



How the Both Lives Matter 100,000 figure was estimated and verified

There is a 'reasonable probability that around 100,000 people are alive in Northern Ireland today who would have otherwise been aborted had it been legal to do so'.

What follows is a clear and simple outline, as to how Both Lives Matter arrived at this important conclusion, in a report subsequently backed by the Advertising Standards Authority.

Background

The origin of the 100,000 figure was in a report created by Both Lives Matter and launched in January 2017. This report sought to cautiously estimate the number of people alive in Northern Ireland today because the 1967 Abortion Act was not introduced in Northern Ireland.

The report launch was accompanied by a billboard campaign at a number of sites around Northern Ireland which said '100,000 people are alive today because of our laws on abortion. Why change that?' Fourteen members of the public complained about this advert to the Advertising Standards Authority (ASA).

The ASA robustly investigated this claim over a five month period. They raised some very helpful questions and points which were addressed in correspondence between the ASA and Both Lives Matter. During this process, Both Lives Matter offered an additional supporting methodology that could also be used to substantiate the 100,000 figure. Ultimately, following detailed consideration involving an assessment of all the evidence by an independent health care statistician, the ASA concluded in their ruling that there was a 'reasonable probability' that 100,000 individuals are alive today in Northern Ireland today who would not be if Northern Ireland had introduced the 1967 Act.¹

Approach

Firstly the figure is a plausible, credible and conservative *estimate*. It is not possible to give an exact figure due to the nature of the subject matter at hand.

It is common practice for policy in a wide variety of areas in Northern Ireland to be based on data and estimates drawn from England and Wales. The argument Both Lives Matter made is that law has an important role in shaping perceived social norms, which are a powerful driver of attitudes and behaviours, within society. A strong signal is sent to society when laws are changed – in the case of the 1967 Abortion Act, abortion became more widely accepted. As abortion becomes more 'acceptable', more women who might otherwise have rejected it as an option are willing to consider it. This can be seen in the initial growth of the abortion rates in England and Wales in the period after the 1967 Act was introduced.

¹ See "ASA Ruling on Both Lives Matter," Advertising Standards Agency, published 2 August 2017, <https://www.asa.org.uk/rulings/both-lives-matter-a17-370344.html>.

It could be argued, however, that Northern Ireland is more conservative and/or less secular than England and Wales, and so would not have an abortion rate or ratio as high as that of England & Wales. Recognising that cultural differences may persist, and that some would argue that the English rate may be too high to be applied directly to Northern Ireland, Both Lives Matter turned to Scotland, as a more appropriate cultural comparator for Northern Ireland. On that premise, Both Lives Matter adjusted their figures in line with Scottish abortion rates and ratios. The decision to use Scotland as an appropriate comparator was affirmed by the ASA.

Methodology 1 - Abortion Rate

This is the methodology which features in the Both Lives Matter 'One Hundred Thousand' report.

Methodology Step	Process	Figures
1 Estimate the number of abortions in NI if the 1967 Act had come into effect in NI and the abortion rates were the same as in England and Wales.	Apply the abortion rate per 1000 women in England and Wales to the NI female population of child-bearing age each year back to 1969. Add together.	220,701
2 Establish as far as possible, the number of abortions carried out for women from Northern Ireland over this period, as per Department of Health public records.	Use Government figures from 1991 – 2015 and backwards projections to 1969. Add together.	53,847
3 Calculate the difference between the England and Wales abortion rates when applied to NI, and the number of abortions that that took place for women from NI using public records as far as possible.	Deduct the number of abortions to NI women from the number expected if England and Wales abortion rate applied.	220,701 – 53,847 = 166,854
4 Adjust each figure to reach the most conservative estimate. Reduce the abortion rate used as the comparator by applying a reduction to the England and Wales abortions rate in line with the Scottish abortion rate. Simultaneously increase our estimate for the number of abortions which took place using public records to the figure obtained directly from the Department of Health as quoted in the report by Aiken, Gomperts and Trussell in the BJOG, 2016. I.e. 61,311.	Adjust the 220,701 downwards by 25.8% in line with the Scottish abortion rate (2008-2012). The 220,701 figure is reduced to 163,854. The 53,847 figure is increased to 61,311	163,854 - 61,311 = 102,449
5. Adjust the figure to account for those who would have been born but have since died	Apply a survival rate of 96.5% (up to the age of 50) to the number of people estimated to be alive using National Life tables from the ONS.	102,449 x .965 = 98,863
6. Adjust to include 2016 figures based on previous years figure.	Add 2,859 to the figure to account for lives saved in 2016	98,863 + 2,859 =

