Cumulative Risks of Confirmed Maltreatment and Foster Care Placement for American Children

Christopher Wildeman\textsuperscript{1}
Yale University

February 26, 2014

\textsuperscript{1}The collector of the original data, the funder, the National Data Archive on Child Abuse and Neglect, and Cornell University and their agents or employees bear no responsibility for the analyses or interpretations herein.
1. Background
The usual (social) suspects

- Parents and families.
- Neighborhoods and schools.
- The broader social policy context.
The usual (social) suspects

- Parents and families.
- Neighborhoods and schools.
- The broader social policy context.
The usual (social) suspects

- Parents and families.
- Neighborhoods and schools.
- The broader social policy context.
The usual (social) suspects

- Parents and families.
- Neighborhoods and schools.
- The broader social policy context.
We ignore child maltreatment and CPS contact

- (1) Because we assume they are very rare.
- (2) And we don’t know how they affect children.
  - This issue somewhat resolved for maltreatment.
We ignore child maltreatment and CPS contact

- (1) Because we assume they are very rare.
- (2) And we don’t know how they affect children.
  - This issue somewhat resolved for maltreatment.
We ignore child maltreatment and CPS contact

- (1) Because we assume they are very rare.
- (2) And we don’t know how they affect children.
  - This issue somewhat resolved for maltreatment.
We ignore child maltreatment and CPS contact

- (1) Because we assume they are very rare.
- (2) And we don’t know how they affect children.
  - This issue somewhat resolved for maltreatment.
In this talk

- I estimate (1) what proportion of children will ever experience confirmed maltreatment and foster care placement at any point between birth and age 18 and (2) how the risk of experiencing these events varies by race/ethnicity and sex.
In this talk

- I estimate (1) what proportion of children will ever experience confirmed maltreatment and foster care placement at any point between birth and age 18 and (2) how the risk of experiencing these events varies by race/ethnicity and sex.
Referrals (1)
- 100%
  (3.4 Million Referrals, 6.2 Million Children)

Response (2)
- Screened In - 61%
  (2 Million Referrals, 3.7 Million Children)
- Screened Out - 39%
  (1.4 Million Referrals, 2.5 Million Children)

Victim (3)
- Non-Victims - 47%
  (2.4 Million Children)
- Victims - 14%
  (681,000 Children)

Services (4)
- None - 35%
  (1.7 Million Children)
- In-Home - 12%
  (645,000 Children)
- Foster Care - 1%
- None - 6%
  (315,000 Children)
- In-Home - 4%
  (224,000 Children)
- Foster Care - 2%

Combined 4%
  (228,000 children)
Referrals - 100%
(3.4 Million Referrals
6.2 Million Children)

Screened In - 61%
(2 Million Referrals
3.7 Million Children)

Non-Victims - 47%
(2.4 Million Children)

None - 35%
(1.7 Million Children)

In-Home – 12%
(645,000 Children)

Foster Care – 1%

Foster Care – 1%

Foster Care – 1%

Combined 4%
(228,000 children)

Screened Out – 39%
(1.4 Million Referrals
2.5 Million Children)

Victims - 14%
(681,000 Children)

In-Home – 4%
(224,000 children)

Foster Care – 2%
2. Data
National Child Abuse and Neglect Data System.

According to the Children's Bureau, "The NCANDS is a voluntary data collection system that gathers information from all 50 states, the District of Columbia, and Puerto Rico about reports of child abuse and neglect... The data are used to examine trends in child abuse and neglect across the country." Although voluntary, >44 states have reported since 2004.
NCANDS

National Child Abuse and Neglect Data System.

According to the Children’s Bureau, “The NCANDS is a voluntary data collection system that gathers information from all 50 states, the District of Columbia, and Puerto Rico about reports of child abuse and neglect...The data are used to examine trends in child abuse and neglect across the country.”

