again, we have developed a new protocol to guide the data analysis for the annual reports from now on. We found that the problem was partly related to the way we take the figures off our database. We have changed the way we do this to improve the accuracy for the future.

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