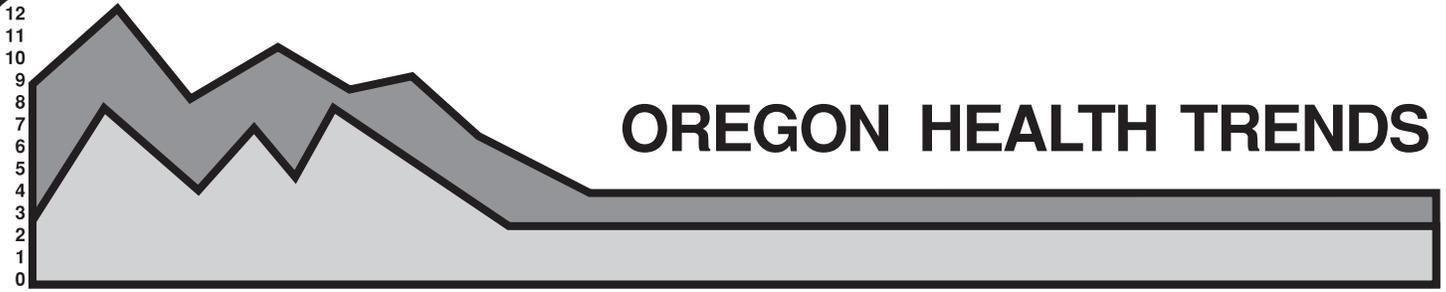


# OREGON HEALTH TRENDS



Center for Health Statistics (503) 731-4354  
OREGON DEPARTMENT OF HUMAN SERVICES

## OREGON TEEN PREGNANCY

SERIES NO. 59  
SEPTEMBER 2001

### County Trends, 1996-2000, an Update

Citizens throughout Oregon have been working hard to reduce the incidence of teen pregnancy. This issue of Oregon Health Trends provides data on teen pregnancy over time (1996–2000) for each county.

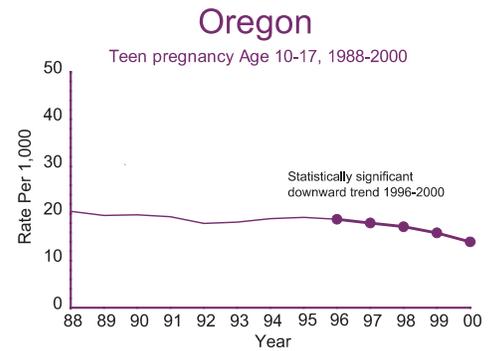
From 1996 through 2000, Oregon had an average of 3,052 teen pregnancies per year for a rate of 16.7 pregnancies for every 1,000 females between the ages of 10 and 17. The rate has decreased for the last five years and the five year trend shows a significant trend downward.

Four counties have a five year aggregate rate which was significantly

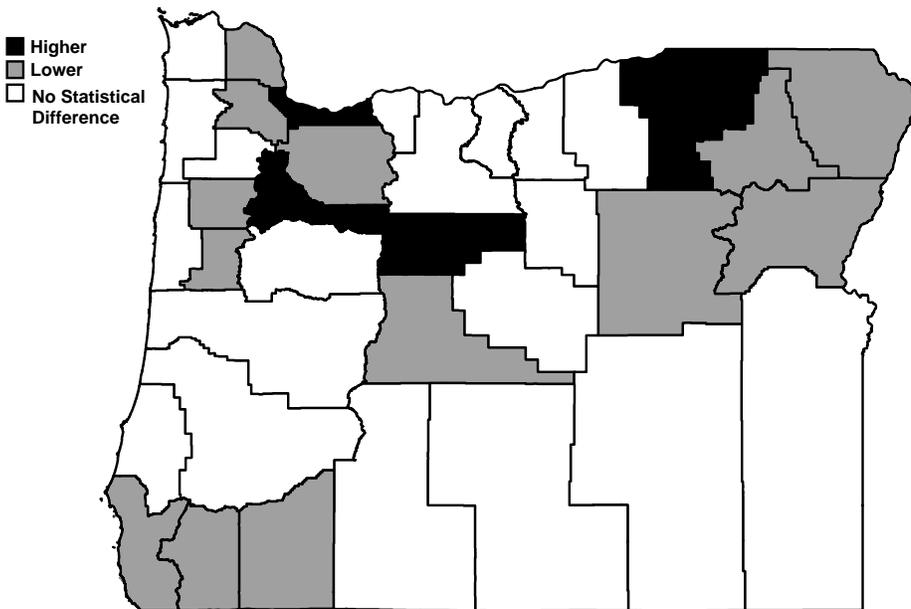
higher than the state rate. These counties were Jefferson, Marion, Multnomah, and Umatilla. Thirteen counties have a rate that is statistically significantly lower than the state rate (Figure 1, below).