Although voluntary, >44 states have reported since 2004.
NCANDS

- National Child Abuse and Neglect Data System.
  - According to the Children’s Bureau, “The NCANDS is a voluntary data collection system that gathers information from all 50 states, the District of Columbia, and Puerto Rico about reports of child abuse and neglect...The data are used to examine trends in child abuse and neglect across the country.”
  - Although voluntary, >44 states have reported since 2004.
NCANDS

- National Child Abuse and Neglect Data System.
  - According to the Children’s Bureau, “The NCANDS is a voluntary data collection system that gathers information from all 50 states, the District of Columbia, and Puerto Rico about reports of child abuse and neglect...The data are used to examine trends in child abuse and neglect across the country.”
  - Although voluntary, >44 states have reported since 2004.
Measures

- First confirmed child maltreatment case.
  - Treat substantiated and indicated cases as confirmed.
  - Inaccurate within year, so had to adjust accordingly.
- Report date, age, sex, race/ethnicity, state, county.
Measures

- First confirmed child maltreatment case.
  - Treat substantiated and indicated cases as confirmed.
  - Inaccurate within year, so had to adjust accordingly.
  - Report date, age, sex, race/ethnicity, state, county.
Measures

- First confirmed child maltreatment case.
  - Treat substantiated and indicated cases as confirmed.
    - Inaccurate within year, so had to adjust accordingly.
  - Report date, age, sex, race/ethnicity, state, county.
Measures

- First confirmed child maltreatment case.
  - Treat substantiated and indicated cases as confirmed.
  - Inaccurate within year, so had to adjust accordingly.
- Report date, age, sex, race/ethnicity, state, county.
Measures

- First confirmed child maltreatment case.
  - Treat substantiated and indicated cases as confirmed.
  - Inaccurate within year, so had to adjust accordingly.
- Report date, age, sex, race/ethnicity, state, county.
AFCARS

According to the Children’s Bureau, “The AFCARS data contain case level information on all children in foster care for whom State and Tribal title IV-E agencies have responsibility for placement, care or supervision and on children adopted under the auspices of the State and Tribal title IV-E agency.”

Reporting is not voluntary. All 50 states since 2000.
Adoption and Foster Care Analysis and Reporting System.

According to the Children’s Bureau, “The AFCARS data contain case level information on all children in foster care for whom State and Tribal title IV-E agencies have responsibility for placement, care or supervision and on children adopted under the auspices of the State and Tribal title IV-E agency.”

Reporting is not voluntary. All 50 states since 2000.
AFCARS

- Adoption and Foster Care Analysis and Reporting System.
  - According to the Children’s Bureau, “The AFCARS data contain case level information on all children in foster care for whom State and Tribal title IV-E agencies have responsibility for placement, care or supervision and on children adopted under the auspices of the State and Tribal title IV-E agency.”
  - Reporting is not voluntary. All 50 states since 2000.
AFCARS

- Adoption and Foster Care Analysis and Reporting System.
  - According to the Children’s Bureau, “The AFCARS data contain case level information on all children in foster care for whom State and Tribal title IV-E agencies have responsibility for placement, care or supervision and on children adopted under the auspices of the State and Tribal title IV-E agency.”
  - Reporting is not voluntary. All 50 states since 2000.
Measures

- First foster care placement.
  - Include both kin and non-kin placements.
  - Accurate within year (because few children experience multiple distinct placements in the same year), but did same checks.
- Placement date, age, sex, race/ethnicity, state, county.
Measures

- First foster care placement.
  - Include both kin and non-kin placements.
  - Accurate within year (because few children experience multiple distinct placements in the same year), but did same checks.
  - Placement date, age, sex, race/ethnicity, state, county.
Measures

- First foster care placement.
  - Include both kin and non-kin placements.
  - Accurate within year (because few children experience multiple distinct placements in the same year), but did same checks.
  - Placement date, age, sex, race/ethnicity, state, county.
Measures

- First foster care placement.
  - Include both kin and non-kin placements.
  - Accurate within year (because few children experience multiple distinct placements in the same year), but did same checks.
- Placement date, age, sex, race/ethnicity, state, county.
Measures

- First foster care placement.
  - Include both kin and non-kin placements.
  - Accurate within year (because few children experience multiple distinct placements in the same year), but did same checks.
- Placement date, age, sex, race/ethnicity, state, county.
CDC Wonder

- Provides population estimates (that all analyses use for the denominator) by age, sex, race/ethnicity, state, and county.
CDC Wonder

