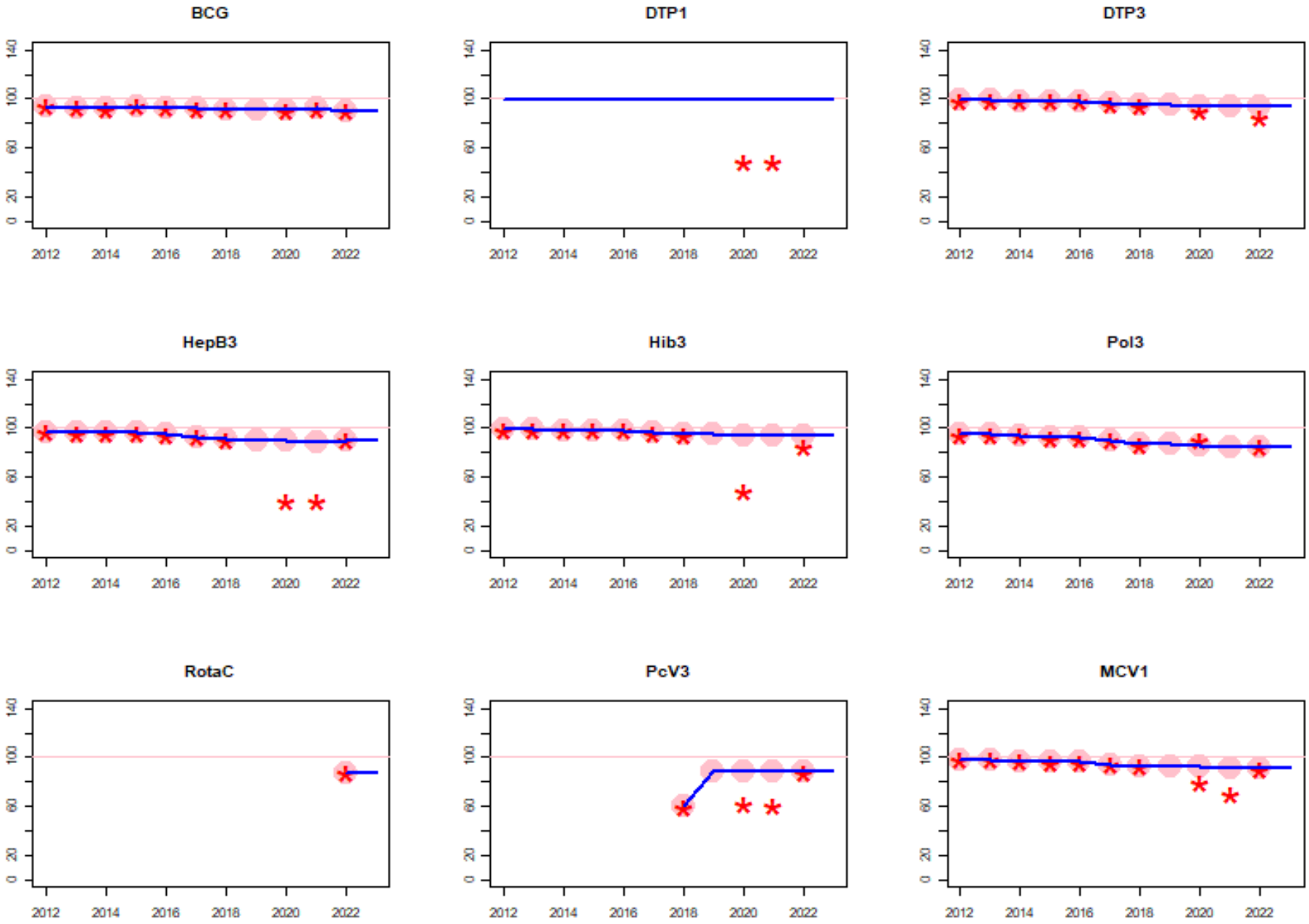

BCG
DTP1
DTP3
HepB3
Hib3
Pol3
RotaC
PcV3
MCV1
0
20
60
100
140
2012
2014
2016
2018
2020
2022

BACKGROUND NOTE: Each year WHO and UNICEF jointly review reports submitted by Member States regarding national immunization coverage, finalized survey reports as well as data from published and grey literature. Based on these data, with due consideration to potential biases and the views of local experts, WHO and UNICEF attempt to distinguish between situations where available empirical data accurately reflect immunization system performance and those where the data are likely compromised and present a misleading view of coverage.

WHO and UNICEF estimates are country-specific; that is to say, each country's data are reviewed individually, and data are not borrowed from other countries in the absence of data. Estimates are not based on ad hoc adjustments to reported data; in some instances empirical data are available from a single source, usually the nationally reported coverage data. In cases where no data are available for a given country/vaccine/year combination, data are considered from earlier and later years and interpolated to estimate coverage for the missing year(s). In cases where data sources are mixed and show large variation, an attempt is made to identify the most likely estimate with consideration of the possible biases in available data. For methods see:

*Burton et al. 2009. Bull World Health Organ.
*Burton et al. 2012. PLoS One.
*Danovaro-Holliday et al. 2021. Gates Open Res.

DATA SOURCES.

ADMINISTRATIVE coverage: Reported by national authorities and based on aggregated administrative reports from health service providers on the number of vaccinations administered during a given period (numerator data) and reported target population data (denominator data). May be biased by inaccurate numerator and/or denominator data.

OFFICIAL coverage: Estimated coverage reported by national authorities that reflects their assessment of the most likely coverage based on any combination of administrative coverage, survey-based estimates or other data sources or adjustments. Approaches to determine OFFICIAL coverage may differ across countries.

SURVEY coverage: Based on estimated coverage from population-based household surveys among children aged 12-23 or 24-35 months following a review of survey methods and results. Information is based on the combination of vaccination history from documented evidence or caregiver recall. Survey results are considered for the appropriate birth cohort based on data collection period.

ABBREVIATIONS

BCG: percentage of births who received one dose of Bacillus Calmette Guerin vaccine.

DTP1 / DTP3: percentage of surviving infants who received the 1st / 3rd dose, respectively, of diphtheria and tetanus toxoid with pertussis containing vaccine.

Pol3: percentage of surviving infants who received the 3rd dose of polio containing vaccine. May be either oral or inactivated polio vaccine.

IPV1: percentage of surviving infants who received at least one dose of inactivated polio vaccine. In countries utilizing an immunization schedule recommending either (i) a primary series of three doses of oral polio vaccine (OPV) plus at least one dose of IPV where OPV is included in routine immunization and/or campaign or (ii) a sequential schedule of IPV followed by OPV, WHO and UNICEF estimates for IPV1 reflect coverage with at least one routine dose of IPV among infants <1 year of age. For countries utilizing IPV containing vaccine only, i.e., no recommended dose of OPV, WHO and UNICEF estimate for IPV1 corresponds to coverage for the 1st dose of IPV. Production of IPV coverage estimates, which begins in 2015, results in no change of the estimated coverage levels for the 3rd dose of polio (Pol3). For countries recommending routine immunization with a primary series of three doses of IPV alone, WHO and UNICEF estimated Pol3 coverage is equivalent to estimated coverage with three doses of IPV. For countries with a sequential schedule, estimated Pol3 coverage is based on that for the 3rd dose of polio vaccine regardless of vaccine type.

