
Explore your neighborhood: Introducing online birth and death-related data maps

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PUBLIC HEALTH DIVISION
Center for Health Statistics

Target audiences

- Public health professionals
- County and city officials
- General public

Oregon Public Health Division
State Health Profile
September 2012



Oregon
Health
Authority

Maternal and child health:

Low birthweight

First trimester care

Teen pregnancy

Causes of Death:

Premature death before age 75

Age-adjusted mortality rate

Map Creation

- State health indicators were calculated from vital records data
- Joined with geographic files
 - County
 - Census tract
 - ZIP code (teen pregnancy)
- Online maps were created

Accessing the indicator maps

<http://bit.ly/data-maps>

The screenshot shows the Oregon Health Authority website. At the top, there is a navigation bar with the Oregon.gov logo, a search bar, and a language selector. Below this is a yellow banner with a warning icon and the text "Need a vital record? Walk-in hours limited to 10 AM - 2 PM until mid-September". The main navigation bar includes "Public Health" and a search bar. A secondary navigation bar lists various categories: Topics A to Z, Data & Statistics, Forms & Publications, News & Advisories, Licensing & Certification, Rules & Regulations, and Public Health Directory. The left sidebar contains "Vital Statistics" with a list of categories, including "Data Maps" which is highlighted. The main content area is titled "Data Maps" and contains a paragraph about the Center for Health Statistics (CHS) and its role in providing vital statistics. It also includes a small map of Oregon and a "View Maps" section with a list of links: "Birth Data Maps", "Death Data Maps", and "Teen Pregnancy Data Maps". A "Contact Us" box is visible on the right side of the page.

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Oregon
Health
Authority

Vital Statistics

[Public Health](#) > [Birth and Death Certificates](#) > Vital Statistics

Annual Reports

Data Maps

Birth Data

Death Data

Marriage Data

Divorce Data

Domestic Partnership Data

Dissolution of Domestic
Partnership Data

Fetal Death Data

Induced Abortion Data

Teen Pregnancy Data

Vital Statistics

Birth Data Maps

Year-to-Date, Preliminary,
and Final DataBirths by County and ZIP
CodeBirth Outcomes by Planned
Birth Place and AttendantDemographic Characteristics
of MotherMedical or Health
Characteristics of Birth

Perinatal Trends

• Divorces

- Domestic Partnerships
- Dissolutions of Domestic Partnership
- Fetal Deaths
- Induced Abortions
- Teen Pregnancies (including births and abortions)

ation and analysis of information collected from vital event Oregon's Center for Health Statistics is responsible for data from these vital records.

Information about the health of Oregonians comes from vital ses of death, low birth weight babies, and mother's access s data are used throughout the state and nation for analysis inning, and policy development.

Contact Us

[Find Us](#)[Health Statistics Unit - Vital
Records](#)

Date and Final Data

Related Publications

- Related information can be found in the [Annual Reports](#), the [CD Summary](#) and in [Special Reports](#).
- Information on how to order birth, death, marriage or divorce certificates can be found in [Vital Records FAQ](#).
- [Calculating rates? Aggregating data?](#) The Data Users Task Group has developed a booklet to help

public.health.oregon.gov/BirthDeathCertificates/VitalStatistics/birth/Pages/birth-data-maps.aspx

The Data Difference

Year-to-Date, Preliminary, and Final Data

Births by County and ZIP Code

Birth Outcomes by Planned Birth Place and Attendant

Demographic Characteristics of Mother

Medical or Health Characteristics of Birth

Perinatal Trends



Birth Data Maps

Tips for using data maps

1. We recommend maximizing your browser window and using Mozilla Firefox or Google Chrome to view the maps.
2. To view, click on the map image.
3. Allow a few moments for the maps to load.
4. Once the maps have loaded, use the tabs across the top to view individual maps.
5. You can click on an individual county to open a pop-up window with detailed data for that county.
6. Zoom in to access census tracts or ZIP codes. If you select a county, you can click **Zoom to** at the bottom of the pop-up window to zoom in to that county.



