

## HPV vaccine uptake in Ireland: 2011/2012

### Background

Following a recommendation from the National Immunisation Advisory Committee, that human papillomavirus (HPV) vaccine should be given to 12 year old girls, a routine Health Service Executive (HSE) school HPV vaccination programme began in May 2010 for girls in the first year of second level school and age equivalent in non second level schools (see below for cohort details). The aim of the programme is to protect girls from their future risk of developing cervical cancer.

A catch-up campaign for girls in sixth year of second level schools and their age equivalents in non-second level schools (see below for cohort details) was added in the academic year 2011/2012, this catch-up campaign will continue until 2013/2014.

Quadrivalent HPV vaccine, which protects against HPV types 6, 11, 16 and 18 associated with 70% of cervical cancer, is used in the school vaccination programme. A schedule of three vaccine doses given over a six month period is required. The HPV vaccine does not protect against all cervical cancers, so regular cervical screening is still needed.

The vaccinations are provided by vaccination teams from the Local Health Offices (LHOs) who go into schools in their areas to vaccinate or provide vaccination clinics free of charge for girls in the target cohorts. Please see the HSE-National Immunisation Office (NIO) website at [www.immunisation.ie](http://www.immunisation.ie) for detailed information on the HPV school vaccination programme.

The Health Information and Quality Authority and HSE target for uptake of three doses of vaccine for the routine HPV vaccination programme is >80% and the HSE target for the catch-up programme is >60% uptake.<sup>1</sup>

HPV vaccinations provided through the schools immunisation programme are entered onto a database. Here we report on the uptake of HPV vaccine, provided through the school immunisation programme and recorded on the database, in the academic year 2011/2012 in Ireland.

Uptake for 2009/2010 and 2010/2011 cohorts of first year girls vaccinated from May 2010 was measured by manual reports and national uptake for the combined cohort was estimated at 81.9%.<sup>2</sup>

### Cohort for vaccination in the academic year 2011/2012

The routine and catch-up cohorts for the 2011/2012 HPV vaccination programme as agreed with the Department of Education and Skills was as follows:

#### Routine HPV Vaccination programme

- All girls in **first year of second level schools**
- **and their equivalents** i.e. those who were born between 01/09/1999 and 31/08/2000
  - attending special schools or
  - registered with the National Education and Welfare Board to be home schooled.

#### Catch up HPV Vaccination Programme

- All girls in **sixth year of second level schools**
- **and their equivalents** i.e. those who were born between 01/09/1993 and 31/08/1994 and
  - attending special schools\* or
  - registered with the National Education and Welfare Board to be home schooled\* or
  - attending Youthreach and Community Training Centres funded by the Department of Education and Skills\*.

\* As the catch up programme will run until the end of the academic year 2013/2014, areas could choose to vaccinate the total cohort in these groups in 2011/2012 i.e. girls who reached 15-18 years of age between September 1st 2011 and 31st August 2012 for operational reasons. (However, those who were not in the cohort's equivalent to sixth year of second level schools were to be recorded on the immunisation database as outside cohort in the academic year 2011/2012.)

## Definitions used in this report

"**at least stage 1**" means a girl had a stage 1 HPV vaccine recorded on the database, this girl may or may not have had a stage 2 or a stage 3 HPV vaccine recorded on the database.

"**at least stage 2**" means a girl had a stage 2 HPV vaccine recorded on the database, she may or may not have had stage 1 or a stage 3 HPV vaccine recorded on the database.

"**at least stage 3**" means a girl had a stage 3 HPV vaccine recorded on the database, she may or may not have had a stage 1 or a stage 2 HPV vaccine recorded on the database.

Girls with at least stage 3 are considered to have completed a course of vaccination.

"**Home Schooled**" refers to girls registered with the National Education and Welfare Board to be educated at home. These girls were recorded on the database and reported here as "home schooled".

"**Out of School**" refers to vaccinated girls who were neither enrolled in a second level school, special school, Youthreach or Community Training Centre nor registered with National Education and Welfare Board as "home schooled".