IPV2: percentage of surviving infants who received a 2nd dose of inactivated polio vaccine. IPV2 coverage estimates produced for OPV using countries.

MCV1: percentage of surviving infants who received the 1st dose of measles containing vaccine. In countries where the national schedule recommends the 1st dose of MCV at 12 months or later based on the epidemiology of disease in the country, coverage estimates reflect the percentage of children who received the 1st dose of MCV as recommended.

MCV2: percentage of children who received the 2nd dose of measles containing vaccine according to the nationally recommended schedule.

RCV1: percentage of surviving infants who received the 1st dose of rubella containing vaccine. Co verage estimates are based on WHO and UNICEF estimates of coverage for the dose of measles containing vaccine that corresponds to the first measles-rubella combination vaccine. Nationally reported coverage of RCV is not taken into consideration nor are the data represented in the accompanying graph and data table.

HepBB: percentage of births which received a dose of hepatitis B vaccine within 24 hours of delivery. Estimates of hepatitis B birth dose coverage are produced only for countries with a universal birth dose policy. Estimates are not produced for countries that recommend a birth dose to infants born to HepB virus-infected mothers only or where there is insufficient information to determine whether vaccination is within 24 hours of birth.

HepB3: percentage of surviving infants who received the 3rd dose of hepatitis B containing vaccine following the birth dose.

Hib3: percentage of surviving infants who received the 3rd dose of Haemophilus influenzae type b containing vaccine.

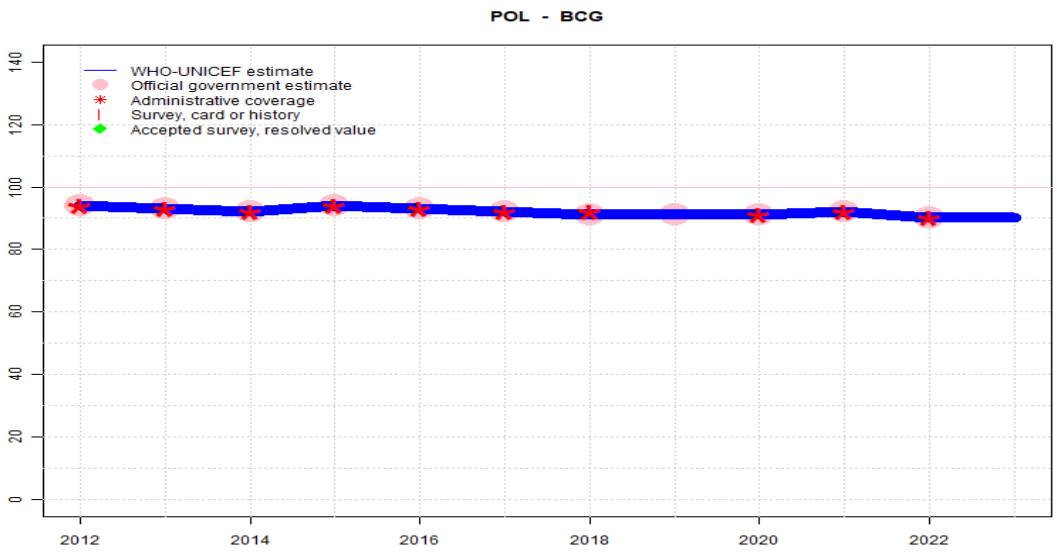
RotaC: percentage of surviving infants who received the final recommended dose of rotavirus vaccine, which can be either the 2nd or the 3rd dose depending on the vaccine.

PcV3: percentage of surviving infants who received the 3rd dose of pneumococcal conjugate vaccine. In countries where the national schedule recommends two doses during infancy and a booster dose at 12 months or later based on the epidemiology of disease in the country, coverage estimates may reflect the percentage of surviving infants who received two doses of PcV prior to the 1st birthday.

YFV: percentage of surviving infants who received one dose of yellow fever vaccine in countries where YFV is part of the national immunization schedule for children or is recommended in at risk areas; coverage estimates are annualized for the entire cohort of surviving infants.

MengA: percentage of children who received one dose of meningococcal A conjugate vaccine. MengA coverage estimates produced for countries in the meningitis belt of sub-Saharan Africa.

Poland - BCG



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	94	93	92	94	93	92	91	91	91	92	90	90
Estimate GoC	••	••	••	••	••	••	••	••	••	••	••	•
Official	94	93	92	94	93	92	91	91	91	92	90	NA
Administrative	94	93	92	94	93	92	92	NA	91	92	90	NA
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability model upon which the estimates are based, we are unable to present classical measures of uncertainty, e.g., confidence intervals. Moreover, we have chosen not to make subjective estimates of plausibility/certainty ranges around the coverage. The GoC reflects the degree of empirical support upon which the estimates are based. It is not a judgment of the quality of data reported by national authorities.

••• Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2022 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.

•• Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.

• There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

2023: Estimate based on extrapolation from data reported by national government. No nationally representative household survey for the most recent 5 annual birth cohorts. WHO and UNICEF recommend a high quality survey to verify reported levels of coverage. GoC=No accepted empirical data

2022: Estimate informed by reported data. Estimate of 90 percent changed from previous revision value of 92 percent. GoC=R+ D+

2021: Estimate informed by reported data. GoC=R+ D+

2020: Estimate informed by reported data. Vaccination coverage from the National Institute of Public Health are available at www.pzh.gov.pl. GoC=R+ D+

2019: Estimate informed by reported data. Vaccination coverage from the National Institute of Public Health are available at www.pzh.gov.pl. Estimate of 91 percent changed from previous revision value of 92 percent. GoC=R+

2018: Estimate informed by reported data. Vaccination coverage from the National Institute of Public Health are available at www.pzh.gov.pl. Estimate of 91 percent changed from previous revision value of 92 percent. GoC=R+ D+

2017: Estimate informed by reported data. GoC=R+ D+

2016: Estimate informed by reported data. GoC=R+ D+

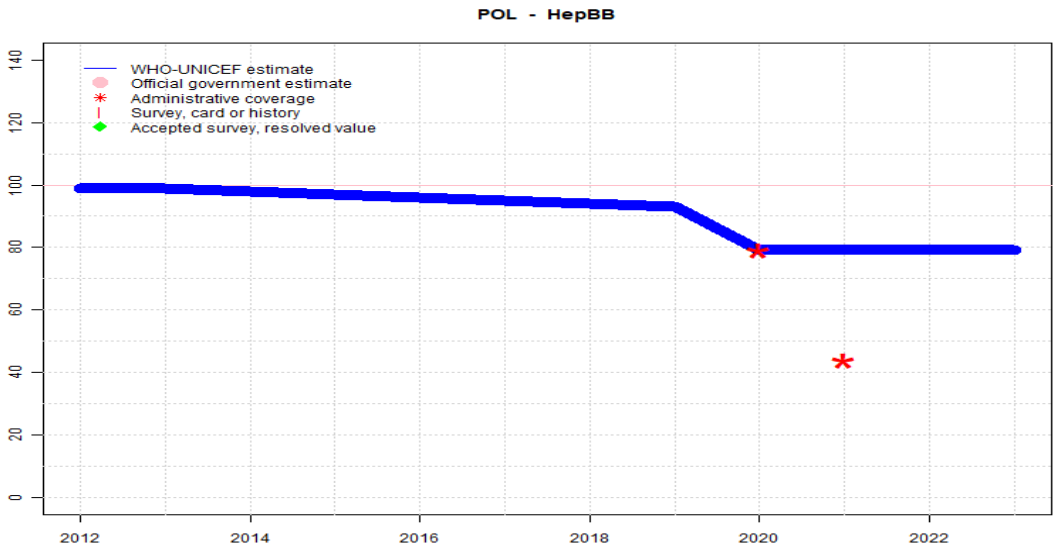
2015: Estimate informed by reported data. GoC=R+

2014: Estimate informed by reported data. GoC=R+

2013: Estimate informed by reported data. GoC=R+ D+

2012: Estimate informed by reported data. GoC=R+ D+

Poland - HepBB



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	99	99	98	97	96	95	94	93	79	79	79	79
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	79	44	NA	NA
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability model upon which the estimates are based, we are unable to present classical measures of uncertainty, e.g., confidence intervals. Moreover, we have chosen not to make subjective estimates of plausibility/certainty ranges around the coverage. The GoC reflects the degree of empirical support upon which the estimates are based. It is not a judgment of the quality of data reported by national authorities.