Use the zoom tool to zoom in or out, or to return to the "home" view.

NOTE: Census tract and ZIP code-level maps are only as accurate as the address information provided on the birth certificate. At least 95 percent of births recorded in Oregon contain sufficiently accurate address information to be geocoded at the level of residential address or street. For border counties, where residents regularly give birth in neighboring states, the accuracy of residential address information is dependent on that state's data collection procedures.

Annual Reports

[Volume 1 - Natality](#)

[Volume 2 - Mortality](#)

Contact Us

[Health Statistics Unit](#)

Oregon State Health Indicators, 2009-2013

These maps display three [state health indicators](#). They were created in response to a growing demand for health indicator data at the county and census tract levels. To protect Oregonian's confidentiality and ensure data reliability, five years of data were combined for the following three health indicators:

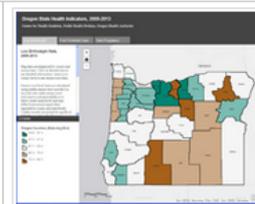
- Low birthweight (all ages)
- Initiation of first trimester prenatal care (all ages), and
- Teen pregnancy (ages 15-17).

To use this map

- Click on the [map image](#) (shown at right) to open the full mapping tool.
- Once the maps have loaded, use the tabs across the top to view individual maps for each of the three health indicators.

[Technical Notes](#)

Data source: Birth records compiled by the Oregon Center for Health Statistics



[Map](#)