Local Health Office (LHO) refers to the LHO the school is located in (it does not refer to the LHO the girl is resident in).

"**Outside cohort**" refers to those who were vaccinated but who were not in first year or sixth year of second level schools or their equivalents.

The **denominator** for girls in second level schools was defined as the number of girls on the school roll on 30<sup>th</sup> September 2011 for first year in the routine programme and for sixth year in the catch-up programme.

The **denominator** for age equivalent to first years in second level schools in the routine programme was defined as girls born between 01/09/1999 and 31/08/2000 on the school roll of special schools or registered with the National Education and Welfare Board on 30<sup>th</sup> September 2011.

The **denominator** for age equivalent to sixth years in second level schools in the catch-up programme was defined as girls born between 01/09/1993 and 31/08/1994 on the school roll of special schools or registered with the National Education and Welfare Board or attending Community Training Centres or Youthreach on 30<sup>th</sup> September 2011.

All the denominator data was entered on the immunisation database by the relevant System Administrator.

## Results

### Ireland

The figures presented in this summary are based on data recorded on the immunisation system on the 21<sup>st</sup> August 2013. These figures are provisional and subject to change due to ongoing updating of data on the database.

#### *First year girls in second level schools*

In Ireland, 85.5% of girls in first year in second level schools were recorded as having received at least HPV stage 3 (considered to have completed a three dose course) (Table 1). Among the 32 Local Health Offices (LHOs) uptake of at least HPV stage 3 ranged from 73.3% to 91.7%; with four recording  $\geq 90.0\%$  uptake and five recording  $< 80.0\%$  uptake.

#### *Sixth year girls in second level schools*

In Ireland, 71.5% of girls in sixth year in second level schools were recorded as having at least HPV stage 3 (Table 2). Among the 32 LHOs uptake of HPV stage 3 ranged from 54.7% to 85.5%; with four recording  $\geq 80.0\%$  uptake and two recording  $< 60.0\%$  uptake.

Some girls in the catch-up cohort were vaccinated privately by General Practitioners or other medical agencies following the licensing of HPV vaccines in 2006/2007 and prior to the announcement in early 2011 that there would be a HPV catch-up programme.

#### *First and Sixth year second level equivalent cohorts in non-second level schools/Outside cohort/Out of school*

In addition, 1,131 girls were recorded as having received at least HPV stage 3 (Table 3); of these 563 were recorded in the first year routine and sixth year catch up age equivalent cohorts in special schools, Youthreach, Community Training Centres, home schooled or out of school and 568 were recorded as being outside the cohorts recommended for vaccination.

The target cohort of girls in special schools, Community Training Centres, Youthreach, and Home Schooled were identified by birth cohort either equivalent to first years (born between 01/09/1999 and 31/08/2000) or equivalent to sixth years (born between 01/09/1993 and 31/08/1994). For operational reasons HSE vaccinating staff did not adhere strictly to these birth cohorts. Many of the vaccinations in these school settings were actually “outside cohort”. The identification of denominator data for the target birth cohorts in these settings was difficult and staff focused on vaccinations rather than defining cohort numbers accurately. Therefore, this report gives the number of girls vaccinated in these settings reflecting activity in these settings rather than HPV vaccine uptake.

#### *Total doses administered*

A total of 139,646 administered vaccine doses were recorded.

## **International comparison**

Uptake of HPV vaccine in Ireland compares very favourably with estimates in other countries that have introduced and monitored HPV vaccination.<sup>3,4,5,6,7,8,9,10,11,12</sup>

### ***United Kingdom***

#### ***Girls aged 12-13 years of age***

In England, 84.2% of girls aged 12 to 13 years who were eligible to routinely receive HPV vaccine in the academic year 2010/2011 completed the three dose course.<sup>3</sup>

In Scotland, 82.8% of girls in second year of secondary school in school year 2011/2012 had completed the three dose course of HPV immunisations by the end of the school year.<sup>4</sup>

In Wales, there was 85.5% uptake of a complete three dose course of HPV vaccine in girls in the first year of the routine campaign i.e. those reaching their 13th birthday between 01/09/2010 and 31/08/2011 (school year 8 during 2010-2011).<sup>5</sup>