●●● Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2022 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.

●● Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.

● There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

2023: Estimate based on previous year estimate. No nationally representative household survey for the most recent 5 annual birth cohorts. WHO and UNICEF recommend a high quality survey to verify reported levels of coverage. GoC=No accepted empirical data

2022: Estimate informed by extrapolation from prior year estimate. GoC=No accepted empirical data

2021: Estimate based on extrapolation from prior year. Reported data excluded due to sudden change in coverage from 79 level to 44 percent. Estimate challenged by: D-R-

2020: Estimate based on reported administrative data. Vaccination coverage from the National Institute of Public Health are available at www.pzh.gov.pl. Estimate based on coverage estimated last year with data reported. Estimate challenged by: R-

2019: Estimate of 93 percent assigned by working group. Estimate based on coverage estimated last year with data reported. Vaccination coverage from the National Institute of Public Health are available at www.pzh.gov.pl. GoC=No accepted empirical data

2018: Reported data calibrated to 2019 levels. Vaccination coverage from the National Institute of Public Health are available at www.pzh.gov.pl. GoC=No accepted empirical data

2017: Reported data calibrated to 2019 levels. GoC=No accepted empirical data

2016: Reported data calibrated to 2019 levels. GoC=No accepted empirical data

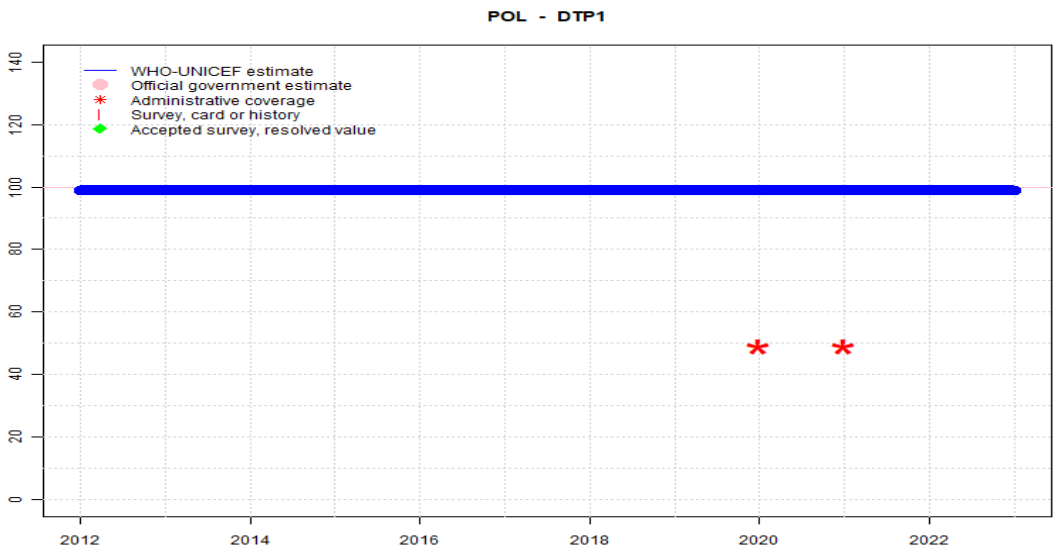
2015: Reported data calibrated to 2019 levels. GoC=No accepted empirical data

2014: Reported data calibrated to 2019 levels. GoC=No accepted empirical data

2013: Reported data calibrated to 2019 levels. GoC=No accepted empirical data

2012: Reported data calibrated to 2019 levels. GoC=No accepted empirical data

Poland - DTP1



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	99	99	99	99	99	99	99	99	99	99	99	99
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	49	49	NA	NA
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability model upon which the estimates are based, we are unable to present classical measures of uncertainty, e.g., confidence intervals. Moreover, we have chosen not to make subjective estimates of plausibility/certainty ranges around the coverage. The GoC reflects the degree of empirical support upon which the estimates are based. It is not a judgment of the quality of data reported by national authorities.

●●● Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2022 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.

●● Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.

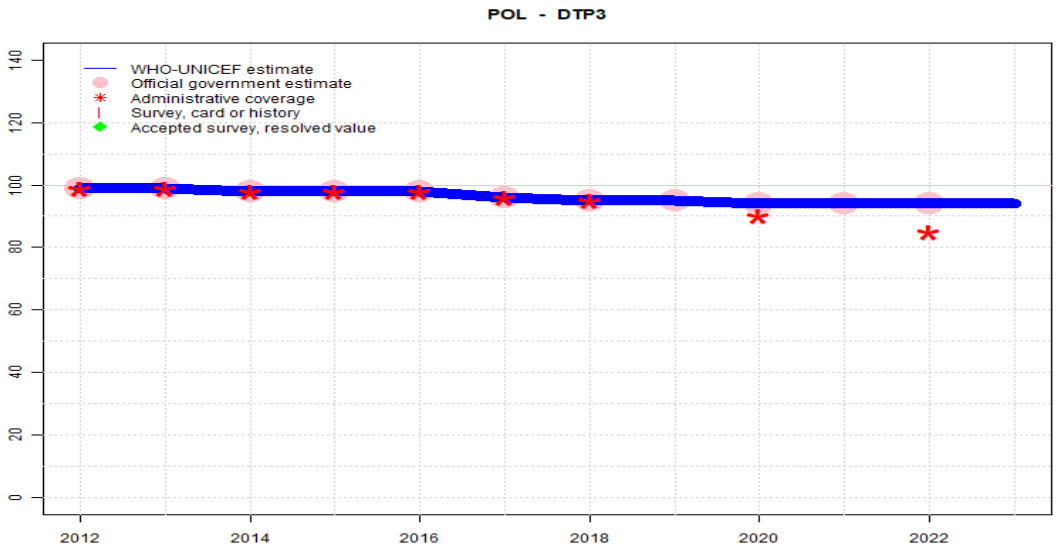
● There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