Oregon State Health Indicators, 2009-2013

Center for Health Statistics, Public Health Division, Oregon Health Authority

Low Birthweight

First Trimester Care

Teen Pregnancy

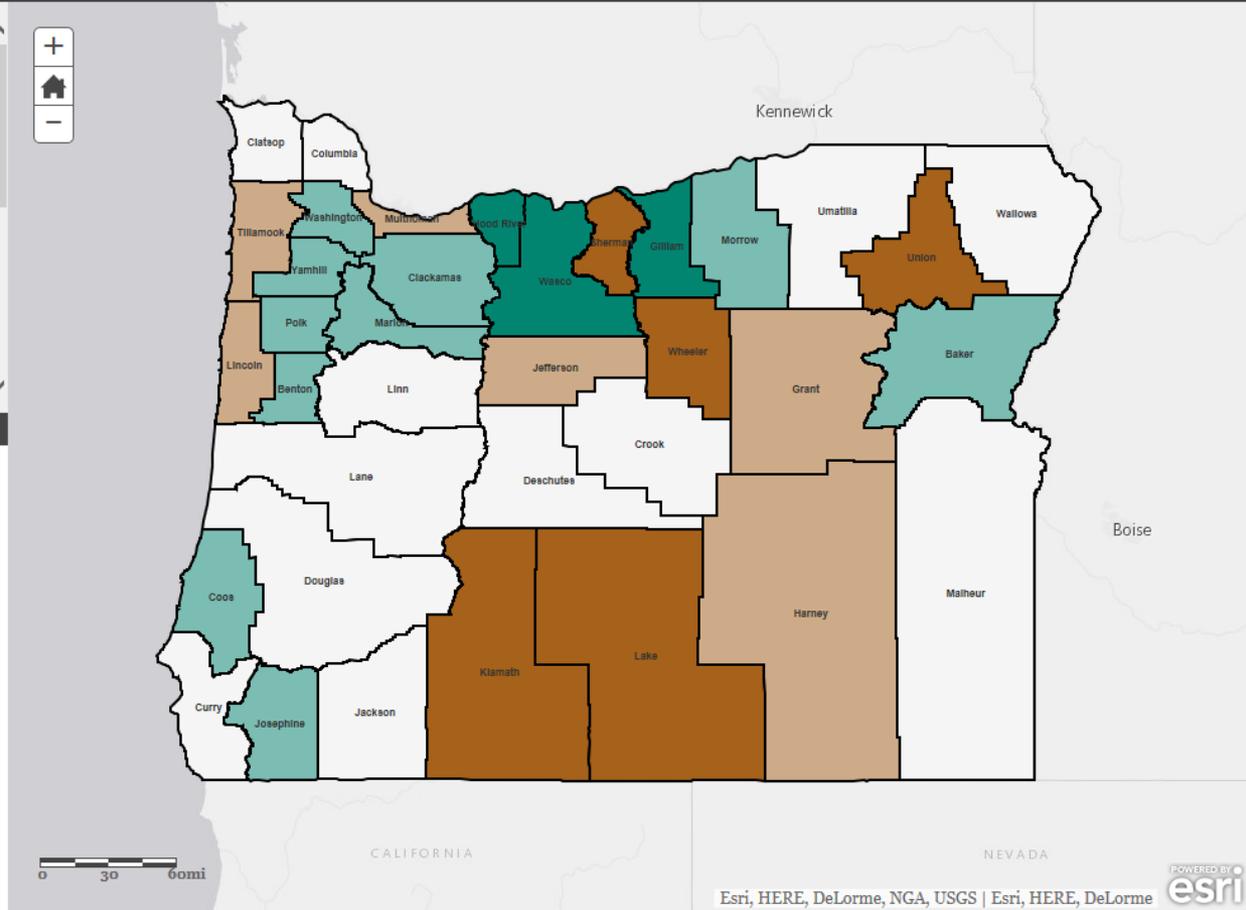
Low Birthweight Rate, 2009-2013

Map data are displayed by county and census tract. Click on desired area to see detailed information. Zoom in to county level to see census tract data.

Low birthweight rate is the proportion of infants that weigh less than 2,500 grams (5 pounds, 8 ounces) at