

Pesticide Harmonised Risk Indicators (HRI's) – Ireland

Pesticide sales data in Ireland is collected annually, transmitted to Eurostat and published on the Department of Agriculture, Food and the Marine (DAFM) website. This can be viewed here: [Pesticide Statistics](#). This data demonstrates the volume of pesticides used in Ireland is relatively low, at 0.62kgs/ha UAA (2022 data). This level compares with the EU-27 average of 2.08 kgs/ha UAA (2020 data). It can also be compared to the [OECD](#) average of 0.93kgs/ha UAA (most recent data available 2016).

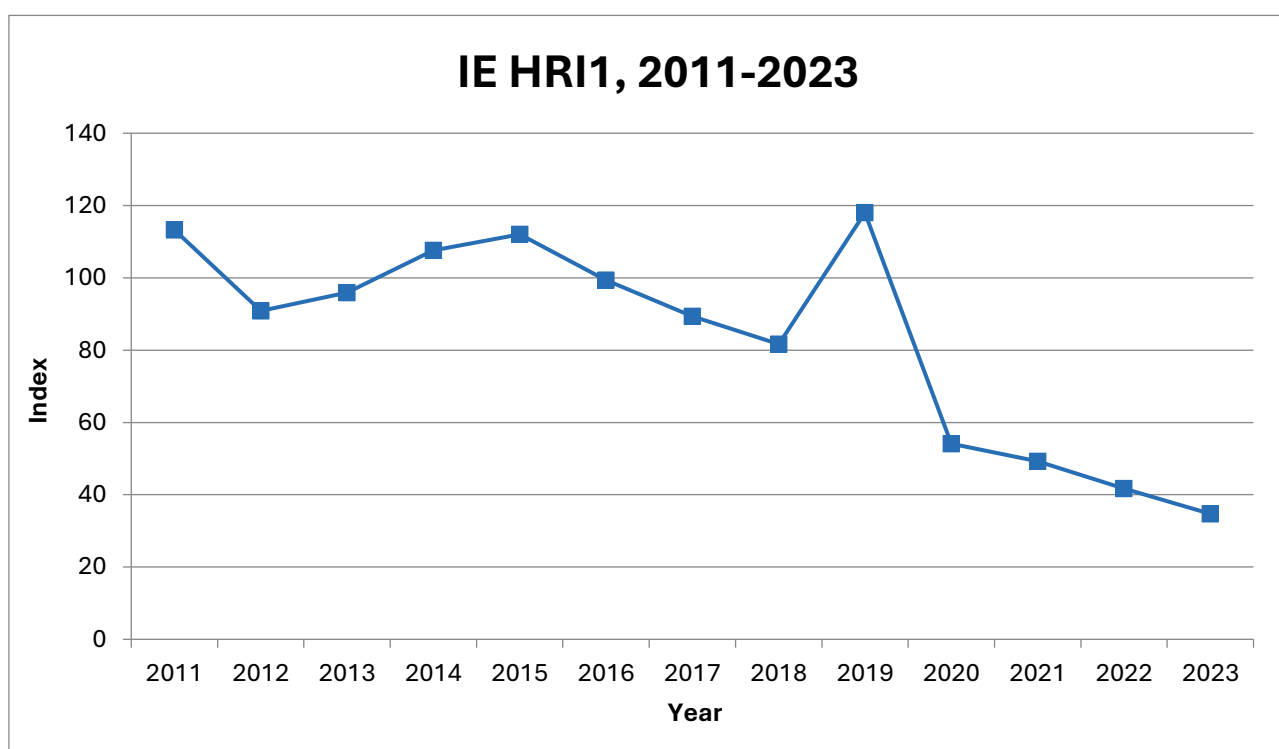
Harmonised Risk Indicators

In 2019, [Commission Directive \(EU\) 2019/782](#) establishing Harmonised Risk Indicators (HRI's) was adopted with the intention to estimate the trends in risk from pesticide use. Further details on the establishment of these harmonised risk indicators can be found here: [Hazard Risk Indicators](#)

Harmonised Risk Indicator 1

HRI 1 is calculated using the quantities of pesticide active substances that are placed on the market, with a weighting applied that is based on the classification of the active substance, in accordance with [Regulation EC No 1107/2009](#).