2023: Reported data calibrated to 1997 levels. No nationally representative household survey for the most recent 5 annual birth cohorts. WHO and UNICEF recommend a high quality survey to verify reported levels of coverage. GoC=No accepted empirical data
2022: Reported data calibrated to 1997 levels. GoC=No accepted empirical data
2021: Reported data calibrated to 1997 levels. Estimate challenged by: D-R-
2020: Reported data calibrated to 1997 levels. Vaccination coverage from the National Institute of Public Health are available at www.pzh.gov.pl. Estimate challenged by: D-R-
2019: Reported data calibrated to 1997 levels. Vaccination coverage from the National Institute of Public Health are available at www.pzh.gov.pl. GoC=No accepted empirical data
2018: Reported data calibrated to 1997 levels. Vaccination coverage from the National Institute of Public Health are available at www.pzh.gov.pl. GoC=No accepted empirical data
2017: Reported data calibrated to 1997 levels. GoC=No accepted empirical data
2016: Reported data calibrated to 1997 levels. GoC=No accepted empirical data
2015: Reported data calibrated to 1997 levels. GoC=No accepted empirical data
2014: Reported data calibrated to 1997 levels. GoC=No accepted empirical data
2013: Reported data calibrated to 1997 levels. GoC=No accepted empirical data
2012: Reported data calibrated to 1997 levels. GoC=No accepted empirical data

Poland - DTP3



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	99	99	98	98	98	96	95	95	94	94	94	94
Estimate GoC	●●	●●	●●	●●	●●	●●	●●	●●	●	●●	●●	●
Official	99	99	98	98	98	96	95	95	94	94	94	NA
Administrative	99	99	98	98	98	96	95	NA	90	NA	85	NA
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability model upon which the estimates are based, we are unable to present classical measures of uncertainty, e.g., confidence intervals. Moreover, we have chosen not to make subjective estimates of plausibility/certainty ranges around the coverage. The GoC reflects the degree of empirical support upon which the estimates are based. It is not a judgment of the quality of data reported by national authorities.

●●● Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2022 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.

●● Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.

● There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

2023: Estimate based on extrapolation from data reported by national government. No nationally representative household survey for the most recent 5 annual birth cohorts. WHO and UNICEF recommend a high quality survey to verify reported levels of coverage. GoC=No accepted empirical data

2022: Estimate informed by reported data. Estimate of 94 percent changed from previous revision value of 90 percent. GoC=R+ D+

2021: Estimate informed by reported data. Estimate of 94 percent changed from previous revision value of 90 percent. GoC=R+

2020: Estimate informed by reported data. Vaccination coverage from the National Institute of Public Health are available at www.pzh.gov.pl. Estimate of 94 percent changed from previous revision value of 90 percent. Estimate challenged by: D-

2019: Estimate informed by reported data. Vaccination coverage from the National Institute of Public Health are available at www.pzh.gov.pl. GoC=R+

2018: Estimate informed by reported data. Vaccination coverage from the National Institute of Public Health are available at www.pzh.gov.pl. GoC=R+ D+

2017: Estimate informed by reported data. GoC=R+ D+

2016: Estimate informed by reported data. GoC=R+ D+

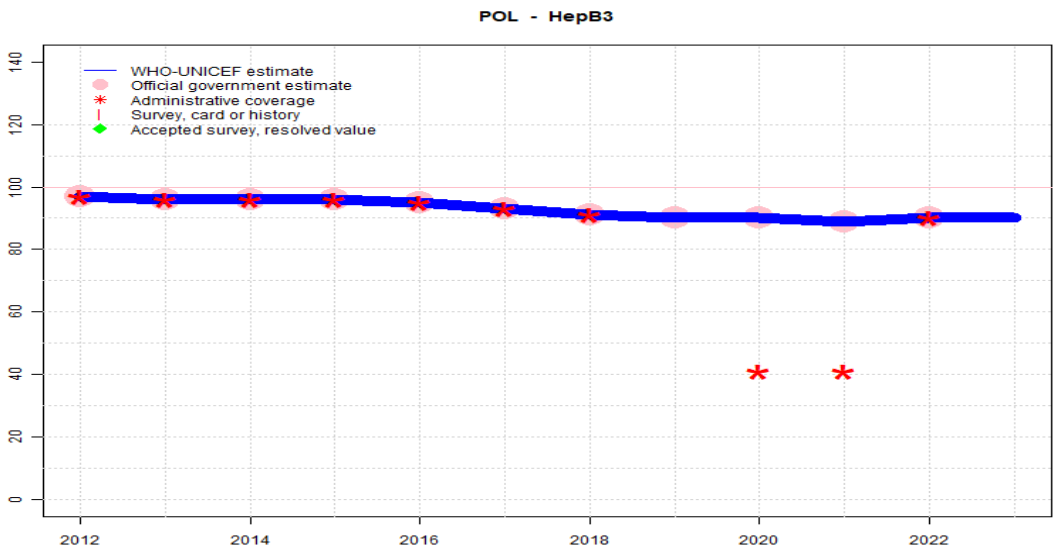
2015: Estimate informed by reported data. GoC=R+

2014: Estimate informed by reported data. GoC=R+

2013: Estimate informed by reported data. GoC=R+ D+

2012: Estimate informed by reported data. GoC=R+ D+

Poland - HepB3



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	97	96	96	96	95	93	91	90	90	89	90	90
Estimate GoC	●●	●●	●●	●●	●●	●●	●●	●●	●	●	●●	●
Official	97	96	96	96	95	93	91	90	90	89	90	NA
Administrative	97	96	96	96	95	93	91	NA	41	41	90	NA
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability model upon which the estimates are based, we are unable to present classical measures of uncertainty, e.g., confidence intervals. Moreover, we have chosen not to make subjective estimates of plausibility/certainty ranges around the coverage. The GoC reflects the degree of empirical support upon which the estimates are based. It is not a judgment of the quality of data reported by national authorities.

●●● Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2022 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.

●● Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.

● There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

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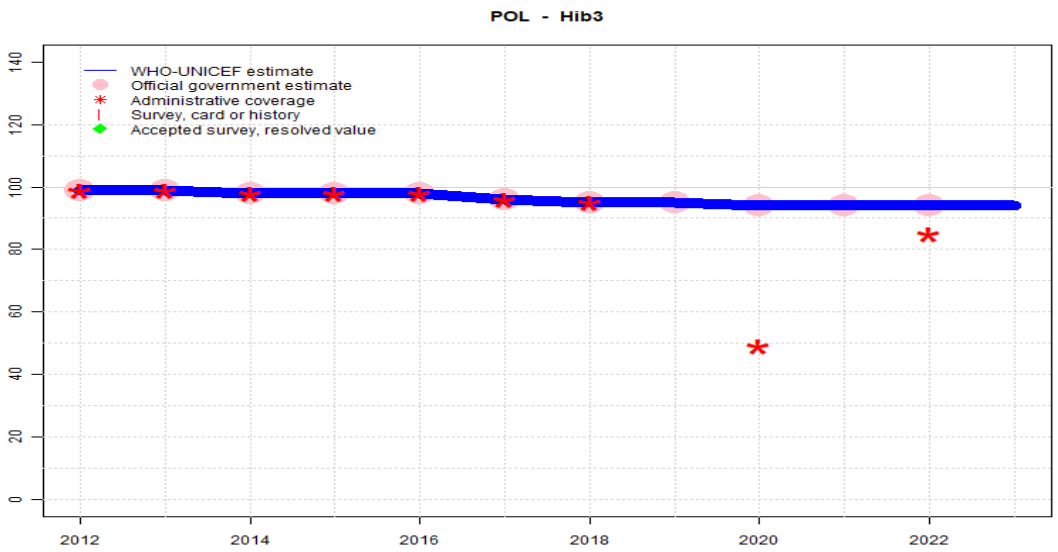
Description:

