

A woman's safety during childbirth can be assessed by looking at potentially avoidable tearing of the perineum during vaginal delivery. Tears that extend to the perineal muscles and bowel wall require surgery. Possible complications include continued perineal pain and incontinence. It is not possible to prevent these types of tear in all cases, but they can be reduced by appropriate labour management and high-quality obstetric care.

The proportion of deliveries involving higher-degree lacerations is considered a useful indicator of the quality of obstetric care. Nevertheless, differences in the consistency with which obstetric units report these complications may make international comparison difficult.

Rates of obstetric trauma may be influenced by other care processes, including the overall national rate of caesarean births, assisted vaginal births (i.e. using forceps or a vacuum) and episiotomy (i.e. surgical incision of the perineum performed to widen the vaginal opening for delivery of an infant); these remain issues of ongoing research. For example, while the World Health Organization (WHO) (2018[1]) does not recommend routine or liberal use of episiotomy for women undergoing spontaneous vaginal birth, selective use of episiotomy to decrease severe perineal lacerations during delivery remains a matter of debate.

Figure 6.7 shows rates of obstetric trauma *with* instrument (referring to deliveries using forceps or vacuum extraction) and Figure 6.8 shows rates of obstetric trauma after vaginal delivery *without* instrument. As the risk of a perineal laceration is significantly increased when instruments are used to assist the delivery, rates for this patient population are reported separately.

High variation in rates of obstetric trauma is evident across countries. Reported rates of obstetric trauma with instrument vary from below 2% in Poland, Israel, Italy, Slovenia and Lithuania to more than 10% in Denmark, Sweden, the United States and Canada. The rates of obstetric trauma after vaginal delivery without instrument vary from below 0.5 per 100 deliveries in Poland, Lithuania, Portugal, Latvia and Israel to over 2.5 per 100 deliveries in Denmark, the United Kingdom and Canada.

While the average rate of obstetric trauma with instrument (5.5 per 100 instrument-assisted vaginal deliveries) across OECD countries in 2017 was nearly four times the rate without instrument (1.4 per 100 vaginal deliveries without instrument assistance), there are indications of a relationship between the two indicators, with Israel, Lithuania, Portugal and Poland reporting among the lowest rates and Canada, Denmark and New Zealand reporting among the highest rates for both indicators.

Rates for both indicators reveal noticeable improvements in Denmark and Norway between 2012 and 2017, but no clear

trend is evident in the overall rates of obstetric trauma over the five-year period: the OECD average remained relative static for vaginal deliveries both with and without instrument. In some countries, including Estonia, Italy and Slovenia, rates appear to have deteriorated.

In Canada there has been limited action to address the high rates of reported obstetric trauma. One initiative was the *Hospital Harm Improvement Resource: Obstetric Trauma* by the Canadian Patient Safety Institute to complement measurement of obstetric trauma by the Canadian Institute for Health Information. It links measurement and improvement by providing evidence-informed resources that support patient safety improvement efforts across the health system.

Definition and comparability

The two obstetric trauma indicators are defined as the proportion of instrument-assisted/non-assisted vaginal deliveries with third- and fourth-degree obstetric trauma codes (ICD-10 codes O70.2-O70.3) in any diagnosis and procedure field.

Several differences in data reporting across countries may influence the calculated rates of obstetric patient safety indicators. These relate primarily to differences in coding practices and data sources. Some countries report obstetric trauma rates based on administrative hospital data and others based on obstetric register data.