Figure 1. HRI 1 trendline for the years 2011-2023. Baseline = 100 (average for the period 2011-2013)

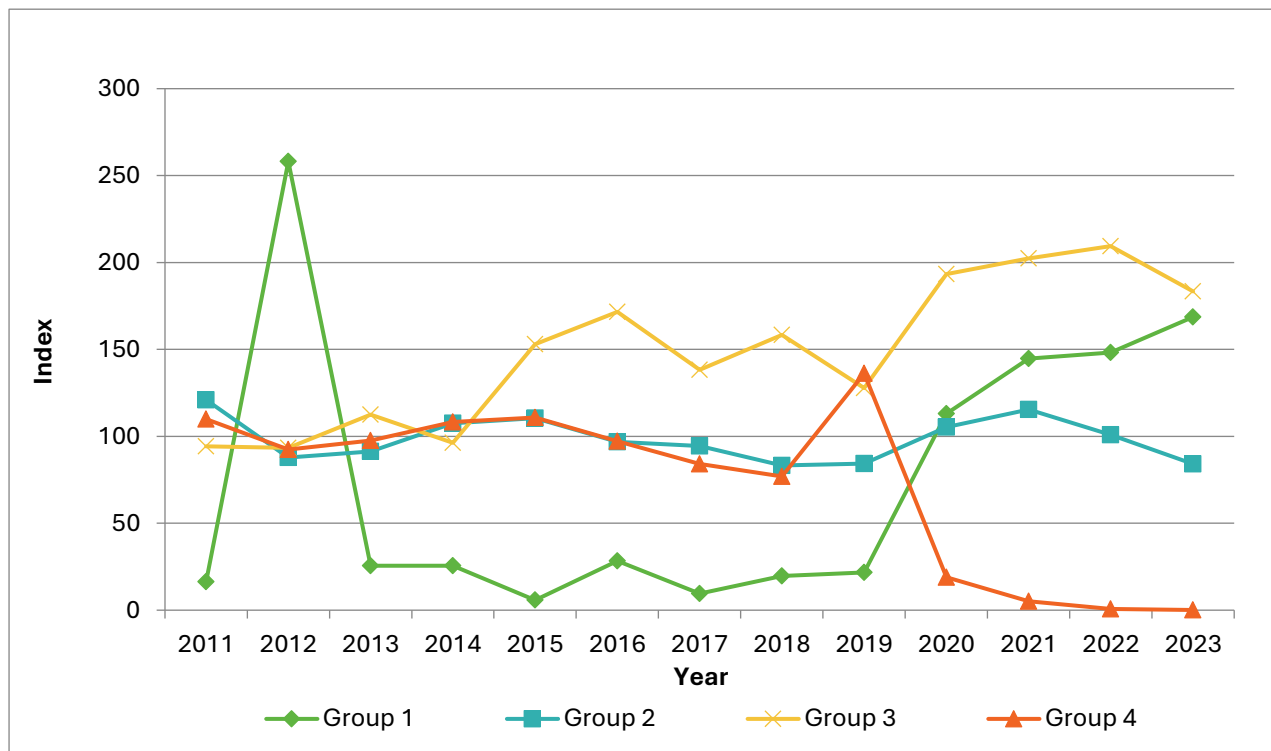


The trendline above generally aligns with the trends for groups 2, 3 and 4 as shown in Figure 2. A decline is observed in 2016, 2017, and 2018 reflecting overall reductions in the quantities of pesticides placed on the market during these years, particularly the decrease in group 4 substances in 2017 and 2018.

In 2020, some active substances were no longer approved at the EU level and moved from group 2 to group 4, leading to their recategorisation. As a result, sales increased in 2019, but decreased in 2020, continuing to decline through 2023 after these substances were removed from the market.

Figure 2 shows the total sales of pesticides for active substances in groups 1-4 for the years 2011-2023. The average sales for the period 2011-2013 are established as the baseline and set at 100.

Figure 2. Sales of active substances by group during 2011-2023. Baseline = 100 (average for the period 2011-2013).



Group 1 (green): low-risk active substances.

In 2012, there is a significant increase in sales, driven entirely by a surge in sales of ferric phosphate. Likewise, the continued upward trend in group 1 sales in 2020 to 2023 is also attributed to increased sales of ferric phosphate.

Group 2 (blue): approved active substances not falling into any other category.

This group accounts for approximately 90% of the total weight of active substances placed on the market in Ireland and has remained relatively stable overtime, aside from a downward trend observed in 2016, 2017 and 2018. Additionally, there was a continued decline in the sales of active substances in group 2 from 2020 to 2023.

Group 3 (yellow): approved active substances which are candidates for substitution.

This group represents less than 10% of the total weight of active substances placed on the market in Ireland. Between 2015 and 2018, there was an overall increase compared to the 2011-2014 period. Although the weight of active substances in this group declined in 2019, it saw a rise in 2020, continuing to increase through 2022. This increase was primarily due to higher sales of the active substance pendimethalin. Between 2022 and 2023, a decrease in the trend for group 3 occurred due to the lower sales of propyzamide and pendimethalin in particular.