2023: Estimate based on extrapolation from data reported by national government. No nationally representative household survey for the most recent 5 annual birth cohorts. WHO and UNICEF recommend a high quality survey to verify reported levels of coverage. GoC=No accepted empirical data
2022: Estimate informed by reported data. . GoC=R+ D+
2021: Estimate informed by reported data. Estimate of 89 percent changed from previous revision value of 90 percent. Estimate challenged by: D-
2020: Estimate informed by reported data. Vaccination coverage from the National Institute of Public Health are available at www.pzh.gov.pl. Estimate challenged by: D-
2019: Estimate informed by reported data. Vaccination coverage from the National Institute of Public Health are available at www.pzh.gov.pl. Estimate of 90 percent changed from previous revision value of 91 percent. GoC=R+
2018: Estimate informed by reported data. Vaccination coverage from the National Institute of Public Health are available at www.pzh.gov.pl. GoC=R+ D+
2017: Estimate informed by reported data. GoC=R+ D+
2016: Estimate informed by reported data. GoC=R+ D+
2015: Estimate informed by reported data. GoC=R+
2014: Estimate informed by reported data. GoC=R+
2013: Estimate informed by reported data. GoC=R+ D+
2012: Estimate informed by reported data. GoC=R+ D+

Poland - Hib3



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	99	99	98	98	98	96	95	95	94	94	94	94
Estimate GoC	●●	●●	●●	●●	●●	●●	●●	●●	●	●●	●●	●
Official	99	99	98	98	98	96	95	95	94	94	94	NA
Administrative	99	99	98	98	98	96	95	NA	49	NA	85	NA
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability model upon which the estimates are based, we are unable to present classical measures of uncertainty, e.g., confidence intervals. Moreover, we have chosen not to make subjective estimates of plausibility/certainty ranges around the coverage. The GoC reflects the degree of empirical support upon which the estimates are based. It is not a judgment of the quality of data reported by national authorities.

●●● Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2022 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.

●● Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.

● There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

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Description:

2023: Estimate informed by extrapolation from reported data. No nationally representative household survey for the most recent 5 annual birth cohorts. WHO and UNICEF recommend a high quality survey to verify reported levels of coverage. GoC=No accepted empirical data

2022: Estimate informed by reported data. . Estimate of 94 percent changed from previous revision value of 90 percent. GoC=R+ D+

2021: Estimate informed by reported data. Estimate of 94 percent changed from previous revision value of 90 percent. GoC=R+

2020: Estimate informed by reported data. Vaccination coverage from the National Institute of Public Health are available at www.pzh.gov.pl. Estimate of 94 percent changed from previous revision value of 90 percent. Estimate challenged by: D-

2019: Estimate informed by reported data. Vaccination coverage from the National Institute of Public Health are available at www.pzh.gov.pl. GoC=R+

2018: Estimate informed by reported data. Vaccination coverage from the National Institute of Public Health are available at www.pzh.gov.pl. GoC=R+ D+

2017: Estimate informed by reported data. GoC=R+ D+

2016: Estimate informed by reported data. GoC=R+ D+

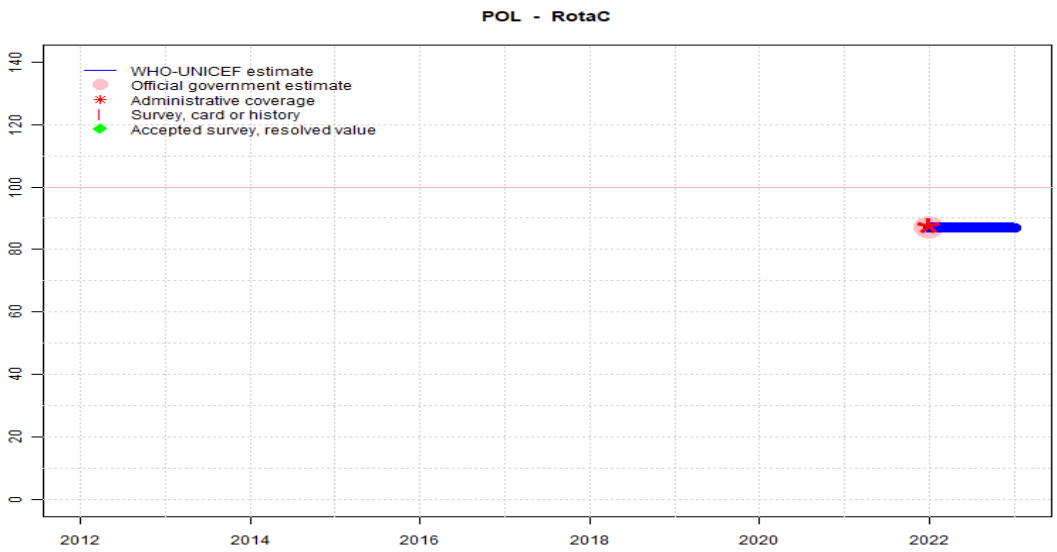
2015: Estimate informed by reported data. GoC=R+

2014: Estimate informed by reported data. GoC=R+

2013: Estimate informed by reported data. GoC=R+ D+

2012: Estimate informed by reported data. GoC=R+ D+

Poland - RotaC



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	87	87
Estimate GoC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	●●	●
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	87	NA
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	88	NA
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability model upon which the estimates are based, we are unable to present classical measures of uncertainty, e.g., confidence intervals. Moreover, we have chosen not to make subjective estimates of plausibility/certainty ranges around the coverage. The GoC reflects the degree of empirical support upon which the estimates are based. It is not a judgment of the quality of data reported by national authorities.

●●● Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2022 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.

●● Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.

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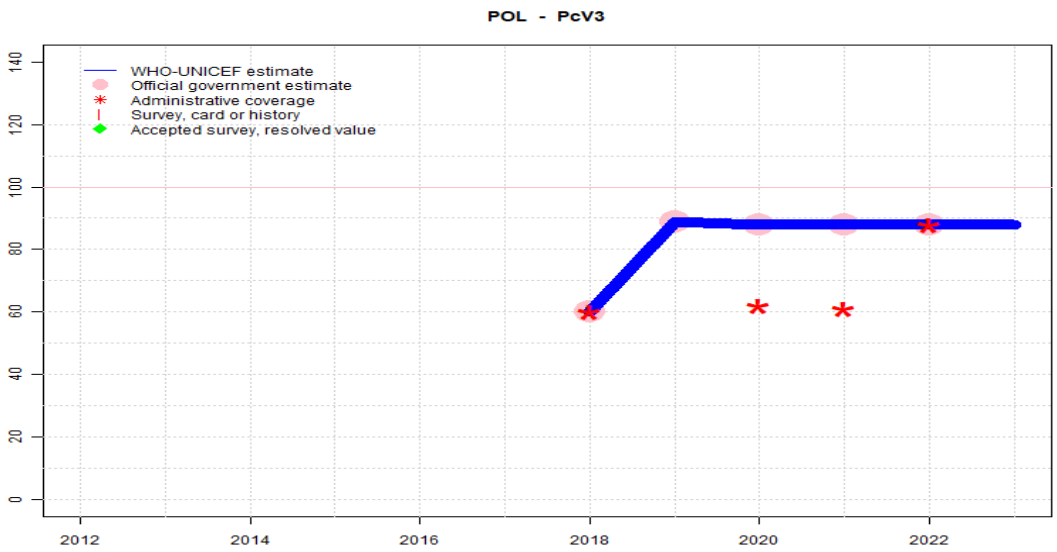
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

2023: Estimate informed by extrapolation from reported data. No nationally representative household survey for the most recent 5 annual birth cohorts. WHO and UNICEF recommend a high quality survey to verify reported levels of coverage. GoC=No accepted empirical data

2022: Estimate informed by reported data. Reporting started in 2022. GoC=R+ D+

Poland - PcV3



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	NA	NA	NA	NA	NA	NA	60	89	88	88	88	88
Estimate GoC	NA	NA	NA	NA	NA	NA	●●	●●	●	●	●	●
Official	NA	NA	NA	NA	NA	NA	60	89	88	88	88	NA
Administrative	NA	NA	NA	NA	NA	NA	60	NA	62	61	88	NA
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability model upon which the estimates are based, we are unable to present classical measures of uncertainty, e.g., confidence intervals. Moreover, we have chosen not to make subjective estimates of plausibility/certainty ranges around the coverage. The GoC reflects the degree of empirical support upon which the estimates are based. It is not a judgment of the quality of data reported by national authorities.