- Provides population estimates (that all analyses use for the denominator) by age, sex, race/ethnicity, state, and county.
3. Analytic strategy
Synthetic cohort (or period) life tables

- Tells us what proportion of a hypothetical cohort of children would ever experience confirmed maltreatment if they were subjected to any given year’s age-specific first-confirmed maltreatment rates at each age from birth through age 18.
- I break all results down by race/ethnicity and sex.
- Although I don’t show CIs, all differences are significant.
Synthetic cohort (or period) life tables

- Tells us what proportion of a hypothetical cohort of children would ever experience confirmed maltreatment if they were subjected to any given year’s age-specific first-confirmed maltreatment rates at each age from birth through age 18.
  - I break all results down by race/ethnicity and sex.
  - Although I don’t show CIs, all differences are significant.
Synthetic cohort (or period) life tables

- Tells us what proportion of a hypothetical cohort of children would ever experience confirmed maltreatment if they were subjected to any given year’s age-specific first-confirmed maltreatment rates at each age from birth through age 18.
  - I break all results down by race/ethnicity and sex.
  - Although I don’t show CIs, all differences are significant.
Synthetic cohort (or period) life tables

- Tells us what proportion of a hypothetical cohort of children would ever experience confirmed maltreatment if they were subjected to any given year’s age-specific first-confirmed maltreatment rates at each age from birth through age 18.
  - I break all results down by race/ethnicity and sex.
  - Although I don’t show CIs, all differences are significant.
Why not birth cohort life tables?

- Insufficient data.
  - Could produce estimates to age 7 in NCANDS.
  - Could produce estimates to age 12 in AFCARS.
Why not birth cohort life tables?

- Insufficient data.
  - Could produce estimates to age 7 in NCANDS.
  - Could produce estimates to age 12 in AFCARS.
Why not birth cohort life tables?

- Insufficient data.
  - Could produce estimates to age 7 in NCANDS.
  - Could produce estimates to age 12 in AFCARS.
Why not birth cohort life tables?

- Insufficient data.
  - Could produce estimates to age 7 in NCANDS.
  - Could produce estimates to age 12 in AFCARS.
### Building a synthetic cohort life table

#### Cumulative Risk of Confirmed Maltreatment by Age 10, 2005

<table>
<thead>
<tr>
<th>Age</th>
<th>$nD_x$</th>
<th>$nN_x$</th>
<th>$nAN_x$</th>
<th>$nmx$</th>
<th>$nqx$</th>
<th>$0c_x$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Building a synthetic cohort life table

### Cumulative Risk of Confirmed Maltreatment by Age 10, 2005

<table>
<thead>
<tr>
<th>Age</th>
<th>$nD_x$</th>
<th>$nN_x$</th>
<th>$nAN_x$</th>
<th>$nm_x$</th>
<th>$nq_x$</th>
<th>$0c_x$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1,997</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>1,071</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>1,001</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>957</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>924</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>937</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>905</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>836</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>763</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>713</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Building a synthetic cohort life table**

<table>
<thead>
<tr>
<th>Age</th>
<th>( nD_x )</th>
<th>( nN_x )</th>
<th>( nAN_x )</th>
<th>( nmx )</th>
<th>( nqx )</th>
<th>( 0cx )</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1,997</td>
<td>4,095,537</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>1,071</td>
<td>4,098,288</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>1,001</td>
<td>4,058,368</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>957</td>
<td>4,049,968</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>924</td>
<td>4,052,579</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>937</td>
<td>3,931,274</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>905</td>
<td>3,885,471</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>836</td>
<td>3,890,518</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>763</td>
<td>3,907,974</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>713</td>
<td>3,977,966</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Building a synthetic cohort life table

Cumulative Risk of Confirmed Maltreatment by Age 10, 2005

<table>
<thead>
<tr>
<th>Age</th>
<th>$nD_x$</th>
<th>$nN_x$</th>
<th>$nAN_x$</th>
<th>$nm_x$</th>
<th>$nq_x$</th>
<th>$0c_x$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1,997</td>
<td>4,095,537</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>1,071</td>
<td>4,098,288</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>1,001</td>
<td>4,058,368</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>957</td>
<td>4,049,968</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>924</td>
<td>4,052,579</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>937</td>
<td>3,931,274</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>905</td>
<td>3,885,471</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>836</td>
<td>3,890,518</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>763</td>
<td>3,907,974</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>713</td>
<td>3,977,966</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Building a synthetic cohort life table