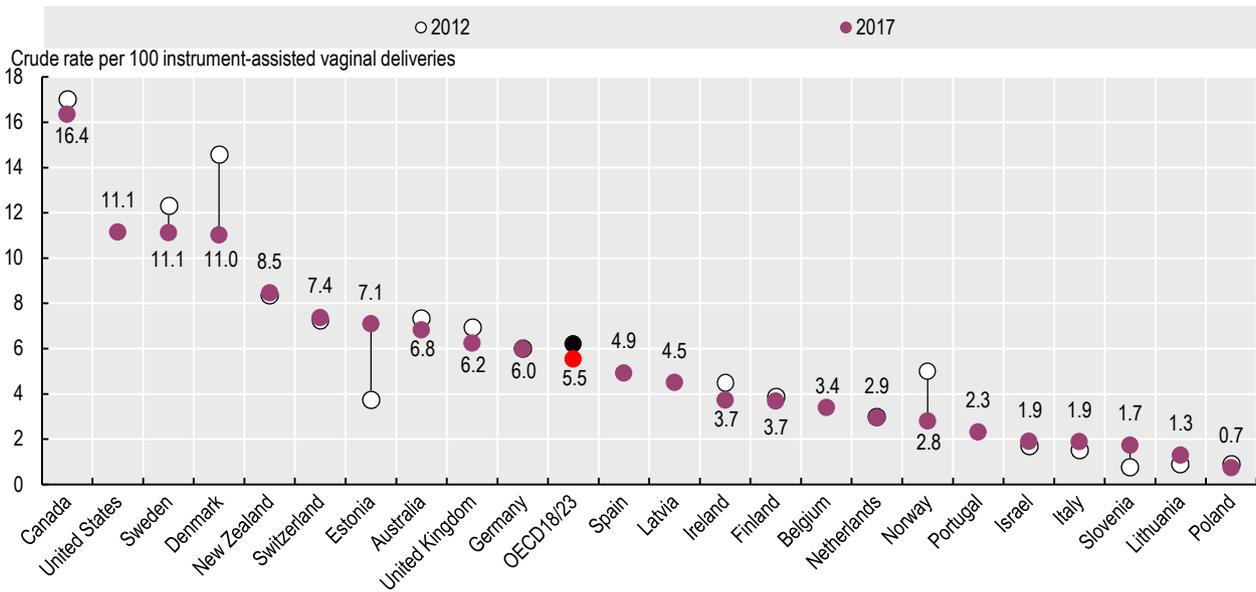
Careful interpretation of obstetric trauma for instrument-assisted delivery rates over time is required, since the very low number of trauma cases in some countries is likely to give rise to significant year-on-year variation.

Data for 2012 are not available for Latvia and not presented for Belgium, Portugal, Spain and the United States due to a break in the series. Rates for Denmark, the Netherlands and Norway are based on registry data.

References

- [2] Canadian Patient Safety Institute (2018), *Hospital Harm Improvement Resource: Obstetric Trauma*.
- [1] WHO (2018), WHO recommendation on episiotomy policy.

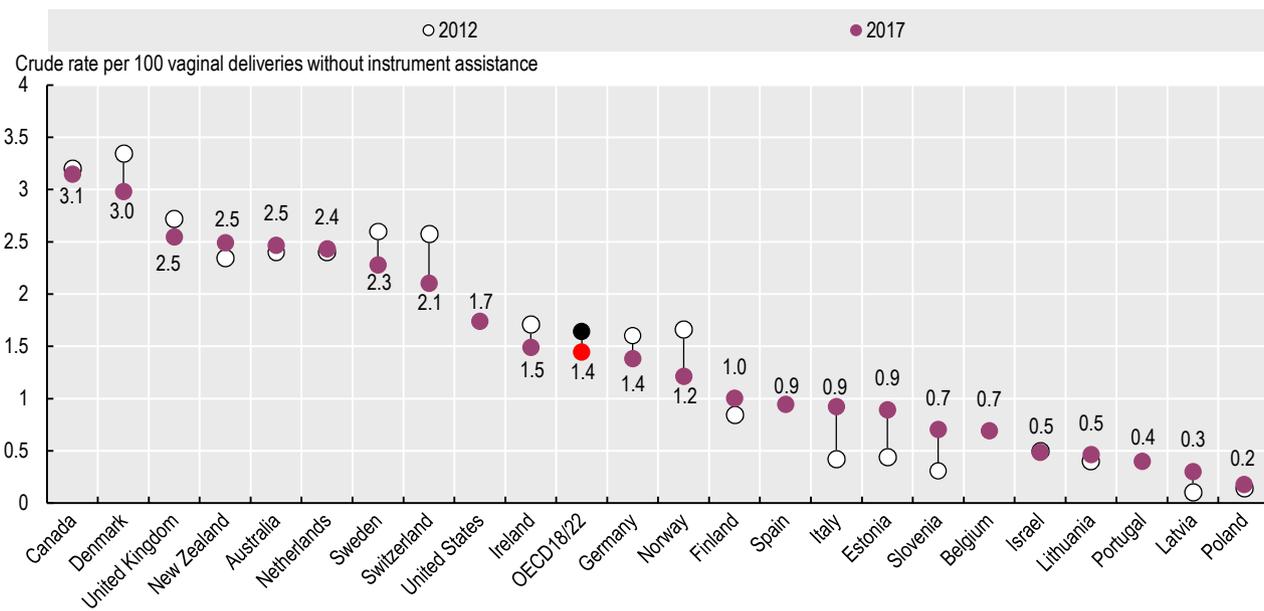
Figure 6.7. **Obstetric trauma, vaginal delivery with instrument, 2012 and 2017 (or nearest year)**



Source: OECD Health Statistics 2019.

StatLink <https://doi.org/10.1787/888934016075>

Figure 6.8. **Obstetric trauma, vaginal delivery without instrument, 2007 and 2017 (or nearest year)**



Source: OECD Health Statistics 2019.

StatLink <https://doi.org/10.1787/888934016094>



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