●●● Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2022 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.

●● Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.

● There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

2023: Estimate informed by extrapolation from reported data. No nationally representative household survey for the most recent 5 annual birth cohorts. WHO and UNICEF recommend a high quality survey to verify reported levels of coverage. GoC=No accepted empirical data

2022: Estimate informed by reported data. Estimate of 88 percent changed from previous revision value of 61 percent. Estimate challenged by: D-

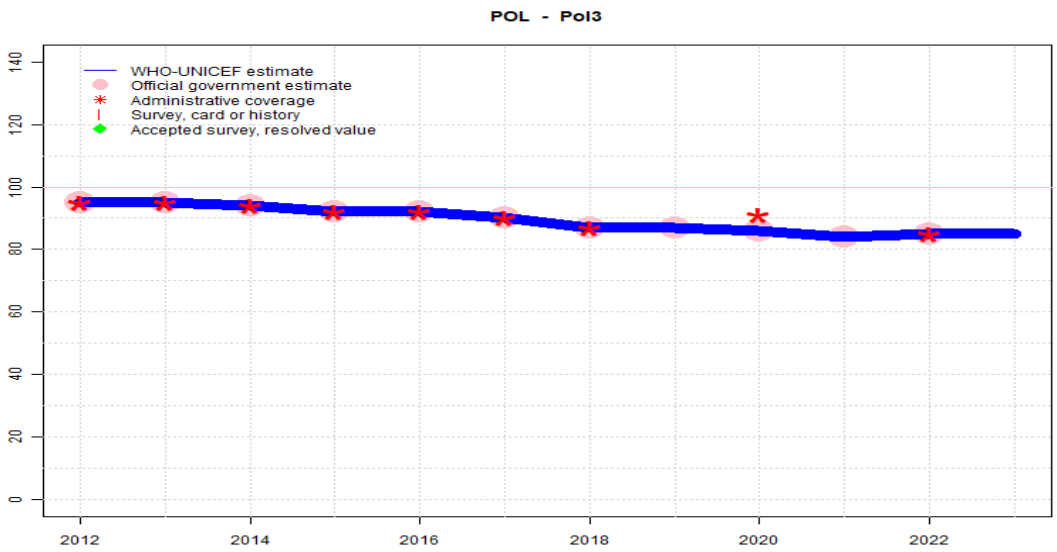
2021: Estimate informed by reported data. Estimate of 88 percent changed from previous revision value of 61 percent. Estimate challenged by: D-

2020: Estimate informed by reported data. Vaccination coverage from the National Institute of Public Health are available at www.pzh.gov.pl. Estimate of 88 percent changed from previous revision value of 62 percent. Estimate challenged by: D-

2019: Estimate informed by reported data. Vaccination coverage from the National Institute of Public Health are available at www.pzh.gov.pl. Estimate of 89 percent changed from previous revision value of 60 percent. GoC=R+

2018: Estimate informed by reported data. Vaccination coverage from the National Institute of Public Health are available at www.pzh.gov.pl. Pneumococcal conjugate vaccine introduced during 2017. Reporting began in 2018. GoC=R+ D+

Poland - Pol3



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	95	95	94	92	92	90	87	87	86	84	85	85
Estimate GoC	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●	●
Official	95	95	94	92	92	90	87	87	86	84	85	NA
Administrative	95	95	94	92	92	90	87	NA	91	NA	85	NA
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability model upon which the estimates are based, we are unable to present classical measures of uncertainty, e.g., confidence intervals. Moreover, we have chosen not to make subjective estimates of plausibility/certainty ranges around the coverage. The GoC reflects the degree of empirical support upon which the estimates are based. It is not a judgment of the quality of data reported by national authorities.

●●● Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2022 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.

●● Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.

● There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

2023: Estimate based on extrapolation from data reported by national government. No nationally representative household survey for the most recent 5 annual birth cohorts. WHO and UNICEF recommend a high quality survey to verify reported levels of coverage. GoC=No accepted empirical data

2022: Estimate informed by reported data. Estimate of 85 percent changed from previous revision value of 91 percent. Estimate challenged by: D-

2021: Estimate informed by reported data. Estimate of 84 percent changed from previous revision value of 91 percent. GoC=R+

2020: Estimate informed by reported data. Vaccination coverage from the National Institute of Public Health are available at www.pzh.gov.pl. Estimate of 86 percent changed from previous revision value of 91 percent. GoC=R+ D+

2019: Estimate informed by reported data. Vaccination coverage from the National Institute of Public Health are available at www.pzh.gov.pl. GoC=R+

2018: Estimate informed by reported data. Vaccination coverage from the National Institute of Public Health are available at www.pzh.gov.pl. GoC=R+ D+

2017: Estimate informed by reported data. GoC=R+ D+

2016: Estimate informed by reported data. GoC=R+ D+

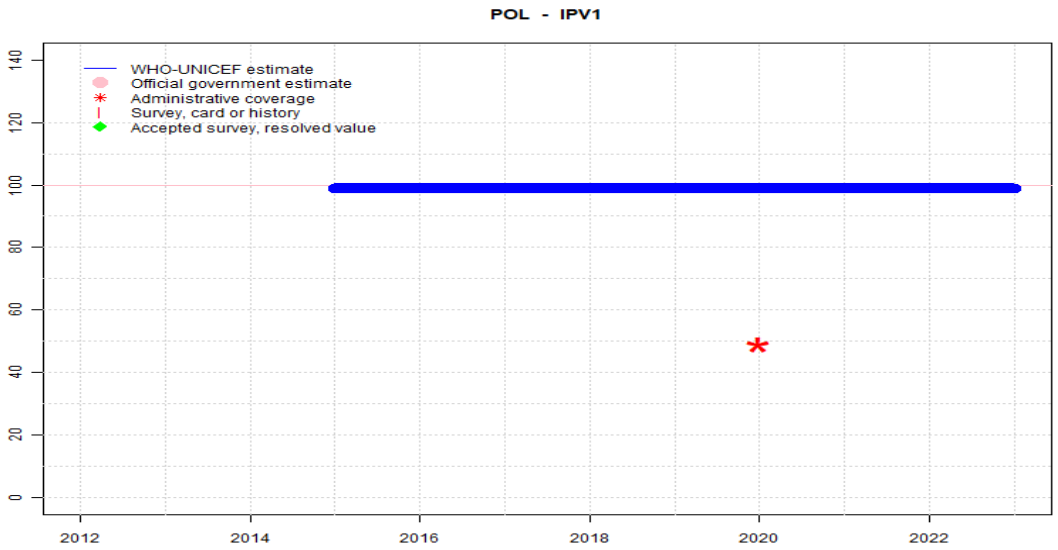
2015: Estimate informed by reported data. GoC=R+

2014: Estimate informed by reported data. GoC=R+

2013: Estimate informed by reported data. GoC=R+ D+

2012: Estimate informed by reported data. GoC=R+ D+

Poland - IPV1



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	NA	NA	NA	99	99	99	99	99	99	99	99	99
Estimate GoC	NA	NA	NA	•	•	•	•	•	•	•	•	•
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	49	NA	NA	NA
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability model upon which the estimates are based, we are unable to present classical measures of uncertainty, e.g., confidence intervals. Moreover, we have chosen not to make subjective estimates of plausibility/certainty ranges around the coverage. The GoC reflects the degree of empirical support upon which the estimates are based. It is not a judgment of the quality of data reported by national authorities.