<table>
<thead>
<tr>
<th>Age</th>
<th>$nD_x$</th>
<th>$nN_x$</th>
<th>$nAN_x$</th>
<th>$nmx$</th>
<th>$nqx$</th>
<th>$c_x$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1,997</td>
<td>4,095,537</td>
<td></td>
<td>.020</td>
<td>.019</td>
<td>.019</td>
</tr>
<tr>
<td>2</td>
<td>1,071</td>
<td>4,098,288</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>1,001</td>
<td>4,058,368</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>957</td>
<td>4,049,968</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>924</td>
<td>4,052,579</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>937</td>
<td>3,931,274</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>905</td>
<td>3,885,471</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>836</td>
<td>3,890,518</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>763</td>
<td>3,907,974</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>713</td>
<td>3,977,966</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Building a synthetic cohort life table

### Cumulative Risk of Confirmed Maltreatment by Age 10, 2005

<table>
<thead>
<tr>
<th>Age</th>
<th>$nD_x$</th>
<th>$nN_x$</th>
<th>$nAN_x$</th>
<th>$nmx$</th>
<th>$nqx$</th>
<th>$c_0x$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1,997</td>
<td>4,095,537</td>
<td></td>
<td>.020</td>
<td>.019</td>
<td>.019</td>
</tr>
<tr>
<td>2</td>
<td>1,071</td>
<td>4,098,288</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>1,001</td>
<td>4,058,368</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>957</td>
<td>4,049,968</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>924</td>
<td>4,052,579</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>937</td>
<td>3,931,274</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>905</td>
<td>3,885,471</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>836</td>
<td>3,890,518</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>763</td>
<td>3,907,974</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>713</td>
<td>3,977,966</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Building a synthetic cohort life table

#### Cumulative Risk of Confirmed Maltreatment by Age 10, 2005

<table>
<thead>
<tr>
<th>Age</th>
<th>$nD_x$</th>
<th>$nN_x$</th>
<th>$nAN_x$</th>
<th>$nmx$</th>
<th>$nqx$</th>
<th>$ncx$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1,997</td>
<td>4,095,537</td>
<td>.020</td>
<td>.019</td>
<td>.019</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>1,071</td>
<td>4,098,288</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>1,001</td>
<td>4,058,368</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>957</td>
<td>4,049,968</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>924</td>
<td>4,052,579</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>937</td>
<td>3,931,274</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>905</td>
<td>3,885,471</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>836</td>
<td>3,890,518</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>763</td>
<td>3,907,974</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>713</td>
<td>3,977,966</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Building a synthetic cohort life table

### Cumulative Risk of Confirmed Maltreatment by Age 10, 2005

<table>
<thead>
<tr>
<th>Age</th>
<th>( nD_X )</th>
<th>( nN_X )</th>
<th>( nAN_X )</th>
<th>( n,m_X )</th>
<th>( n,q_X )</th>
<th>( 0c_X )</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1,997</td>
<td>4,095,537</td>
<td></td>
<td>.020</td>
<td>.019</td>
<td>.019</td>
</tr>
<tr>
<td>2</td>
<td>1,071</td>
<td>4,098,288</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>1,001</td>
<td>4,058,368</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>957</td>
<td>4,049,968</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>924</td>
<td>4,052,579</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>937</td>
<td>3,931,274</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>905</td>
<td>3,885,471</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>836</td>
<td>3,890,518</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>763</td>
<td>3,907,974</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>713</td>
<td>3,977,966</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Building a synthetic cohort life table

<table>
<thead>
<tr>
<th>Age</th>
<th>$nD_x$</th>
<th>$nN_x$</th>
<th>$nAN_x$</th>
<th>$n m_x$</th>
<th>$n q_x$</th>
<th>$c_x$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1,997</td>
<td>4,095,537</td>
<td></td>
<td>.020</td>
<td>.019</td>
<td>.019</td>
</tr>
<tr>
<td>2</td>
<td>1,071</td>
<td>4,098,288</td>
<td>4,016,450</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>1,001</td>
<td>4,058,368</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>957</td>
<td>4,049,968</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>924</td>
<td>4,052,579</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>937</td>
<td>3,931,274</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>905</td>
<td>3,885,471</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>836</td>
<td>3,890,518</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>763</td>
<td>3,907,974</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>713</td>
<td>3,977,966</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Building a synthetic cohort life table