In Northern Ireland, 84.6% of girls aged 12 to 13 years who were eligible to routinely receive HPV vaccine in the academic year 2010/2011 completed the three dose course.<sup>6</sup>

#### ***Older girls***

In England, coverage of three HPV doses was 38.9% for those aged 17-18 years (i.e. born 01/09/1991 to 31/08/1992) in the academic year 2009/2010. This cohort predominantly received vaccine in general practice as many of these individuals were not in full-time education.<sup>7</sup>

In Scotland, girls who were aged 13 to aged under 18 years on 1 September 2008 (born 01/09/1990 to 31/08/1995) were offered HPV immunisation as part of the catch-up programme. Some girls aged 13 years were in second year of secondary school during the first year of the programme and were therefore eligible for immunisation as part of the routine programme. These girls are excluded from the catch-up cohort figures, as they were offered immunisation as part of the routine programme. Girls in the catch-up cohort attending school were offered HPV immunisation through a school-based programme. Older girls who had left school were offered immunisations as part of an "out-of-school" programme such as through community-based clinics or via their GP. By mid-August 2010, 65.5% of girls in the catch-up cohort had completed the full three dose course. Uptake rates for girls offered HPV immunisation as part of the school-based catch-up programme were over two times higher than uptake rates for girls offered immunisation as part of the out-of-school catch-up programme. By mid-August 2012, 87.8% of girls in the school-based catch-up cohort had completed the three dose course of HPV immunisations compared to 32.3% of girls in the out-of-school catch-up cohort.<sup>8</sup>

In Wales, uptake (at the time of publication of the report in August 2010) in the catch-up campaign for girls turning 19 years of age during 01/09/2009 to 31/08/2010 was 31.8% for three doses.<sup>9</sup>

### ***Other European countries***

The 2010 VENICE 2 survey showed that as of July 2010 18 of the 29 participating countries in Europe had integrated this vaccine into the national immunisation schedules. The 2010 survey showed variation in the HPV vaccination strategies among these countries. The recommended vaccination ages are diverse ranging from 10 to 18 years as are the ages for the catch-up campaigns, where they range from 12 to 24 years. In Austria boys and men are also recommended for vaccination. There was also variation between countries in the vaccination delivery infrastructure and financing. In 2010, out of seven European countries for which data were available, coverage for routine vaccinations with three doses varied between 17% and 81% with only Portugal (80%) and the United Kingdom (81%) having vaccination coverage rates of  $\geq 80\%$  for the full three-dose routine vaccinations. Out of six European countries for which data were available, coverage for catch-up vaccinations with three doses varied between 29% and 73%.<sup>10</sup>

### ***Australia***

In Australia, for girls aged 12-13 years, uptake of three doses of HPV was 72% in 2009 and 69% in 2010. For girls aged 14-15 years and 16-17 years, uptake of three doses of HPV in the catch-up programme in schools, was between 69-72% for 2009, 2010 and 2011. For 18-19 year old girls in the community (outside of school) uptake of three doses of HPV was 62%, 66% and 67% in 2009, 2010 and 2011. Uptake of three doses of HPV for women aged 20-26 years in the community was 32%, 35% and 39% for 2009, 2010 and 2011 respectively.<sup>11</sup>

***United States***

In the United States, estimated coverage for completed three dose series of HPV vaccine among girls aged 13–17 years was 5.9%, 17.9%, 26.7%, 32%, 34.8% and 33.4% from 2007 to 2012, respectively.<sup>12</sup>

## **Conclusions**

The uptake of HPV vaccine in Ireland is very encouraging and reflects the huge effort and support put in by all staff and schools involved in the school vaccination programme. It is particularly encouraging to see the very high retention of girls within the programme once they commence vaccination. Uptake for 2009/2010 and 2010/2011 cohorts of first year girls vaccinated from May 2010 was measured by manual reports and national uptake for the combined cohort was estimated at 81.9%.<sup>1</sup>

Uptake of HPV vaccine compares very favourably with estimates in other countries that have introduced HPV vaccination and monitored uptake.

