Who are the Women Giving Birth in Various Settings?

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Source of Data

• Data based on all birth certificates filed in the US each year

• Shows number of births actually delivered in each location (home, birthing center, hospital, etc.)

• Data does not identify women who planned to deliver at home but were transported to a hospital.
Long-Term Trends by Place of Birth

There have been large changes in US birthing patterns over the past century:

- In 1900, nearly all US births occurred at home.
- By 1940, only 44% of US births were born outside of a hospital.
- By 1969, only 1% of US births were born outside of a hospital.
- Out-of-hospital births have remained around 1% for several decades.
- 1989 revision of the birth certificate allowed us to distinguish, for the first time, between types of out-of-hospital births (home or birthing center)
Number and Percent of Out-of-Hospital Births, United States, 1990-2010

Source: Birth certificate data from the National Vital Statistics System
Percent of out-of-hospital births by place of birth, US, 2010

- **Home**: 67%
- **Birthing center**: 28%
- **Other**: 5%

Source: Birth certificate data from the National Vital Statistics System.
Number and percent of home and birthing center births, US, 1990-2010

Source: Birth certificate data from the National Vital Statistics System.
Percent of out-of-hospital births by birth attendant, US, 2010

- **Physician**: 6%
- **CNM/CM**: 29%
- **Other midwife**: 41%
- **Other**: 24%

Source: Birth certificate data from the National Vital Statistics System.
Percent of out-of-hospital births by maternal race/ethnicity, US, 1990-2010

Notes: Non-Hispanic white, Non-Hispanic black and Hispanic data exclude New Hampshire in 1990-92 and Oklahoma in 1990, as these states did not report Hispanic origin on their birth certificates for those years. API denotes Asian or Pacific Islander.

Source: Birth certificate data from the National Vital Statistics System.
Percent Distribution of Home, Birth Center and Hospital Births by Characteristics
Percent distribution of home, birth center, and hospital births by maternal age, US, 2010

Source: Birth certificate data from the National Vital Statistics System.
Percent of home, birth center and hospital births by live birth order, US, 2010

<table>
<thead>
<tr>
<th>Live Birth Order</th>
<th>Home</th>
<th>Birth Center</th>
<th>Hospital</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>22.5</td>
<td>36.1</td>
<td>38.0</td>
</tr>
<tr>
<td>2-3</td>
<td>45.9</td>
<td>44.3</td>
<td>48.0</td>
</tr>
<tr>
<td>4</td>
<td>31.6</td>
<td>19.5</td>
<td>11.4</td>
</tr>
</tbody>
</table>

Source: Birth certificate data from the National Vital Statistics System.
Percent of home, birth center, and hospital births to smokers and unmarried women, 2010

* Data reported from 30 states and DC.
Source: Birth certificate data from the National Vital Statistics System.
Percent of home, birth center, and hospital births with selected medical risk factors, US, 2010

Preterm: 12.1% (Hospital), 2.2% (Birth center), 5.4% (Home)
Low birthweight: 8.2% (Hospital), 1.1% (Birth center), 3.9% (Home)
Multiple birth: 3.5% (Hospital), 0.3% (Birth center), 1.0% (Home)
Diabetes: 5.1% (Hospital), 1.1% (Birth center), 1.1% (Home)
Hypertension: 1.4% (Hospital), 0.1% (Birth center), 0.3% (Home)

Source: Birth certificate data from the National Vital Statistics System.
Percent of home births with selected demographic risk factors, US, 2004 and 2010
Percent of birth center births with selected demographic risk factors, US, 2004 and 2010

Maternal age

- <20:
  - 2004: 4.5%
  - 2010: 2.5%

- 35+:
  - 2004: 15.8%
  - 2010: 14.8%

- Live birth order 4+:
  - 2004: 22.8%
  - 2010: 19.5%

- Unmarried:
  - 2004: 16.0%
  - 2010: 14.2%
Percent of home births with selected medical risk factors, US, 2004 and 2010

- Preterm birth: 7.1% (2004), 5.4% (2010)
- Low birthweight: 5.3% (2004), 3.9% (2010)
- Multiple birth: 1.1% (2004), 1.0% (2010)
Percent of birth center births with selected medical risk factors, US, 2004 and 2010

- Preterm birth: 2.7% (2004), 2.2% (2010)
- Low birthweight: 1.0% (2004), 1.1% (2010)
- Multiple birth: 0.2% (2004), 0.3% (2010)
Planning status of home birth

• Important indicator of risk for home births

• Unplanned home births:
  • may represent an emergency situation (precipitous labor, couldn’t get to the hospital)
  • may be at higher risk for poor birth outcomes, with the birth taking place in an environment unprepared for a delivery.

• Planning status of home birth reported by 31 states and DC (representing 60% of US births) in 2010
Percent of home births that were planned, by care provider, 31 States and DC, 2010

NOTE: Not stated planning status excluded before percent computation.
SOURCE: Birth certificate data from the National vital statistics system.
Percent of home births that were planned by maternal race/ethnicity, 31 States and DC, 2010

NOTE: Not stated planning status excluded before percent computation.
SOURCE: Birth certificate data from the National Vital Statistics System.
Geographic Differences
Percent of home births, 2010

Source: Birth certificate data from the National Vital Statistics System.
Significant increase <41%

U.S. average=41% increase

Data not available

Source: Birth certificate data from the National Vital Statistics System.
Percent of birth center births, 2010

Source: Birth certificate data from the National Vital Statistics System.

U.S. average=0.33%
Summary

• After a gradual decline from 1990-2004, the percent of total out-of-hospital, home, and birthing center births increased rapidly from 2004-2010. The increase was widespread and involved states from every region of the country.

• In 2010, 1.2% of US births were out-of-hospital births.

• 90% of the increase in out-of-hospital births from 2004-2010 was due to increases for non-Hispanic white women.

• In 2010, 1 in 57 births to non-Hispanic white women were out-of-hospital births.

• In 2010, 88% of home births in 31 states and DC were planned. For non-Hispanic white women, 93% were planned.

• Out-of-hospital births were more prevalent (>2.5% of births) in the Pacific Northwest, Alaska, and Pennsylvania.
Summary (cont.)

- Home and birth center births have a lower risk profile than hospital births for a variety of risk factors, including:
  - teen births
  - non-marital births
  - preterm or low birthweight births
  - multiple births
  - maternal smoking
  - hypertension and diabetes

- Relatively more out-of-hospital than hospital births were to older mothers and to those having a 4\textsuperscript{th} or higher-order birth.

- The risk profile of out-of-hospital births improved from 2004-2010, suggesting that appropriate risk selection of low-risk women is occurring and improving.

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Key findings

- After a decline from 1990 to 2004, the percentage of U.S. births that occurred at home increased by 29%, from 0.56% of births in 2004 to 0.72% in 2009.
- For non-Hispanic white women, home births increased

Large changes in birthing patterns in the United States have occurred over the past century. In 1900, almost all U.S. births occurred outside a hospital, the vast majority of which occurred at home (1). However, this proportion fell to 44% by 1940, and to 1% by 1969, where it remained through the 1980s (2,3). The 1989 revision of the U.S. Standard Certificate of Live Birth provides additional detail for out-of-hospital births, and makes it possible to distinguish among out-of-hospital births at home, in a birthing center, or other specified location. Home births are still rare in the United States, comprising less than 1% of births, however they have been increasing since 2004 (3–5). This report examines recent trends and characteristics of home births in the United States.

Questions?

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Link to recent report:  http://www.cdc.gov/nchs/data/databriefs/db84.pdf