### Cumulative Risk of Confirmed Maltreatment by Age 10, 2005

<table>
<thead>
<tr>
<th>Age</th>
<th>$nD_x$</th>
<th>$nN_x$</th>
<th>$nAN_x$</th>
<th>$nm_x$</th>
<th>$nq_x$</th>
<th>$c_0$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1,997</td>
<td>4,095,537</td>
<td></td>
<td>.020</td>
<td>.019</td>
<td>.019</td>
</tr>
<tr>
<td>2</td>
<td>1,071</td>
<td>4,098,288</td>
<td>4,016,450</td>
<td>.011</td>
<td>.011</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>1,001</td>
<td>4,058,368</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>957</td>
<td>4,049,968</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>924</td>
<td>4,052,579</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>937</td>
<td>3,931,274</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>905</td>
<td>3,885,471</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>836</td>
<td>3,890,518</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>763</td>
<td>3,907,974</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>713</td>
<td>3,977,966</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Building a synthetic cohort life table

### Cumulative Risk of Confirmed Maltreatment by Age 10, 2005

<table>
<thead>
<tr>
<th>Age</th>
<th>$nD_x$</th>
<th>$nN_x$</th>
<th>$nAN_x$</th>
<th>$nmx$</th>
<th>$nqx$</th>
<th>$c_x$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1,997</td>
<td>4,095,537</td>
<td></td>
<td>.020</td>
<td>.019</td>
<td>.019</td>
</tr>
<tr>
<td>2</td>
<td>1,071</td>
<td>4,098,288</td>
<td>4,016,450</td>
<td>.011</td>
<td>.011</td>
<td>.031</td>
</tr>
<tr>
<td>3</td>
<td>1,001</td>
<td>4,058,368</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>957</td>
<td>4,049,968</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>924</td>
<td>4,052,579</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>937</td>
<td>3,931,274</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>905</td>
<td>3,885,471</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>836</td>
<td>3,890,518</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>763</td>
<td>3,907,974</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>713</td>
<td>3,977,966</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4. Low daily (and yearly) prevalence
Proportion of Children with Confirmed Maltreatment

For Males

Year

Proportion of Children

For Females

Year

Proportion of Children with Confirmed Maltreatment

Total
For Males

Proportion of Children with Confirmed Maltreatment

Year

2004 2006 2008 2010

Proportion of Children

0 0.005 0.01 0.015...

For Females

Proportion of Children with Confirmed Maltreatment

Total

White

Year

2004 2006 2008 2010
Proportion of Children with Confirmed Maltreatment

For Males

Proportion of Children

Year

Proportion of Children with Confirmed Maltreatment

Total

White

Black
Proportion of Children with Confirmed Maltreatment

For Males

For Females

Year

Proportion of Children

Total
White
Black
Hispanic Origin
Asian
Native American
Proportion of Children in Foster Care on September 30

For Males

Year

Proportion of Children in Foster Care on September 30

For Females

Year
Proportion of Children in Foster Care on September 30

For Males

Year

2001 2003 2005 2007 2009 2011

Proportion of Children

Total
White
Black
Hispanic Origin

For Females

Year

2001 2003 2005 2007 2009 2011

Proportion of Children

Total
White
Black
Hispanic Origin
Proportion of Children in Foster Care on September 30

For Males

- Total
- White
- Black
- Hispanic Origin
- Asian

For Females

- Year
- Proportion of Children in Foster Care on September 30
5. Risks highest for the very young
Age-Specific Risk for First Confirmed Maltreatment, 2005