## **Acknowledgements**

Thank you to all HSE staff, Department of Education and Skills staff, staff in all educational settings, parents and girls, who implemented, participated in and supported the school HPV vaccination programme.

**Table 1**

| <b>Vaccine Type:</b>           |                                  | HPV  |                          |                  |                  |                       |                  |                  |
|--------------------------------|----------------------------------|--|--------------------------|------------------|------------------|-----------------------|------------------|------------------|
| <b>Academic Year:</b>          |                                  | 2011 - 2012                                      |                          |                  |                  |                       |                  |                  |
| <b>Cohort:</b>                 |                                  | First Year (routine HPV vaccination programme)** |                          |                  |                  |                       |                  |                  |
| <b>School Category:</b>        |                                  | Second Level School                              |                          |                  |                  |                       |                  |                  |
| <b>Date Report Run:</b>        |                                  | 21/08/2013                                       |                          |                  |                  |                       |                  |                  |
| <b>Uptake Statistics</b>       |                                  |  |                          |                  |                  |                       |                  |                  |
|                                |                                  | 2011 - 2012                                      |                          |                  |                  |                       |                  |                  |
|                                |                                  | First Year (routine HPV vaccination programme)** |                          |                  |                  |                       |                  |                  |
| HSE Region                     | LHO/HSE Region                   | Denominator                                      | Numbers Vaccinated with: |                  |                  | % Immunisation Uptake |                  |                  |
|                                |                                  |  | At least Stage 1         | At least Stage 2 | At least Stage 3 | At least Stage 1      | At least Stage 2 | At least Stage 3 |
| Dublin Mid Leinster            | Dublin South                     | 922  | 817                      | 816              | 808              | 88.6%                 | 88.5%            | 87.6%            |
|                                | Dublin South East                | 622  | 538                      | 535              | 531              | 86.5%                 | 86.0%            | 85.4%            |
|                                | Dublin South City                | 838  | 652                      | 651              | 649              | 77.8%                 | 77.7%            | 77.4%            |
|                                | Dublin South West                | 791  | 667                      | 661              | 631              | 84.3%                 | 83.6%            | 79.8%            |
|                                | Dublin West                      | 941  | 823                      | 817              | 758              | 87.5%                 | 86.8%            | 80.6%            |
|                                | Kildare/West Wicklow             | 1580   | 1397                     | 1384             | 1367             | 88.4%                 | 87.6%            | 86.5%            |
|                                | Wicklow                          | 731  | 644                      | 639              | 625              | 88.1%                 | 87.4%            | 85.5%            |
|                                | Laois/Offaly                     | 1021   | 951                      | 946              | 930              | 93.1%                 | 92.7%            | 91.1%            |
|                                | Longford/Westmeath               | 936  | 839                      | 835              | 818              | 89.6%                 | 89.2%            | 87.4%            |
|                                | <b>Total Dublin Mid Leinster</b> | <b>8382</b>                                      | <b>7328</b>              | <b>7284</b>      | <b>7117</b>      | <b>87.4%</b>          | <b>86.9%</b>     | <b>84.9%</b>     |
| Dublin North East              | Dublin North                     | 1441   | 1278                     | 1272             | 1244             | 88.7%                 | 88.3%            | 86.3%            |
|                                | Dublin North Central             | 695  | 610                      | 608              | 597              | 87.8%                 | 87.5%            | 85.9%            |