birth. Low birthweight is the major predictor of infant death, which is a fundamental measure of the health of a population. Oregon's state rate continues to be below the national goal of 78.0.

LEGEND

Oregon Counties (State Avg 62.4)



Oregon State Health Indicators, 2009-2013

Center for Health Statistics, Public Health Division, Oregon Health Authority

Low Birthweight

First Trimester Care

Teen Pregnancy

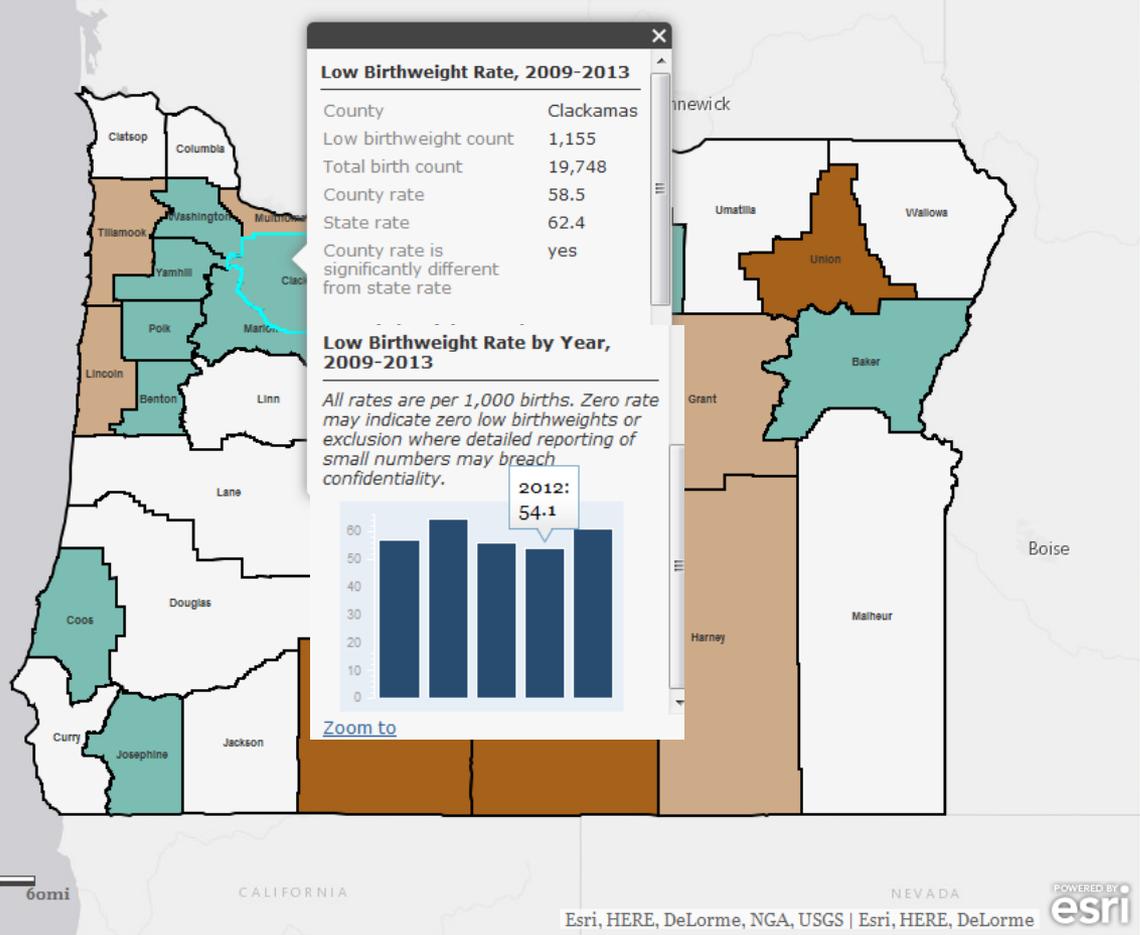
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LEGEND