Fourteen counties had significantly decreasing trends for teen pregnancies between 1996 and 2000. (Figure 2, page 4).

1. Use of the word significant in this article means a statistical test for significant difference was computed and found at the  $p \leq .05$  level.



**Figure 1** Teen Pregnancy Rates That are Significantly Different Than the State Rate, 1996-2000, Aggregate



Source: Center for Health Statistics, DHS - Health Services

*Five-year average of 3,052 teen pregnancies per year in Oregon during 1996-2000.*

*The trend downward in the last five years is statistically significant.*



Table 1. Oregon Teen Pregnancy Rate 1991-2000 Among Females Age 10-17											5 Year Aggregate rate 96-00	Significantly Different from State
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000		
STATE	19.3	17.9	18.2	18.9	19.2	18.8	18.0	17.2	15.9	14.0	16.7	
BAKER	18.1	17.8	15.2	17.5	9.2	8.1	10.1	13.0	10.8	8.1	10.0	lower
BENTON	11.6	8.3	10.1	11.0	10.5	10.0	7.9	7.4	9.9	6.3	8.2	lower
CLACKAMAS	13.5	13.3	12.8	14.9	13.9	15.0	14.1	13.3	11.9	11.1	13.0	lower
CLATSOP	15.5	12.3	17.7	18.7	21.7	24.4	16.3	13.6	12.9	13.0	16.0	
COLUMBIA	17.1	14.5	17.4	16.0	13.8	21.2	18.8	12.4	10.1	10.9	14.4	lower
COOS	19.2	17.0	21.2	19.4	15.8	15.3	16.3	16.3	14.9	13.2	15.2	
CROOK	17.4	25.3	10.3	19.3	17.9	21.3	18.9	17.1	11.3	11.4	15.7	
CURRY	16.7	18.1	14.5	17.8	14.7	11.8	17.3	8.3	10.2	11.2	11.6	lower
DESCHUTES	17.6	12.7	16.9	17.1	16.5	17.9	15.1	14.5	11.6	10.7	13.8	lower
DOUGLAS	15.9	16.6	20.1	19.0	21.5	14.7	17.8	16.8	17.8	13.6	16.2	
GILLIAM	*	*	*	*	*	*	*	*	*	*	*	
GRANT	16.4	12.6	20.6	12.1	12.3	*	14.4	9.7	14.5	6.4	10.6	lower
HARNEY	10.7	20.4	18.0	18.3	20.9	13.6	*	14.9	20.0	15.2	14.3	
HOOD RIVER	19.7	24.9	15.4	15.8	13.6	15.0	14.4	18.4	11.6	13.8	14.7	
JACKSON	19.4	16.5	18.8	15.7	15.9	14.4	14.4	13.7	11.5	11.2	13.5	lower
JEFFERSON	56.0	28.4	37.1	32.8	34.5	32.6	21.4	32.9	30.6	26.7	28.8	higher
JOSEPHINE	23.8	18.0	16.4	14.0	15.9	16.7	13.0	15.3	16.6	11.9	14.7	lower
KLAMATH	23.8	23.2	20.6	24.5	21.7	24.2	15.4	21.8	16.8	15.6	18.7	
LAKE	10.8	15.2	15.5	23.3	17.6	*	23.0	15.0	10.5	9.0	12.8	
LANE	15.3	13.5	14.4	17.0	17.3	17.6	17.8	18.2	15.3	12.2	16.1	
LINCOLN	27.0	19.5	17.1	18.8	18.7	17.9	21.3	16.9	16.8	12.6	17.1	
LINN	16.0	18.0	15.7	15.6	17.8	19.1	19.3	13.5	16.7	15.2	16.7	
MALHEUR	22.8	23.3	21.9	25.9	27.7	21.9	16.8	17.5	9.8	17.8	16.6	
MARION	22.5	23.5	22.6	22.6	25.3	23.9	26.6	21.0	20.7	17.6	21.8	higher
MORROW	13.9	20.4	23.1	21.6	25.5	20.2	30.3	11.6	23.8	15.5	19.9	
MULTNOMAH	30.1	26.3	27.3	28.7	26.0	23.3	21.8	21.5	20.3	19.1	21.2	higher
POLK	9.0	12.3	15.6	15.5	15.5	15.7	16.1	14.6	11.2	7.8	12.9	lower
SHERMAN	*	*	*	*	*	*	*	*	*	*	*	
TILLAMOOK	19.4	16.3	13.3	7.1	15.7	17.3	15.2	15.6	21.0	7.8	15.4	
UMATILLA	16.3	23.4	15.3	20.7	24.5	21.2	21.0	20.9	21.3	21.3	21.1	higher
UNION	10.2	16.8	14.0	12.6	11.1	15.9	12.1	10.2	13.1	8.6	11.9	lower
WALLOWA	18.5	15.8	*	12.8	10.7	*	12.6	15.0	11.6	4.5	9.5	lower
WASCO	15.4	19.8	16.2	10.9	16.5	18.7	19.7	13.9	16.0	20.8	17.8	
WASHINGTON	13.5	12.9	13.9	14.0	15.9	16.5	15.9	17.2	15.1	13.1	15.5	lower
WHEELER	*	*	*	*	*	*	*	*	*	*	*	
YAMHILL	17.6	13.3	13.6	13.7	20.5	19.6	16.8	20.3	15.5	11.2	16.6	