|                                | Dublin North West                | 1121   | 1078                     | 1064             | 1004             | 96.2%                 | 94.9%            | 89.6%            |
|                                | Cavan/Monaghan                   | 901  | 835                      | 833              | 826              | 92.7%                 | 92.5%            | 91.7%            |
|                                | Louth                            | 1023   | 912                      | 905              | 894              | 89.1%                 | 88.5%            | 87.4%            |
|                                | Meath                            | 1239   | 1104                     | 1093             | 1079             | 89.1%                 | 88.2%            | 87.1%            |
| <b>Total Dublin North East</b> | <b>6420</b>                      | <b>5817</b>                                      | <b>5775</b>              | <b>5644</b>      | <b>90.6%</b>     | <b>90.0%</b>          | <b>87.9%</b>     |                  |
| South                          | North Cork                       | 574  | 489                      | 486              | 472              | 85.2%                 | 84.7%            | 82.2%            |
|                                | North Lee - Cork                 | 1192   | 1049                     | 1040             | 996              | 88.0%                 | 87.2%            | 83.6%            |
|                                | South Lee - Cork                 | 1200   | 982                      | 972              | 939              | 81.8%                 | 81.0%            | 78.3%            |
|                                | West Cork                        | 372  | 283                      | 281              | 277              | 76.1%                 | 75.5%            | 74.5%            |
|                                | Kerry                            | 913  | 816                      | 805              | 796              | 89.4%                 | 88.2%            | 87.2%            |
|                                | Carlow/Kilkenny                  | 907  | 832                      | 829              | 818              | 91.7%                 | 91.4%            | 90.2%            |
|                                | Tipperary South                  | 555  | 482                      | 475              | 463              | 86.8%                 | 85.6%            | 83.4%            |
|                                | Waterford                        | 824  | 756                      | 752              | 743              | 91.7%                 | 91.3%            | 90.2%            |
|                                | Wexford                          | 1075   | 948                      | 943              | 930              | 88.2%                 | 87.7%            | 86.5%            |
|                                | <b>Total South</b>               | <b>7612</b>                                      | <b>6637</b>              | <b>6583</b>      | <b>6434</b>      | <b>87.2%</b>          | <b>86.5%</b>     | <b>84.5%</b>     |
| West                           | Donegal                          | 1173   | 1045                     | 1042             | 1036             | 89.1%                 | 88.8%            | 88.3%            |
|                                | Sligo/Leitrim                    | 602  | 540                      | 537              | 534              | 89.7%                 | 89.2%            | 88.7%            |
|                                | Galway                           | 1573   | 1337                     | 1324             | 1312             | 85.0%                 | 84.2%            | 83.4%            |
|                                | Mayo                             | 798  | 598                      | 593              | 585              | 74.9%                 | 74.3%            | 73.3%            |
|                                | Roscommon                        | 348  | 296                      | 296              | 289              | 85.1%                 | 85.1%            | 83.0%            |
|                                | Clare                            | 730  | 652                      | 647              | 633              | 89.3%                 | 88.6%            | 86.7%            |
|                                | Limerick                         | 967  | 890                      | 886              | 865              | 92.0%                 | 91.6%            | 89.5%            |
|                                | Tipperary North/East             | 895  | 788                      | 786              | 775              | 88.0%                 | 87.8%            | 86.6%            |
| <b>Total West</b>              | <b>7086</b>                      | <b>6146</b>                                      | <b>6111</b>              | <b>6029</b>      | <b>86.7%</b>     | <b>86.2%</b>          | <b>85.1%</b>     |                  |
| <b>Total</b>                   | <b>29500</b>                     | <b>25928</b>                                     | <b>25753</b>             | <b>25224</b>     | <b>87.9%</b>     | <b>87.3%</b>          | <b>85.5%</b>     |                  |