Oregon Counties (State Avg 62.4)



Low Birthweight Rate, 2009-2013

County	Clackamas
Low birthweight count	1,155
Total birth count	19,748
County rate	58.5
State rate	62.4
County rate is significantly different from state rate	yes

Low Birthweight Rate by Year, 2009-2013

All rates are per 1,000 births. Zero rate may indicate zero low birthweights or exclusion where detailed reporting of small numbers may breach confidentiality.



[Zoom to](#)

Oregon State Health Indicators, 2009-2013

Center for Health Statistics, Public Health Division, Oregon Health Authority

Low Birthweight

First Trimester Care

Teen Pregnancy

Low Birthweight Rate, 2009-2013

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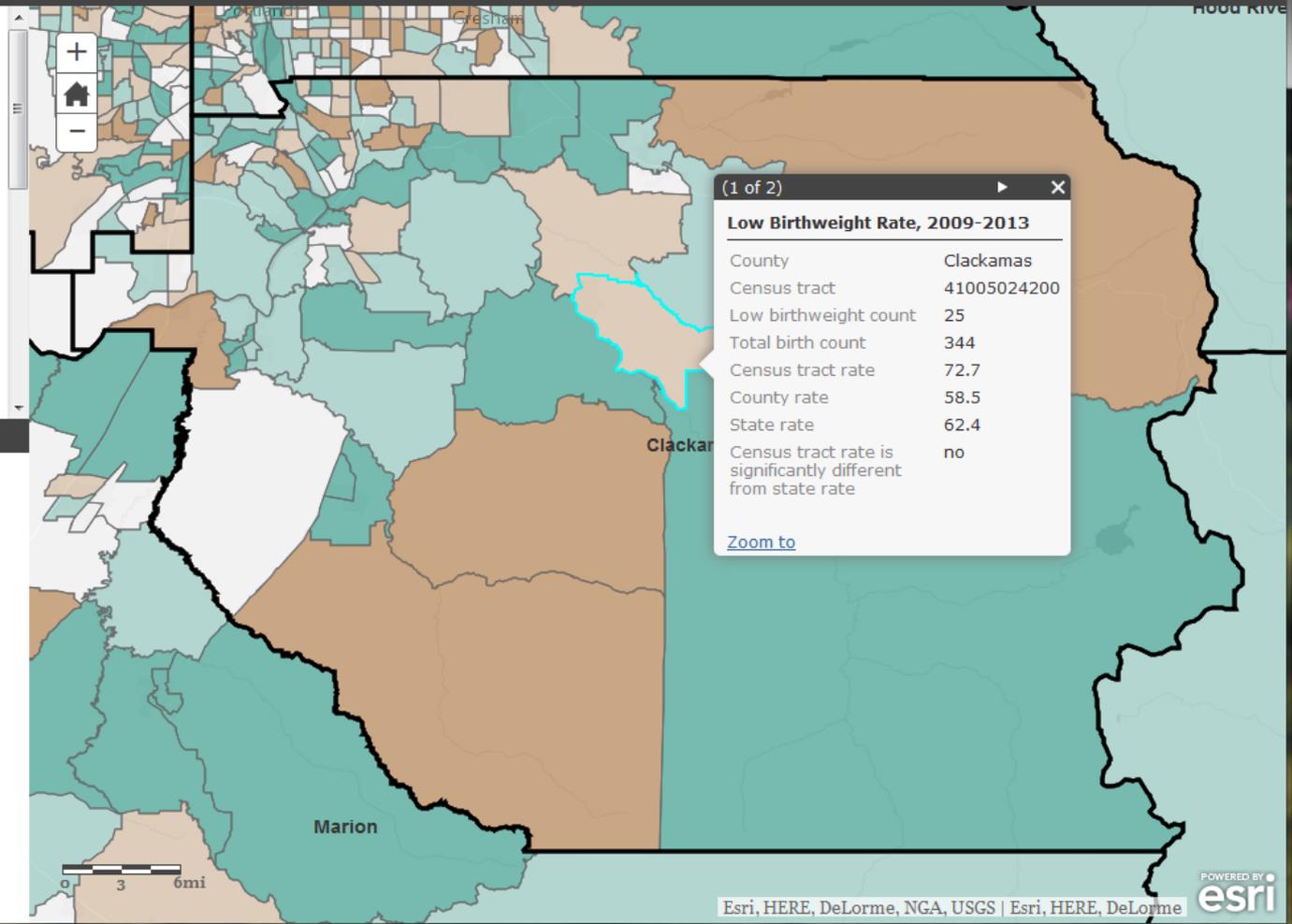
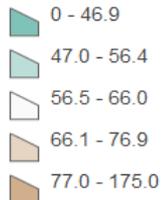
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LEGEND

County Boundary



Census Tracts (State Avg 62.4)



Percent First Trimester Initiation of Prenatal Care, 2009-2013

County	Benton
First trimester prenatal care count	2,875
Total birth count	3,643
County %	78.9
State %	74.6
County percent is significantly different from state percent	yes

Percent First Trimester Initiation of Prenatal Care by Year, 2009-2013

Percentages are calculated excluding missing and unknown values. Zero percent may indicate zero first

[Zoom to](#)

Percent First Trimester Initiation of Prenatal Care, 2009-2013

County	Benton
Census tract	41003010300
First trimester prenatal care count	91
Total birth count	111
Census tract %	82.0
County %	78.9
State %	74.6
Census tract percent is significantly different from state percent	no

[Zoom to](#)

Teen Pregnancy Rate, Age 15-17, 2009-2013

County	Marion
Teen pregnancy count	888
County rate	26.2
State rate	17.6
County rate is significantly different from state rate	yes

Teen Pregnancy Rate by Year, Age 15-17, 2009-2013

All rates are per 1,000 births. Zero rate may indicate zero teen pregnancies or exclusion where detailed reporting of small numbers may breach confidentiality.

[Zoom to](#)

ZIP Code Rate, Age 15-17, 2009-2013

County	Clackamas, Marion
ZIP code	97375
Teen pregnancy count	2
ZIP code rate	36.4
County rate	26.2
State rate	17.6
ZIP code rate is significantly different from state rate	no

[Zoom to](#)

Oregon State Health Indicators

Center for Health Statistics, Public Health Division, Oregon Health Authority

Age-Adj. Death Rate

Age-Adj. Years of Potential Life Lost

deaths and the estimated population by county and age groups for the seven-year period. All rates are per 100,000 population.