For Males

Proportion

0 2 4 6 8 10 12 14 16

0 0.01 0.02 0.03 0.04

For Females

0 2 4 6 8 10 12 14 16

Age

Age-Specific Risk for First Confirmed Maltreatment, 2005

Total
For Males

Proportion

0 2 4 6 8 10 12 14 16

Age

Age−Specific Risk for First Confirmed Maltreatment, 2005

Total                   
White

For Females

Proportion

0 2 4 6 8 10 12 14 16

Age

Age−Specific Risk for First Confirmed Maltreatment, 2005

Total                   
White
Age–Specific Risk for First Confirmed Maltreatment, 2005

For Males

For Females

Total
White
Black

Age
Proportion

Age–Specific Risk for First Confirmed Maltreatment, 2005

For Males

For Females

- Total
- White
- Black
- Hispanic Origin

Age

Proportion

0 2 4 6 8 10 12 14 16

0 0.01 0.02 0.03 0.04

0 2 4 6 8 10 12 14 16

0 0.01 0.02 0.03 0.04

0 2 4 6 8 10 12 14 16

0 0.01 0.02 0.03 0.04
Age–Specific Risk for First Confirmed Maltreatment, 2005

For Males

For Females

- Total
- White
- Black
- Hispanic Origin
- Asian

Proportion

Age

0 2 4 6 8 10 12 14 16

0 0.01 0.02 0.03 0.04
Age–Specific Risk for First Confirmed Maltreatment, 2005

For Males

For Females

- Total
- White
- Black
- Hispanic Origin
- Asian
- Native American

Age

Proportion

0 2 4 6 8 10 12 14 16

0 0.01 0.02 0.03 0.04
Age–Specific Risks of First–Time Foster Care Placement, 2005

For Males

For Females
Age-Specific Risks of First-Time Foster Care Placement, 2005

For Males

For Females

Proportion

Age
Age-Specific Risks of First-Time Foster Care Placement, 2005

For Males

For Females
Age-Specific Risks of First-Time Foster Care Placement, 2005

For Males

- Total
- White
- Black
- Hispanic Origin
- Asian

For Females

- Total
- White
- Black
- Hispanic Origin
- Asian

Proportion vs Age

Age-Specific Risks of First-Time Foster Care Placement, 2005
6. High cumulative prevalence
Cumulative Risk of Confirmed Maltreatment by Demographic Group

For Males

Cumulative Risk

Year

2004 2006 2008 2010

0 0.05 0.1 0.15 0.2 0.25

For Females

Cumulative Risk of Confirmed Maltreatment by Demographic Group

Year

2004 2006 2008 2010

Total
Cumulative Risk of Confirmed Maltreatment by Demographic Group

For Males

Cumulative Risk

Year

Cumulative Risk of Confirmed Maltreatment by Demographic Group

For Females

Year

Total

White
Cumulative Risk of Confirmed Maltreatment by Demographic Group

For Males

For Females

Cumulative Risk
2004 2006 2008 2010
0 0.05 0.1 0.15 0.2 0.25

Year

Cumulative Risk of Confirmed Maltreatment by Demographic Group

Total                   White                   Black

Year
Cumulative Risk of Confirmed Maltreatment by Demographic Group

For Males

Cumulative Risk

Year

For Females

Cumulative Risk of Confirmed Maltreatment by Demographic Group

Total
White
Black
Hispanic Origin

Year
Cumulative Risk of Confirmed Maltreatment by Demographic Group

For Males

For Females

Y ear

Cumulative Risk of Confirmed Maltreatment by Demographic Group

Total

White

Black

Hispanic Origin

Asian
Cumulative Risk of Confirmed Maltreatment by Demographic Group

For Males:
- Total
- White
- Black
- Hispanic Origin
- Asian
- Native American

For Females:
- Total
- White
- Black
- Hispanic Origin
- Asian
- Native American

Year:
- 2004
- 2006
- 2008
- 2010
Cumulative Risk of Foster Care Placement by Age 18

For Males

Total

White

For Females

Year

Cumulative Risk

Cumulative Risk of Foster Care Placement by Age 18
Cumulative Risk of Foster Care Placement by Age 18

For Males

For Females

Total
White
Black

Cumulative Risk of Foster Care Placement by Age 18

Year
Cumulative Risk

2001 2003 2005 2007 2009
0 0.03 0.06 0.09 0.12 0.15

Cumulative Risk

2001 2003 2005 2007 2009

2001 2003 2005 2007 2009

2001 2003 2005 2007 2009
Cumulative Risk of Foster Care Placement by Age 18

For Males

Total
White
Black
Hispanic Origin
Asian
Native American

For Females

Year
Cumulative Risk
Cumulative Risk of Foster Care Placement by Age 18
7. Conclusions
From annual prevalence to cumulative prevalence