Local health office (LHO) refers to the LHO of the school.

"At least stage 1" means a person had a stage 1 recorded on the database, this person may or may not have had a stage 2 or a stage 3 recorded. Similarly, "at least stage 2" means a person had a stage 2 recorded on the database, they may or may not have had stage 1 or a stage 3 recorded. Similarly, "at least stage 3" means a person had a stage 3 recorded on the database, they may or may not have had stage 1 or a stage 2 recorded.

\*\*Please see Background section of document for details of cohorts recommended HPV vaccine during the academic year 2011/2012.

**Table 2**

| <b>Vaccine Type:</b>           | HPV                              |                                  |                          |                  |                  |                       |                  |                  |
|--------------------------------|----------------------------------|----------------------------------|--------------------------|------------------|------------------|-----------------------|------------------|------------------|
| <b>Academic Year:</b>          | 2011 - 2012                      |                                  |                          |                  |                  |                       |                  |                  |
| <b>Cohort</b>                  | Sixth Year (catch up campaign)** |                                  |                          |                  |                  |                       |                  |                  |
| <b>School Category:</b>        | Second Level School              |                                  |                          |                  |                  |                       |                  |                  |
| <b>Date Report Run:</b>        | 21/08/2013                       |                                  |                          |                  |                  |                       |                  |                  |
| <b>Uptake Statistics</b>       |                                  |                                  |                          |                  |                  |                       |                  |                  |
|                                |                                  | 2011 - 2012                      |                          |                  |                  |                       |                  |                  |
|                                |                                  | Sixth Year (catch up campaign)** |                          |                  |                  |                       |                  |                  |
| HSE Region                     | LHO/HSE Region                   | Denominator                      | Numbers Vaccinated with: |                  |                  | % Immunisation Uptake |                  |                  |
|                                |                                  |                                  | At least Stage 1         | At least Stage 2 | At least Stage 3 | At least Stage 1      | At least Stage 2 | At least Stage 3 |
| Dublin Mid Leinster            | Dublin South                     | 938                              | 596                      | 593              | 583              | 63.5%                 | 63.2%            | 62.2%            |
|                                | Dublin South East                | 569                              | 335                      | 333              | 332              | 58.9%                 | 58.5%            | 58.3%            |
|                                | Dublin South City                | 908                              | 590                      | 582              | 562              | 65.0%                 | 64.1%            | 61.9%            |
|                                | Dublin South West                | 710                              | 623                      | 601              | 575              | 87.7%                 | 84.6%            | 81.0%            |
|                                | Dublin West                      | 790                              | 607                      | 589              | 535              | 76.8%                 | 74.6%            | 67.7%            |
|                                | Kildare/West Wicklow             | 1315                             | 972                      | 959              | 941              | 73.9%                 | 72.9%            | 71.6%            |
|                                | Wicklow                          | 613                              | 504                      | 491              | 455              | 82.2%                 | 80.1%            | 74.2%            |
|                                | Laois/Offaly                     | 805                              | 580                      | 572              | 549              | 72.0%                 | 71.1%            | 68.2%            |
|                                | Longford/Westmeath               | 925                              | 731                      | 725              | 712              | 79.0%                 | 78.4%            | 77.0%            |
|                                | <b>Total Dublin Mid Leinster</b> | <b>7573</b>                      | <b>5538</b>              | <b>5445</b>      | <b>5244</b>      | <b>73.1%</b>          | <b>71.9%</b>     | <b>69.2%</b>     |
|                                | Dublin North East                | Dublin North                     | 1268                     | 772              | 747              | 694                   | 60.9%            | 58.9%            |
| Dublin North Central           |                                  | 572                              | 388                      | 376              | 361              | 67.8%                 | 65.7%            | 63.1%            |