\* Rates based on less than 5 events are unreliable.

Table 2. Total Pregnancies for Oregon females ages 10-17: 1991-2000											5 Year Aggregate 96-00
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	
STATE	3,085	2,913	3,027	3,214	3,284	3,274	3,197	3,176	2,961	2,653	15,261
BAKER	16	16	14	17	9	8	10	12	10	8	48
BENTON	40	29	36	40	38	36	29	28	38	30	161
CLACKAMAS	236	231	229	276	248	267	259	258	234	221	1,239
CLATSOP	29	23	34	37	41	47	31	27	26	27	158
COLUMBIA	43	37	44	41	34	52	48	39	29	30	198
COOS	67	60	75	69	55	53	56	55	51	45	260
CROOK	15	22	9	17	16	19	17	16	11	13	76
CURRY	16	17	14	18	15	12	18	10	11	11	62
DESCHUTES	77	59	83	87	84	96	84	86	70	70	406
DOUGLAS	91	94	116	111	122	84	102	98	106	78	468
GILLIAM	1	0	0	2	0	1	3	0	0	0	4
GRANT	8	6	10	6	6	4	7	5	7	3	26
HARNEY	5	9	8	8	9	6	3	8	10	7	34
HOOD RIVER	20	27	17	18	15	17	16	23	14	17	87
JACKSON	162	139	163	141	144	156	133	143	114	114	660
JEFFERSON	47	24	32	30	34	34	23	38	33	33	161
JOSEPHINE	82	63	59	51	60	63	50	60	66	49	288
KLAMATH	79	78	71	86	74	84	54	78	61	58	335
LAKE	5	7	7	11	8	3	10	8	5	4	30
LANE	235	208	230	276	278	289	295	305	264	218	1,371
LINCOLN	56	40	37	42	43	41	49	41	38	29	198
LINN	87	97	87	86	98	109	111	81	101	91	493
MALHEUR	41	42	40	47	50	41	31	35	21	34	162
MARION	298	320	317	327	363	352	398	333	335	296	1,714
MORROW	7	11	13	13	14	12	18	8	16	11	65
MULTNOMAH	845	750	775	833	802	739	712	682	652	605	3,390
POLK	27	38	49	49	49	50	53	51	41	30	225
SHERMAN	3	1	2	3	1	1	0	2	0	0	3
TILLAMOOK	23	20	17	9	20	22	19	20	27	10	98
UMATILLA	59	86	58	80	93	84	81	87	90	90	432
UNION	15	25	21	19	16	23	17	16	21	13	90
WALLOWA	8	7	3	6	5	2	6	7	5	2	22
WASCO	20	27	22	15	22	25	26	19	22	28	120
WASHINGTON	246	243	271	279	322	347	346	390	349	317	1,749
WHEELER	1	0	3	1	0	1	1	1	0	1	4
YAMHILL	75	57	61	63	96	94	82	106	83	60	425