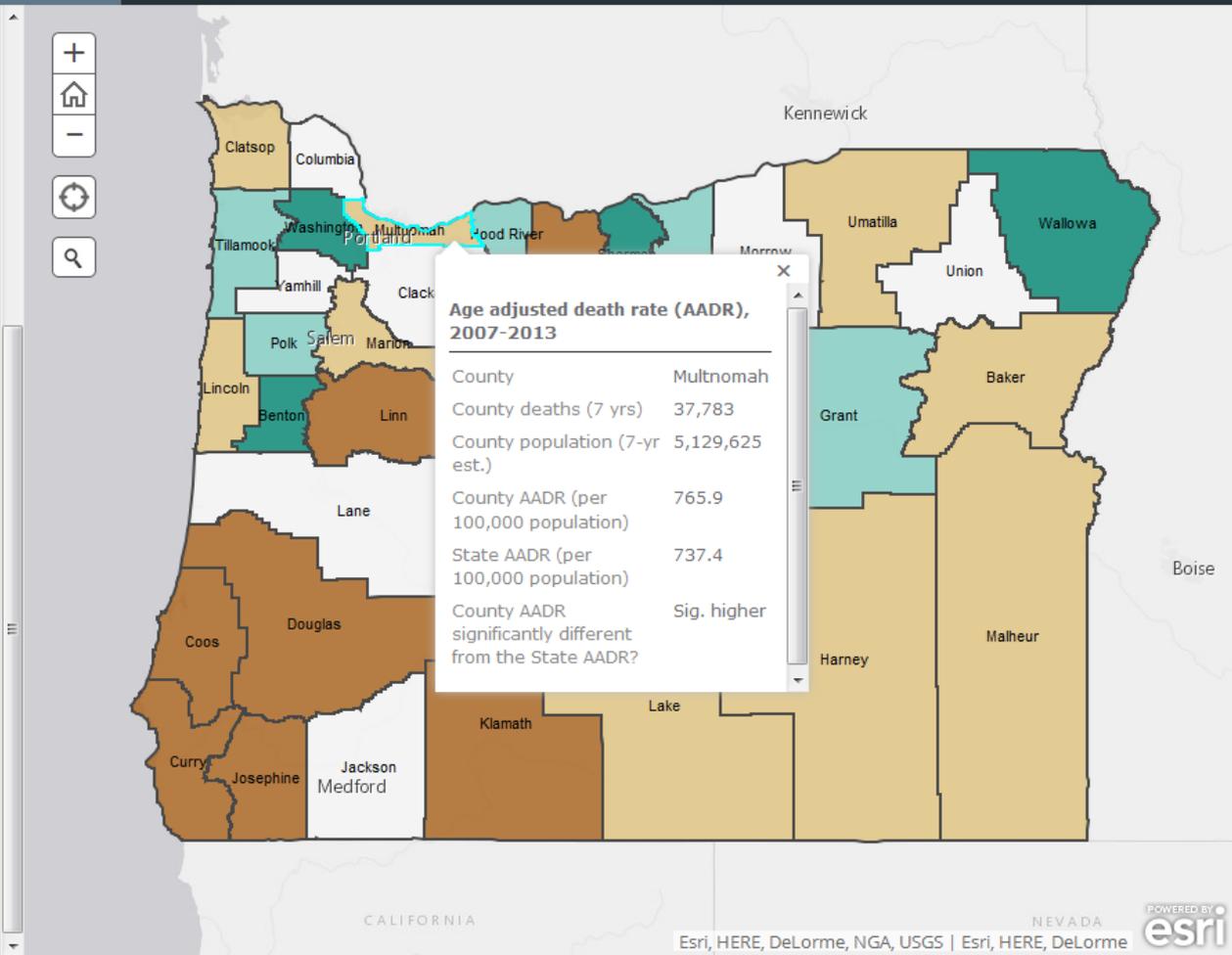
Census tract level rates are calculated with usable census tract records (i.e. records with census tract information geocodable at or below street name level). These rates may differ from those reported in the Oregon Vital Statistics Annual Reports, which are reported at county and state levels. Census tract level rates for Oregon counties bordering other states may be less reliable due to varying data completeness. Usable records accounted for 99.87% of all death records in the seven-year period.