| Dublin North West              |                                  | 956                              | 673                      | 658              | 605              | 70.4%                 | 68.8%            | 63.3%            |
| Cavan/Monaghan                 |                                  | 875                              | 673                      | 673              | 667              | 76.9%                 | 76.9%            | 76.2%            |
| Louth                          |                                  | 829                              | 583                      | 574              | 549              | 70.3%                 | 69.2%            | 66.2%            |
| Meath                          |                                  | 886                              | 650                      | 632              | 619              | 73.4%                 | 71.3%            | 69.9%            |
| <b>Total Dublin North East</b> |                                  | <b>5386</b>                      | <b>3739</b>              | <b>3660</b>      | <b>3495</b>      | <b>69.4%</b>          | <b>68.0%</b>     | <b>64.9%</b>     |
| South                          | North Cork                       | 539                              | 420                      | 413              | 399              | 77.9%                 | 76.6%            | 74.0%            |
|                                | North Lee - Cork                 | 1236                             | 902                      | 886              | 842              | 73.0%                 | 71.7%            | 68.1%            |
|                                | South Lee - Cork                 | 965                              | 701                      | 689              | 667              | 72.6%                 | 71.4%            | 69.1%            |
|                                | West Cork                        | 326                              | 209                      | 209              | 206              | 64.1%                 | 64.1%            | 63.2%            |
|                                | Kerry                            | 945                              | 793                      | 788              | 767              | 83.9%                 | 83.4%            | 81.2%            |
|                                | Carlow/Kilkenny                  | 833                              | 642                      | 641              | 632              | 77.1%                 | 77.0%            | 75.9%            |
|                                | Tipperary South                  | 530                              | 410                      | 397              | 389              | 77.4%                 | 74.9%            | 73.4%            |
|                                | Waterford                        | 743                              | 619                      | 608              | 591              | 83.3%                 | 81.8%            | 79.5%            |
|                                | Wexford                          | 926                              | 743                      | 735              | 699              | 80.2%                 | 79.4%            | 75.5%            |
|                                | <b>Total South</b>               | <b>7043</b>                      | <b>5439</b>              | <b>5366</b>      | <b>5192</b>      | <b>77.2%</b>          | <b>76.2%</b>     | <b>73.7%</b>     |
| West                           | Donegal                          | 1038                             | 856                      | 854              | 836              | 82.5%                 | 82.3%            | 80.5%            |
|                                | Sligo/Leitrim                    | 524                              | 458                      | 454              | 448              | 87.4%                 | 86.6%            | 85.5%            |
|                                | Galway                           | 1565                             | 1227                     | 1205             | 1149             | 78.4%                 | 77.0%            | 73.4%            |
|                                | Mayo                             | 782                              | 636                      | 632              | 612              | 81.3%                 | 80.8%            | 78.3%            |
|                                | Roscommon                        | 338                              | 285                      | 279              | 269              | 84.3%                 | 82.5%            | 79.6%            |
|                                | Clare                            | 659                              | 504                      | 498              | 482              | 76.5%                 | 75.6%            | 73.1%            |
|                                | Limerick                         | 923                              | 750                      | 734              | 706              | 81.3%                 | 79.5%            | 76.5%            |
|                                | Tipperary North/East             | 740                              | 578                      | 575              | 562              | 78.1%                 | 77.7%            | 75.9%            |
|                                | <b>Total West</b>                | <b>6569</b>                      | <b>5294</b>              | <b>5231</b>      | <b>5064</b>      | <b>80.6%</b>          | <b>79.6%</b>     | <b>77.1%</b>     |
|                                | <b>Total</b>                     | <b>26571</b>                     | <b>20010</b>             | <b>19702</b>     | <b>18995</b>     | <b>75.3%</b>          | <b>74.1%</b>     | <b>71.5%</b>     |