## Methodology

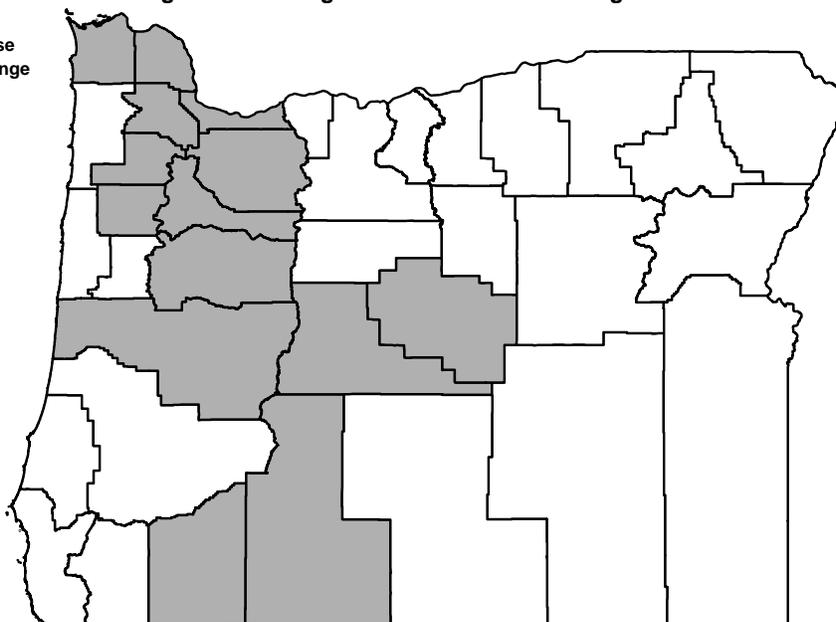
Numbers of pregnancies were estimated by combining the sum of live births and induced abortions among Oregon residents age ten through seventeen. Denominators for rates were based on the population estimates produced by the Center for Population Research and Census, Portland State University. Rates were calculated as the number of pregnancies per 1,000 females aged 10-17. Oregon uses the 10-17 year-old category for its teen pregnancy Benchmark. This age group of females is usually still in middle and high school and is targeted for intervention and education programs along with their male peers. Nationally, teen pregnancy numbers are usually presented for females age 15-19. When comparing Oregon rates to U.S. rates be careful that identical age groups are used.

Since the numbers for pregnancies and population are small in many counties in Oregon, an aggregate rate was calculated for the 5 year period from 1996 to 2000. Five years of pregnancies were divided by 5 years of population data. This allowed for stabilization of rates in smaller counties. Each county's 5 year rate was compared to the 5 year state rate with a t-test on the difference between the proportion of means. Directions for calculations of these statistical tests can be found in NCHS National Vital Statistics Report, Vol. 49, No. 1, April 17, 2001, pp. 93-97. at [http://www.cdc.gov/nchs/data/nvsr/nvsr49/nvsr49\\_01.pdf](http://www.cdc.gov/nchs/data/nvsr/nvsr49/nvsr49_01.pdf). Aggregation allowed analysis of the smaller population areas of the state by rates and average number of pregnancies.

Since rates in many counties vary dramatically from any one year to the next, single year comparisons can be misleading. This newsletter uses a Mantel-Haenszel chi-square for trend across five years (1996-2000). Although the graphs in each county narrative display rates from 1988 to 2000, the statistical test method focuses on the 1996-2000 trend to account for year-to-year variation. If a county has widely fluctuating rates due to small numbers, trends will typically not be significant. The data years used in the chi-trend analysis are highlighted with bold lines in each of the county graphs. Trend analysis was not done on counties with fewer than 5 pregnancies in any of the five years.

**Figure 2** Oregon Teen Pregnancy Rates Trend Analysis:  
Significant Changes Over Time: 1996 through 2000

■ Decrease  
□ No Change



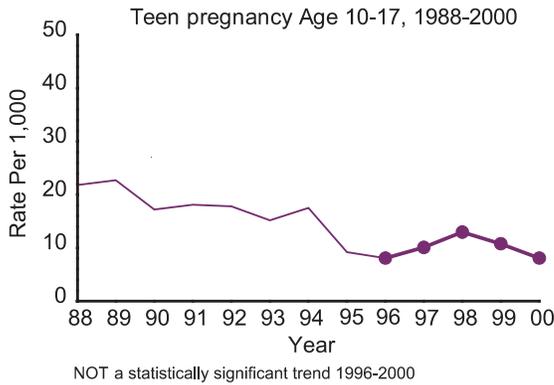
Source: Center for Health Statistics, Department of Human Services

*Teen parents are generally less able to give their children the kind of solid foundation—including proper nutrition, health care, cognitive and social stimulation, and old-fashioned nurturing—that all kids need.*

—The Annie E. Casey Foundation.