- Annual prevalences are low, making inattention reasonable.
- Yet cumulative risks are high, making child maltreatment and foster care placement salient factors shaping child health. For that to be the case, at least one would have to have negative effects. (I think it is hard to argue neither will.)
From annual prevalence to cumulative prevalence

▶ Annual prevalences are low, making inattention reasonable.
▶ Yet cumulative risks are high, making child maltreatment and foster care placement salient factors shaping child health.
  ▶ For that to be the case, at least one would have to have negative effects. (I think it is hard to argue neither will.)
From annual prevalence to cumulative prevalence

- Annual prevalences are low, making inattention reasonable.
- Yet cumulative risks are high, making child maltreatment and foster care placement salient factors shaping child health.
  - For that to be the case, at least one would have to have negative effects. (I think it is hard to argue neither will.)
From annual prevalence to cumulative prevalence

- Annual prevalences are low, making inattention reasonable.
- Yet cumulative risks are high, making child maltreatment and foster care placement salient factors shaping child health.
  - For that to be the case, at least one would have to have negative effects. (I think it is hard to argue neither will.)
May also shape child health disparities

- Racial/ethnic disparities in these risks are shockingly high.
  - 25 percent of Black children and 10 percent of White children will ever experience confirmed maltreatment, for instance.
- Suggests possible consequences for child health disparities.
May also shape child health disparities

- Racial/ethnic disparities in these risks are shockingly high.
  - 25 percent of Black children and 10 percent of White children will ever experience confirmed maltreatment, for instance.
  - Suggests possible consequences for child health disparities.
May also shape child health disparities

- Racial/ethnic disparities in these risks are shockingly high.
  - 25 percent of Black children and 10 percent of White children will ever experience confirmed maltreatment, for instance.
- Suggests possible consequences for child health disparities.
May also shape child health disparities

- Racial/ethnic disparities in these risks are shockingly high.
  - 25 percent of Black children and 10 percent of White children will ever experience confirmed maltreatment, for instance.
- Suggests possible consequences for child health disparities.
8. The two next steps
Referrals - 100% (3.4 Million Referrals, 6.2 Million Children)

Screened In - 61% (2 Million Referrals, 3.7 Million Children)

Screened Out - 39% (1.4 Million Referrals, 2.5 Million Children)

Victim (3)

Non-Victims - 47% (2.4 Million Children)

Victims - 14% (681,000 Children)

In-Home - 12% (645,000 Children)

Foster Care - 1% (31,000 Children)

In-Home - 4% (224,000 Children)

Foster Care - 2% (68,000 Children)

Services (4)

None - 35% (1.7 Million Children)

Combined 4% (228,000 Children)
Referrals - 100%
(3.4 Million Referrals 6.2 Million Children)

Screened In - 61%
(2 Million Referrals 3.7 Million Children)

Screened Out – 39%
(1.4 Million Referrals 2.5 Million Children)

Non-Victims - 47%
(2.4 Million Children)

Victims - 14%
(681,000 Children)

None - 35%
(1.7 Million Children)

In-Home – 12%
(645,000 Children)

Foster Care – 1%

In-Home – 4%
(224,000 children)

Foster Care – 2%

Combined 4%
(228,000 children)
Cumulative Risk of Foster Care Placement by Age 18

2005

Cumulative Percentage Experiencing Placement

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Total</th>
<th>White</th>
<th>Black</th>
<th>Hispanic Origin</th>
<th>Asian</th>
<th>Native American</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6-12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12-20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20-30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30+</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Cumulative Risk of Foster Care Placement by Age 18

Total White Black Hispanic Origin Asian Native American

Cumulative Percentage Experiencing Placement

0-2 2-6 6-12 12-20 20-30 30+

Total White Black Hispanic Origin Asian Native American

Cumulative Percentage Experiencing Placement

0-2 2-6 6-12 12-20 20-30 30+
9. Thanks so much for your time