Local health office (LHO) refers to the LHO of the school.

"At least stage 1" means a person had a stage 1 recorded on the database, this person may or may not have had a stage 2 or a stage 3 recorded. Similarly, "at least stage 2" means a person had a stage 2 recorded on the database, they may or may not have had stage 1 or a stage 3 recorded. Similarly, "at least stage 3" means a person had a stage 3 recorded on the database, they may or may not have had stage 1 or a stage 2 recorded.

\*\*Please see Background section of document for details of cohorts recommended HPV vaccine during the academic year 2011/2012.



**Table 3**

|  |                               |   |                         |                         |
|--|-------------------------------|---|-------------------------|-------------------------|
| <b>Vaccine Type:</b>                                     |                               | HPV   |                         |                         |
| <b>Academic Year:</b>                                    |                               | 2011 - 2012   |                         |                         |
| <b>Cohort and School Category:</b>                       |                               | Recommended cohorts** for vaccination and those outside cohort in special schools, youthreach, community training centres, home schooled and out of school and those outside cohort in second level schools.      |                         |                         |
| <b>Date Report Run:</b>                                  |                               | 21/08/2013  |                         |                         |
| <b>Uptake Statistics</b>                                 |                               |   |                         |                         |
|  |                               | Recommended cohorts** for vaccination and those outside cohort in special schools, youthreach, community training centres, home schooled and out of school and those outside cohort in second level schools with: |                         |                         |
| <b>HSE Region</b>  | <b>LHO/HSE Region</b>         | <b>At least Stage 1</b>   | <b>At least Stage 2</b> | <b>At least Stage 3</b> |
| Dublin Mid Leinster                                      | Dublin South                  | 22  | 22                      | 18                      |
|  | Dublin South East             | 9   | 8                       | 5                       |
|  | Dublin South City             | 69  | 68                      | 51                      |
|  | Dublin South West             | 54  | 53                      | 46                      |
|  | Dublin West                   | 224   | 200                     | 162                     |
|  | Kildare/West Wicklow          | 29  | 25                      | 21                      |
|  | Wicklow                       | 33  | 30                      | 23                      |
|  | Laois/Offaly                  | 33  | 26                      | 23                      |
|  | Longford/Westmeath            | 49  | 49                      | 43                      |
|  |                               | <b>Total Dublin Mid Leinster</b>  | <b>522</b>              | <b>481</b>              |
| Dublin North East  | Dublin North                  | 84  | 66                      | 44                      |
|  | Dublin North Central          | 60  | 51                      | 42                      |
|  | Dublin North West             | 53  | 37                      | 25                      |
|  | Cavan/Monaghan                | 1   | 1                       | 1                       |
|  | Louth                         | 17  | 15                      | 14                      |
|  | Meath                         | 63  | 58                      | 55                      |
|  |                               | <b>Total Dublin North East</b>  | <b>278</b>              | <b>228</b>              |
| South  | North Cork                    | 9   | 8                       | 6                       |
|  | North Lee - Cork              | 34  | 33                      | 29                      |
|  | South Lee - Cork              | 33  | 32                      | 26                      |
|  | West Cork                     | 2   | 2                       | 0                       |
|  | Kerry                         | 29  | 26                      | 24                      |
|  | Carlow/Kilkenny               | 63  | 60                      | 50                      |
|  | Tipperary South               | 22  | 20                      | 20                      |
|  | Waterford                     | 66  | 58                      | 46                      |
|  | Wexford                       | 87  | 82                      | 71                      |
|  |                               | <b>Total South</b>  | <b>345</b>              | <b>321</b>              |
| West   | Donegal                       | 11  | 9                       | 6                       |
|  | Sligo/Leitrim                 | 58  | 56                      | 56                      |
|  | Galway                        | 59  | 53                      | 29                      |
|  | Mayo                          | 61  | 59                      | 54                      |
|  | Roscommon                     | 9   | 8                       | 5                       |
|  | Clare                         | 39  | 36                      | 28                      |
|  | Limerick                      | 86  | 79                      | 69                      |
|  | Tipperary North/East Limerick | 45  | 37                      | 32                      |
|  |                               | <b>Total West</b>   | <b>368</b>              | <b>337</b>              |
| <b>Home Schooled</b>                                     |                               | <b>3</b>  | <b>3</b>                | <b>3</b>                |
| <b>Total of LHOs and Home Schooled</b>                   |                               | <b>1516</b>   | <b>1370</b>             | <b>1127</b>             |
| <b>Out of School</b>                                     |                               | <b>5</b>  | <b>5</b>                | <b>4</b>                |
| <b>Total of LHOs and Home Schooled and Out of School</b> |                               | <b>1521</b>   | <b>1375</b>             | <b>1131</b>             |

Local health office (LHO) refers to the LHO of the school. Therefore, in reports the LHOs of homeschooled and out of school children do not appear.

"At least stage 1" means a person had a stage 1 recorded on the database, this person may or may not have had a stage 2 or a stage 3 recorded.

Similarly, "at least stage 2" means a person had a stage 2 recorded on the database, they may or may not have had stage 1 or a stage 3 recorded.

Similarly, "at least stage 3" means a person had a stage 3 recorded on the database, they may or may not have had stage 1 or a stage 2 recorded.

\*\* Please see Background section of document for details of cohorts recommended HPV vaccine during the academic year 2011/2012.

"Outside cohort" refers to those who were vaccinated but who were not in first year or sixth year of second level schools or their equivalents.

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