●●● Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2022 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.

●● Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.

● There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

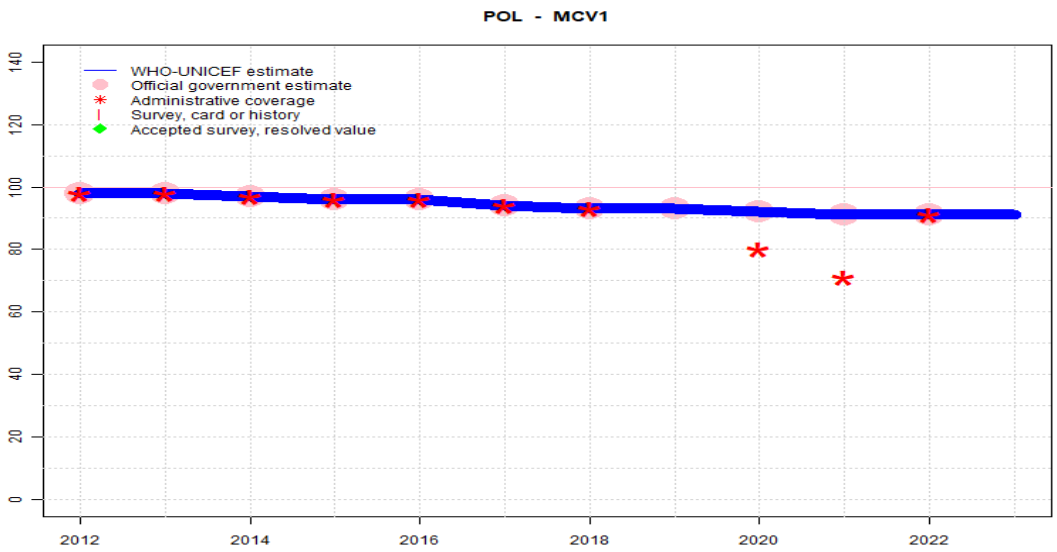
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

Estimates for a dose of inactivated polio vaccine (IPV) begin in 2015 following the Global Polio Eradication Initiative's Polio Eradication and Endgame Strategic Plan: 2013-2018 which recommended at least one full dose or two fractional doses of IPV into routine immunization schedules as a strategy to mitigate the potential consequences should any re-emergence of type 2 poliovirus occur following the planned withdrawal of Sabin type 2 strains from oral polio vaccine (OPV).

2023: Estimate is based on estimated DTP1. No nationally representative household survey for the most recent 5 annual birth cohorts. WHO and UNICEF recommend a high quality survey to verify reported levels of coverage. GoC=No accepted empirical data
2022: Estimate is based on estimated DTP1. GoC=No accepted empirical data
2021: Estimate is based on estimated DTP1. GoC=No accepted empirical data
2020: Estimate is based on estimated DTP1. Vaccination coverage from the National Institute of Public Health are available at www.pzh.gov.pl. Estimate challenged by: D-R-
2019: Estimate is based on estimated DTP1. Vaccination coverage from the National Institute of Public Health are available at www.pzh.gov.pl. GoC=No accepted empirical data
2018: Estimate is based on estimated DTP1. Vaccination coverage from the National Institute of Public Health are available at www.pzh.gov.pl. GoC=No accepted empirical data
2017: Estimate is based on estimated DTP1. GoC=No accepted empirical data
2016: Estimate is based on estimated DTP1. GoC=No accepted empirical data
2015: Estimate is based on estimated DTP1. GoC=No accepted empirical data

Poland - MCV1



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	98	98	97	96	96	94	93	93	92	91	91	91
Estimate GoC	●●	●●	●●	●●	●●	●●	●●	●●	●	●	●	●
Official	98	98	97	96	96	94	93	93	92	91	91	NA
Administrative	98	98	97	96	96	94	93	NA	80	71	91	NA
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability model upon which the estimates are based, we are unable to present classical measures of uncertainty, e.g., confidence intervals. Moreover, we have chosen not to make subjective estimates of plausibility/certainty ranges around the coverage. The GoC reflects the degree of empirical support upon which the estimates are based. It is not a judgment of the quality of data reported by national authorities.

●●● Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2022 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.

●● Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.

● There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

2023: Estimate based on extrapolation from data reported by national government. No nationally representative household survey for the most recent 5 annual birth cohorts. WHO and UNICEF recommend a high quality survey to verify reported levels of coverage. GoC=No accepted empirical data

2022: Estimate informed by reported data. . Estimate of 91 percent changed from previous revision value of 71 percent. Estimate challenged by: D-

2021: Estimate informed by reported data. Estimate of 91 percent changed from previous revision value of 71 percent. Estimate challenged by: D-

2020: Estimate informed by reported data. Vaccination coverage from the National Institute of Public Health are available at www.pzh.gov.pl. Estimate of 92 percent changed from previous revision value of 80 percent. Estimate challenged by: D-

2019: Estimate informed by reported data. Vaccination coverage from the National Institute of Public Health are available at www.pzh.gov.pl. GoC=R+

2018: Estimate informed by reported data. Vaccination coverage from the National Institute of Public Health are available at www.pzh.gov.pl. GoC=R+ D+

2017: Estimate informed by reported data. GoC=R+ D+

2016: Estimate informed by reported data. GoC=R+ D+

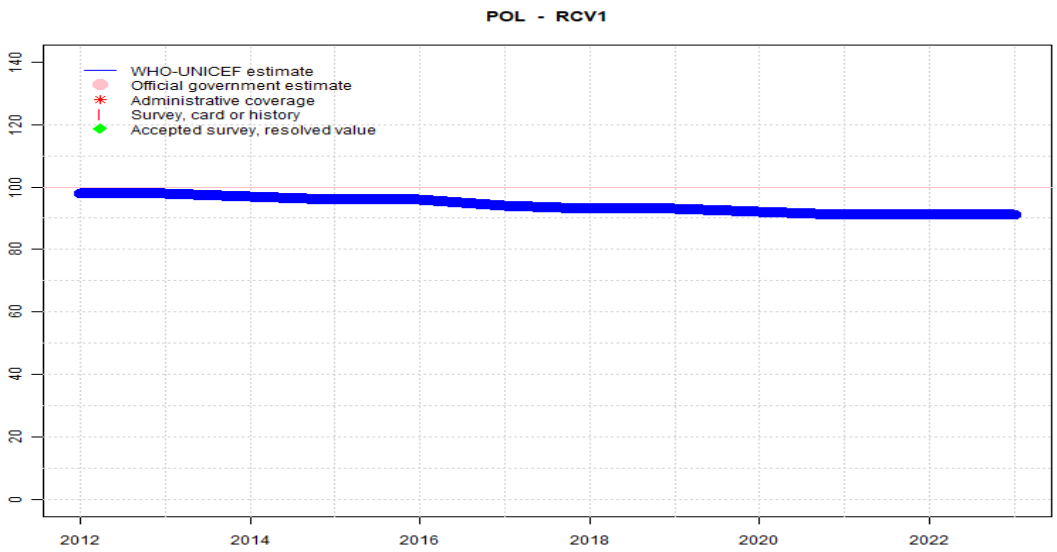
2015: Estimate informed by reported data. GoC=R+