For more information about Oregon vital statistics, please visit the following Center for Health Statistics web pages: [Vital Statistics](#), [Oregon Death Data](#), [Annual Reports](#).

Oregon counties (State rate 737.4 per 100,000 pop.)

County AADR (per 100,000 population)

- 801 to 877
- 751 to 800
- 701 to 750
- 651 to 700
- 584 to 650



Oregon State Health Indicators

Center for Health Statistics, Public Health Division, Oregon Health Authority

Age-Adj. Death Rate

Age-Adj. Years of Potential Life Lost

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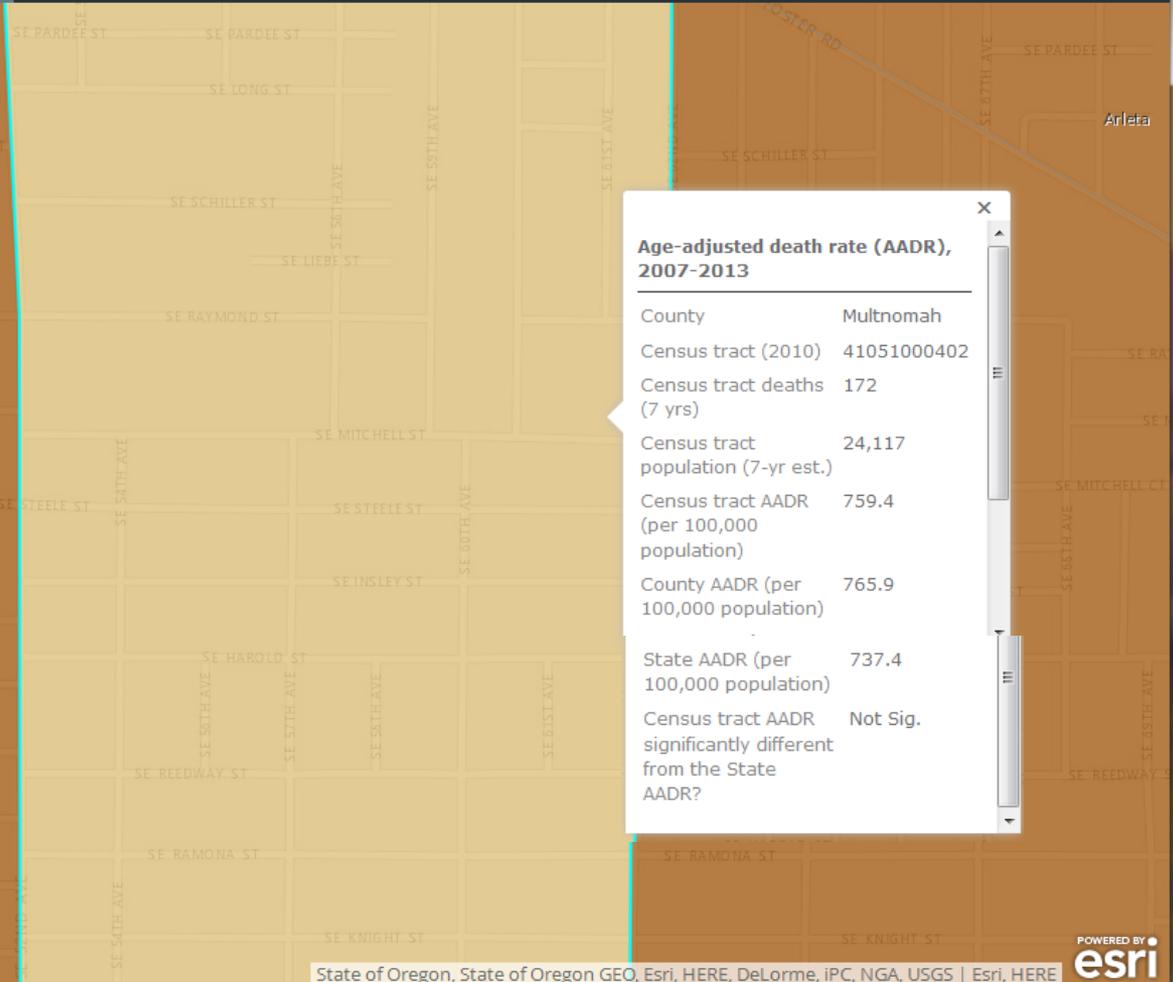
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Census tracts 2010 (State rate 737.4 per 100,000 pop.)