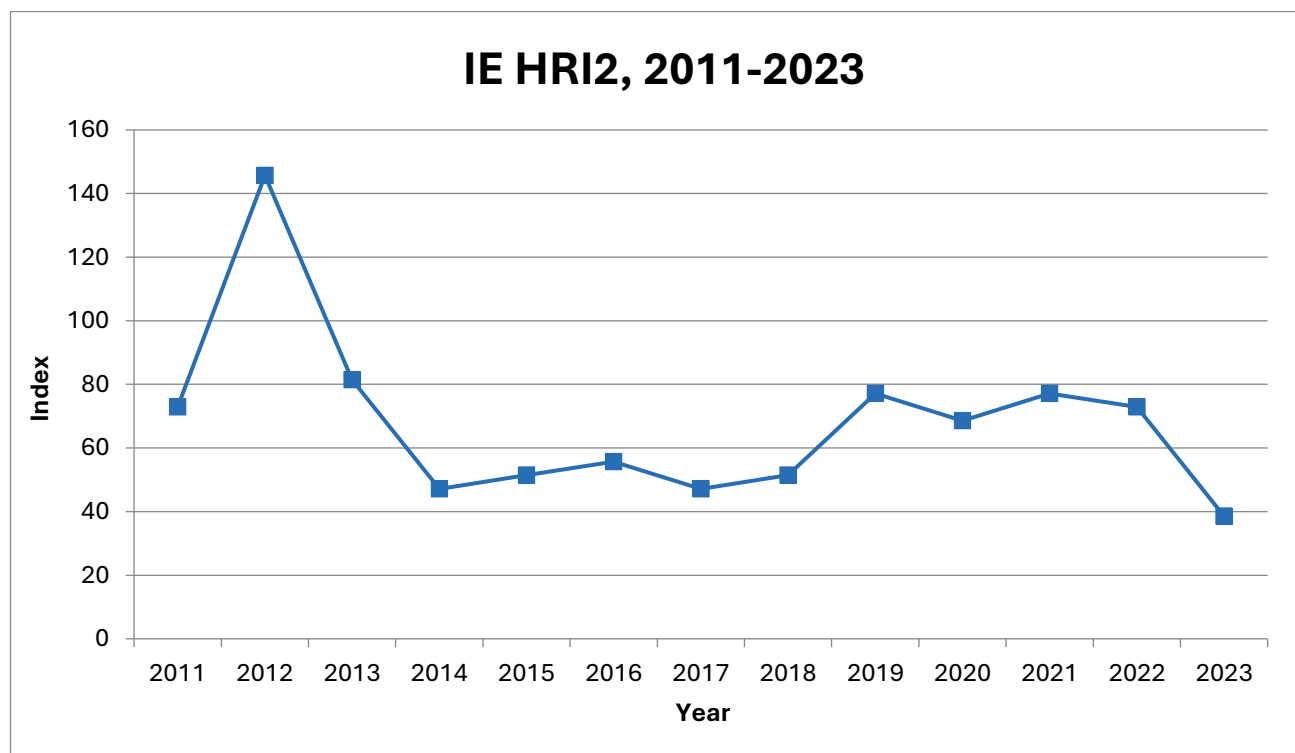
Group 4 (orange): active substances which are not approved.

This category represents active substances that are not approved under Regulation (EU) No. 1107/2009 and are not listed in the Annex to Regulation (EU) No. 540/2011. However, it's important to note that these substances were approved at the time of their use but were later removed from the Annex. The decline observed in 2012 is due to the reduction in the use of the active substance isoproturon. The drop in 2017 and 2018 can be attributed to the non-renewal of linuron and iprodione in 2017. A similar trend is observed from 2019 to 2023, with additional actives, such as chlorothalonil also not being renewed.

Harmonised Risk Indicator 2

HRI 2 is calculated by combining the number of emergency authorisations granted in any one year in accordance with Article 53 of Regulation (EU) No. 1107/2009. Emergency authorisations are only granted in specific circumstances for limited and controlled uses. Emergency authorisations are weighted according to the classification of the active substance and combined to calculate HRI 2. The trendline for HRI 2 for the year 2011 to 2023 is shown below in Figure 3.

Figure 3. HRI 2 trendline for the years 2011-2023. Baseline = 100 (average for the period 2011-2013).



In Ireland, the number of emergency authorisations granted annually is low and ranges from 2 to a maximum of 6 during the period 2011-2023.