2014: Estimate informed by reported data. GoC=R+

2013: Estimate informed by reported data. GoC=R+ D+

2012: Estimate informed by reported data. GoC=R+ D+

Poland - RCV1



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	98	98	97	96	96	94	93	93	92	91	91	91
Estimate GoC	●●	●●	●●	●●	●●	●●	●●	●●	●	●	●	●
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability model upon which the estimates are based, we are unable to present classical measures of uncertainty, e.g., confidence intervals. Moreover, we have chosen not to make subjective estimates of plausibility/certainty ranges around the coverage. The GoC reflects the degree of empirical support upon which the estimates are based. It is not a judgment of the quality of data reported by national authorities.

●●● Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2022 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.

●● Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.

● There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

For this revision, coverage estimates for the first dose of rubella containing vaccine are based on WHO and UNICEF estimates of coverage of measles containing vaccine. Nationally reported coverage of rubella containing vaccine is not taken into consideration nor are they represented in the the accompanying graph and data table.

2023: Estimate based on estimated MCV1. No nationally representative household survey for the most recent 5 annual birth cohorts. WHO and UNICEF recommend a high quality survey to verify reported levels of coverage. GoC=No accepted empirical data

2022: Estimate based on estimated MCV1. Estimate of 91 percent changed from previous revision value of 71 percent. Estimate challenged by: D-

2021: Estimate based on estimated MCV1. Estimate of 91 percent changed from previous revision value of 71 percent. Estimate challenged by: D-

2020: Estimate based on estimated MCV1. Vaccination coverage from the National Institute of Public Health are available at www.pzh.gov.pl. Estimate of 92 percent changed from previous revision value of 80 percent. Estimate challenged by: D-

2019: Estimate based on estimated MCV1. Vaccination coverage from the National Institute of Public Health are available at www.pzh.gov.pl. GoC=R+

2018: Estimate based on estimated MCV1. Vaccination coverage from the National Institute of Public Health are available at www.pzh.gov.pl. GoC=R+ D+

2017: Estimate based on estimated MCV1. GoC=R+ D+

2016: Estimate based on estimated MCV1. GoC=R+ D+

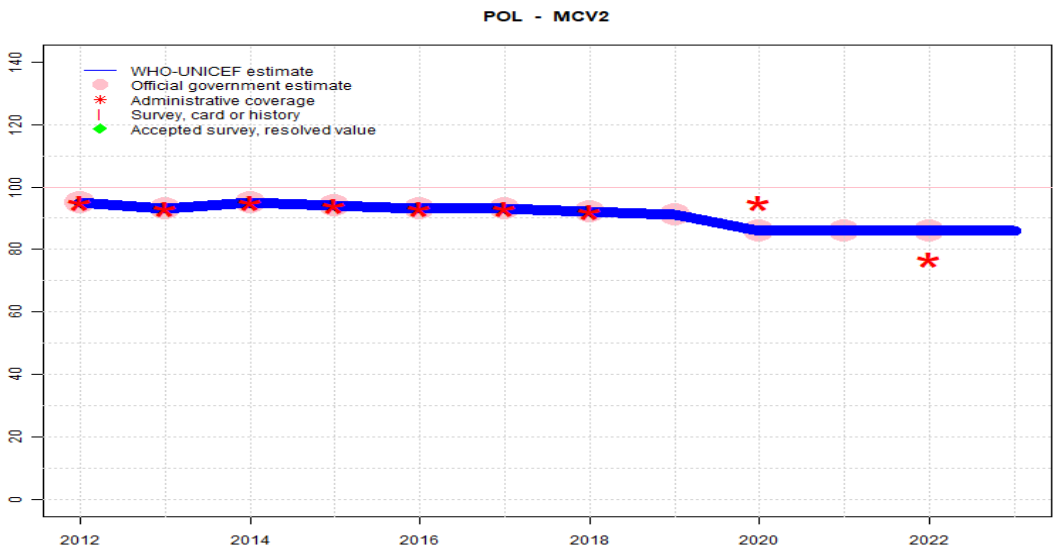
2015: Estimate based on estimated MCV1. GoC=R+

2014: Estimate based on estimated MCV1. GoC=R+

2013: Estimate based on estimated MCV1. GoC=R+ D+

2012: Estimate based on estimated MCV1. GoC=R+ D+

Poland - MCV2



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	95	93	95	94	93	93	92	91	86	86	86	86
Estimate GoC	•	••	••	••	••	••	••	••	•	••	•	•
Official	95	93	95	94	93	93	92	91	86	86	86	NA
Administrative	95	93	95	94	93	93	92	NA	95	NA	77	NA
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability model upon which the estimates are based, we are unable to present classical measures of uncertainty, e.g., confidence intervals. Moreover, we have chosen not to make subjective estimates of plausibility/certainty ranges around the coverage. The GoC reflects the degree of empirical support upon which the estimates are based. It is not a judgment of the quality of data reported by national authorities.

●●● Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2022 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.

●● Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.

● There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

Coverage estimates for the second dose of measles containing vaccine are for children by the nationally recommended age.

2023: Estimate informed by extrapolation from reported data. No nationally representative household survey for the most recent 5 annual birth cohorts. WHO and UNICEF recommend a high quality survey to verify reported levels of coverage. GoC=No accepted empirical data

2022: Estimate informed by reported data. Estimate of 86 percent changed from previous revision value of 95 percent. Estimate challenged by: D-

2021: Estimate informed by reported data. Estimate of 86 percent changed from previous revision value of 95 percent. GoC=R+

2020: Estimate informed by reported data. Vaccination coverage from the National Institute of Public Health are available at www.pzh.gov.pl. Estimate of 86 percent changed from previous revision value of 95 percent. Estimate challenged by: D-

2019: Estimate informed by reported data. Vaccination coverage from the National Institute of Public Health are available at www.pzh.gov.pl. Estimate of 91 percent changed from previous revision value of 92 percent. GoC=R+

2018: Estimate informed by reported data. Vaccination coverage from the National Institute of Public Health are available at www.pzh.gov.pl. GoC=R+ D+

2017: Estimate informed by reported data. GoC=R+ D+

2016: Estimate informed by reported data. GoC=R+ D+

2015: Estimate informed by reported data. GoC=R+

2014: Estimate informed by reported data. GoC=R+

2013: Estimate informed by reported data. GoC=R+ D+

2012: Estimate informed by reported data. Estimate challenged by: D-

Further information and estimates for previous years are available at:
https://data.unicef.org/topic/child-health/immunization/
https://immunizationdata.who.int/listing.html