Census tract AADR (per 100,000 population)

- 801 to 1,806
- 751 to 800
- 701 to 750
- 651 to 700
- 0 to 650



State of Oregon, State of Oregon GEO, Esri, HERE, DeLorme, iPC, NGA, USGS | Esri, HERE



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Oregon State Health Indicators

Center for Health Statistics, Public Health Division, Oregon Health Authority

Age-Adj. Death Rate

Age-Adj. Years of Potential Life Lost

Age-Adjusted Years of Potential Life Lost before age 75 (YPLL75) Ratio, 2007-2013

Map data are displayed by county and census tract. Click on the desired area to see detailed information. Zoom in to county level to see census tract data.

Age-adjusted years of potential life lost before age 75 (YPLL75) is a standardized measure of premature deaths that allows for comparisons across geographic areas. YPLL75 quantifies premature deaths occurring in younger age groups. These ratios are calculated from the average count of years lost for premature deaths before age 75 and the estimated population by county and age groups for the seven-year period. All rates are per 100,000 population.

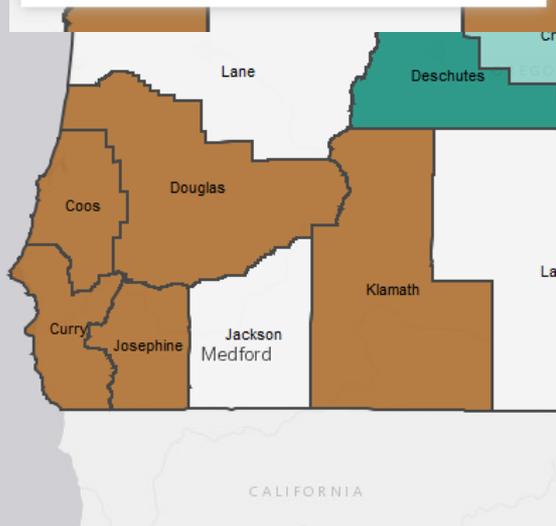
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Age-adjusted years of potential life lost before age 75 (YPLL75) ratio, 2007-2013

County	Marion
County total YPLL75 (7 yrs)	135,278
County population (7-yr est.)	2,226,270
County age-adjusted YPLL75 ratio (per 100,000 population)	5,900.8
State age-adjusted YPLL75 ratio (per 100,000 population)	5,606.2

Age-adjusted years of potential life lost before age 75 (YPLL75) ratio, 2007-2013

County	Marion
Census tract (2010)	41047010501
Census tract total YPLL75 (7 yrs)	1,927
Census tract population (7-yr est.)	37,911
Census tract age-adjusted YPLL75 ratio (per 100,000 population)	4,495.9
County age-adjusted YPLL75 ratio (per 100,000 population)	5,900.8
State age-adjusted YPLL75 ratio (per 100,000 population)	5,606.2



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Real world applications

- Exploratory
- Research
- Resource allocation
- Replicating with other data

Looking Forward

Potential mapping project expansion

- Frequency of updates
- Five primary indicators by CCO region
- Other state health profile indicators by
 - Census tract
 - CCO
- Major indicators by socio-economic status

Potential mapping project expansion (cont'd)

- Birth rate
- Fertility rate
- Tobacco use (birth and death)
- Leading causes of death
- Vehicle accident deaths
- Suicide deaths

Questions / Comments?

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