

## Data sources

This file provides the metadata related to the data sources used for Austria in the Human Multiple Births Database (<https://www.twinbirths.org/en/data-metadata/>).

### Summary

#### Data from 1906 to 1934:

**Source:** Bunle, H. (1954). *Le mouvement naturel de la population dans le monde de 1906 à 1936*. Paris: Les éditions de l'Institut national d'études démographiques (INED).

**Coverage and completeness:**

- Data from 1906 to 1913 cover the Austro-Hungarian territory as it was in 1910. Data from 1920 to 1936 cover the Austrian territory as it was in 1936. Data for some years are missing.

**Treatment of births by vitality:**

- It is not clear whether the stillborn children are included in the data on confinements by plurality.

#### Data from 1938 to 2021:

**Source:** Statistics Austria

**Coverage and completeness:**

- Until 2014, data only include births occurred and registered in Austria. Since 2015, births occurred abroad involving mothers whose main residence is in Austria are also included.

**Treatment of births by vitality:**

- Data on confinements by plurality include the stillbirths, even if all children from a confinement were stillborn.

## Detailed metadata by source

### Source 1: Bunle (1954)

<b>Reference</b>	Bunle, H. (1954). <i>Le mouvement naturel de la population dans le monde de 1906 à 1936</i> . Paris: Les éditions de l'Institut national d'études démographiques (INED).
<b>Period covered</b>	1936-1934
<b>Code in database</b>	Bunle
<b>Coverage and completeness</b>	<p>Data from 1906 to 1913 cover the territory as it was in 1910 (Austria-Hungary). Data for those years are not included in the pooled data file of the HMBD, but they are available in the input data file for Austria.</p> <p>Data from 1920 to 1936 cover the Austrian territory as it was in 1936. Data for this period are available only for the following years: 1920, 1921, 1928, 1929, 1931, 1934.</p>
<b>Definitions and treatment of births by vitality</b>	The source does not provide definitions for live-births and stillbirths. It is not clear whether the stillborn children are included in the data on confinements by plurality.
<b>Footnotes<sup>1</sup></b>	<p><b>1</b> - Data from 1906 to 1913 are not included in the pooled data file of the HMBD, as they concern the Austro-Hungarian territory as it was in 1910.</p> <p><b>2</b> - It is not clear whether the stillborn children are included in the data on confinements by plurality.</p> <p><b>3</b> - From 1911 onwards, data in the column <i>Triplet_deliveries</i> correspond to the deliveries of triplets and more children, as it is not possible to distinguish between the number of deliveries of triplets and the number of deliveries of quadruplets and more children in the original data source.</p>

### Source 2: Statistics Austria

<b>References</b>	<p><b>Data from 1938 to 1990</b> were sent by e-mail upon request to Statistics Austria:</p> <p>Statistik Austria. "T1 Geborene und Geburten seit 1946 nach Mehrlingseigenschaft" [extract from table], data sent by e-mail upon request to Statistics Austria.</p> <p>Statistik Austria. "Berichtsjahr nach Lebend-/Totgeburt und Geschlechterverteilung bei Mehrlingen" [extract from table], sent by e-mail upon request to Statistics Austria.</p> <p><b>Data from 1991 onwards:</b></p> <p>Statistik Austria. Tabelle 6: "Geborene und Geburten nach Mehrlingseigenschaft seit 1991". Available online: <a href="https://www.statistik.at/fileadmin/pages/424/Geborene.ods">https://www.statistik.at/fileadmin/pages/424/Geborene.ods</a> Accessed: 07/07/2022</p>
<b>Period covered</b>	1938-2021
<b>Code in database</b>	Statistik Austria

<sup>1</sup> Number indicated in the variable *Footnote*.

<b>Coverage and completeness</b>	<p>Until 31/10/2014, the processing of marriages, births and deaths was based on paper reports provided by the registry offices according to the place of occurrence of the event. Since 01/11/2014, data are continuously transmitted, electronically, by the Central Civil Status Register. Until 2014, data only include births occurred and registered in Austria.</p> <p>Since 2015, under the 2013 Civil Status Act, all civil status cases (births, deaths, marriages, and registered partnerships) involving Austrian citizens are included in the data, even if the event occurred abroad. However, those cases are statistically relevant only if the concerned persons have their main residence in Austria. Events occurred abroad concerning persons of non-Austrian nationality whose main residence is in Austria are only taken into account if Austrian registry offices become aware of them.</p> <p>Data on births are registered according to the place of residence of the mother.</p> <p>There are no particular warnings concerning data quality on births in the website of Statistics Austria. Data are considered of high quality.</p>
<b>Definitions and treatment of births by vitality</b>	<p>Data on confinements by plurality include the stillbirths. For example, the number of twin confinements include cases where there are stillbirths, even if both children are stillborn. Likewise, the number of singleton confinements include those cases where the child was stillborn.</p> <p>The following definitions are extracted from Statistik Austria. 2022. <a href="#">Demographisches Jahrbuch 2020</a>:</p> <p><b><u>Live births:</u></b></p> <p>Until 31/12/1976, a child was considered born alive when natural lung respiration had begun. From 01/01/1977 to 31/12/1994, a child was considered born alive when at least one of the following had occurred: natural respiration of the lungs, heartbeat, or pulsation of the umbilical cord. Since 01/01/1995, the definition of a live birth follows the guidelines of the World Health Organization (WHO), namely: a child is considered to be born alive, irrespective of the duration of pregnancy, if, after complete extraction from the womb, either natural lung respiration has begun or any other sign of life is observed, such as a heartbeat, pulsation of the umbilical cord, or marked movement of voluntary muscles, whether or not the umbilical cord has been cut, or whether or not the placenta has been expelled.</p> <p><b><u>Stillbirths:</u></b></p> <p>Until 31/12/1976, a child was considered stillborn if he/she was at least 35 cm long and did not show any signs of natural lung breathing. From 01/01/1977 to 31/12/1994, two more criteria were added to the previous definition, namely the absence of heartbeat and of pulsation in the umbilical cord (fetuses smaller than 35 cm in this situation were considered miscarriages and were not certified). Since 01/01/1995, a new definition was adopted, following the guidelines of the WHO: a fetus is considered stillborn if none of the signs listed under "born alive" are recognizable, and if he/she has a birthweight of at least 500 grams (under 500 grams are considered miscarriages and are not certified).</p>

	The transition to the latter definition implied an increase in the recorded number of stillbirths, as the average weight of fetuses measuring at least 35 cm long (old definition) is 1000 grams.
<b>Footnotes<sup>1</sup></b>	<p><b>1</b> - The column <i>Triplet_deliveries</i> corresponds to the deliveries of triplets and more children, as it is not possible to distinguish between the number of deliveries of triplets and the number of deliveries of quadruplets and more children in the original data source.</p> <p><b>2</b> - In addition to births occurred and registered in Austria, data include births occurred abroad concerning people whose main residence is in Austria.</p>