		101,722
7. Arrive at a conservative estimate for the number of people alive in NI today because we do not have the 1967 Abortion Act or similar legislation.	Culmination of all steps above.	101,722

Methodology 2 - Abortion Ratio

In the second methodology, Both Lives Matter used the “abortion ratio” - the number of abortions per live births. Both Lives Matter applied the Scotland abortion ratio of 16:100 (one third lower than the GB average of 24:100) to Northern Ireland and deducted the accepted DoH figure for the number of abortions in the UK that had been carried out on women who were residents in Northern Ireland. Both Lives Matter explained that the first methodology had assumed that fertility and birth rates were the same in Northern Ireland as elsewhere in the UK, yet they were both in fact significantly higher in Northern Ireland. They calculated that the application of the Scotland abortion ratio to Northern Ireland led to a headline figure of 139,379.

Methodology Step	Process	Figures
1. Determine total number of live births for Scotland 1968 - 2015	Use Government data for each year and add together	2,989,162
2. Determine total number of abortions in Scotland 1968 - 2015	Use Government data for each year and add together	483,817
3. Determine abortion ratio	Calculate abortion ratio as a percentage of live births for each year. The average worked out at 16% but ranged from 2% in 1968 to 22% in 2015	
4. Calculate number of live births for Northern Ireland 1968 - 2015	Use Government data for each year and add together	1,245,024
5. Determine number of abortions in NI if Scottish abortion ratio applied	Apply annual Scottish abortion ratio to annual NI live births each year back to 1968. Add together	200,690
6. Adjust figure by reducing by the number of recorded abortions carried out to Northern Irish women in England and Wales	Deduct Department of Health figure, as quoted in methodology 1, of 61,311	200,690 – 61,311 = 139,379
7. The ASA accepted the methodology to this point. They further reduced it to account for smaller family size. They then adjusted for survival rates and 2016 figures as per our original methodology.	See steps below*	The ASA's figure is 106,144

*The ASA affirmed that the use of this ratio was appropriate in seeking to estimate the number of abortions which would have taken place in Northern Ireland compared to Scotland. However, other variable factors had to be considered in determining how many individuals are alive today in Northern Ireland compared with Scotland due to the differing laws on abortion. Four factors in particular needed to be taken in to account:

1. The smaller total family size which would have resulted from the legalisation of abortion in Northern Ireland. If Northern Ireland had legalised abortion, it is likely that there would have been a reduction in the average family size in Northern Ireland. This is calculated by dividing the Northern Ireland birth numbers by $(1+R)$ where R is the Scottish ratio of abortions to births. This reduced birth number is then multiplied by R to give the expected number of abortions in Northern Ireland.
2. The number of women in Northern Ireland who travelled to Great Britain (not just England and Wales) to obtain abortions. This information is recorded by the Department of Health in England and is publicly available.²
3. The survival rate of individuals living in Northern Ireland. The methodology assumes a survival rate of 96.5% up to the age of 50.³
4. A projection for the year 2016. An assumption was made that the figure for 2016 would be the same as it was in 2015 which proved to be broadly correct.⁴

Following consideration of these additional factors, the ASA used this methodology to arrive at a figure of 106,144. Further considerations are contained in the Both Lives Matter Report and the Advertising Standards Authority's Ruling.

Conclusions

Having reviewed all the evidence and both methodologies, the ASA came to the view that "on balance we concluded that the evidence indicated that there was a reasonable probability that around 100,000 people were alive in Northern Ireland today who would have otherwise been aborted had it been legal to do so."

Both Lives Matter believes it is significant that as well as rejecting the complaints and upholding the figure of approximately 100,000, the ASA upheld their causal link between those alive today and the non-introduction of the 1967 Act.

In short, the 100,000 figure represents a robust estimate which clearly illustrates that important impact of law on abortion in Northern Ireland when compared to the 1967 Abortion Act in England and Wales.

² See for example: "Abortion Statistics, England and Wales: 2015," Department of Health, published November 2016, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/570040/Updated_Abortion_Statistics_2015.pdf.

³ The 96.5% figure for survival to 50 is based on statistical analysis conducted by the Office of National Statistics. See the "National Life Tables: United Kingdom, 2011-2013", Office of National Statistics, published September 2014, <https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/lifeexpectancies/bulletins/nationallifetablesunitedkingdom/2014-09-25>.

⁴ See "Abortion Statistics, England and Wales: 2016," Department of Health, published 13 June 2017, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/618533/Abortion_stats_2016_complementary_with_tables.pdf.