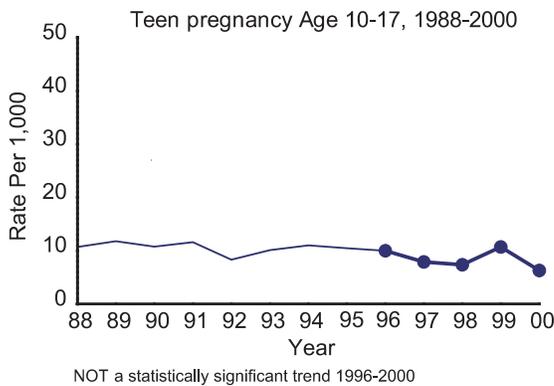
When teens have sex:  
Issues and trends. 1998.

### Baker County



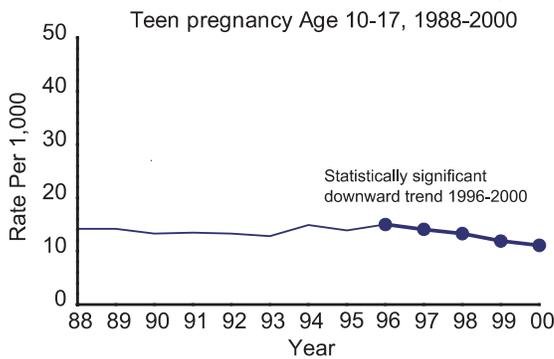
- Five-year average of 10 teen pregnancies per year with a rate of 10.0.
- Rate is statistically significantly **lower** than the state.
- Trend is not statistically significant.

### Benton County



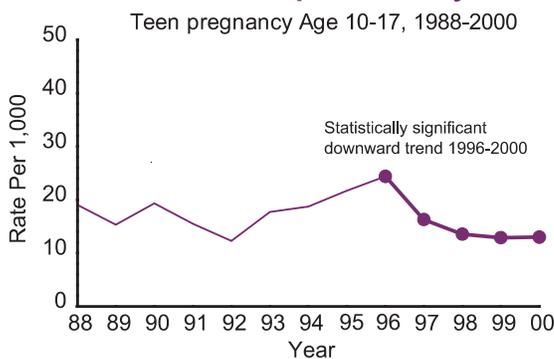
- Benton has the lowest rate in the state.
- Five-year average of 32 teen pregnancies per year with a rate of 8.2.
- Rate is statistically significantly **lower** than the state.
- Trend is not statistically significant.

### Clackamas County



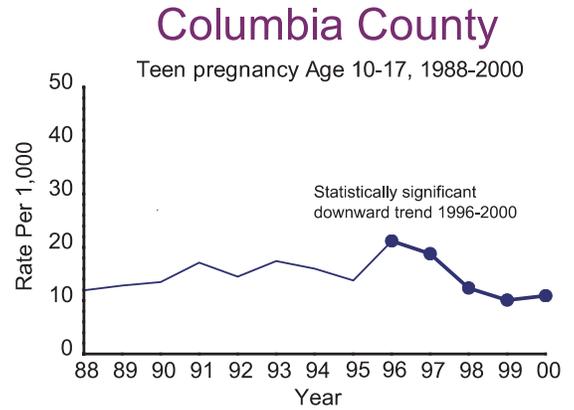
- Five-year average of 248 teen pregnancies per year with a rate of 13.0.
- Rate is statistically significantly **lower** than the state.
- The trend downward is statistically significant.

### Clatsop County

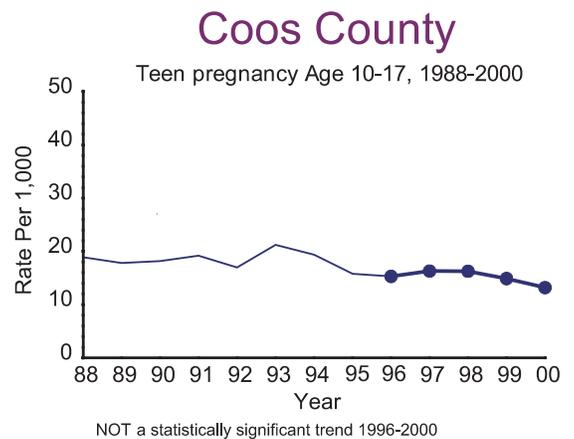


- Five-year average of 32 teen pregnancies per year with a rate of 16.0.
- Rate is not statistically significantly different than the state.
- The trend downward is statistically significant.

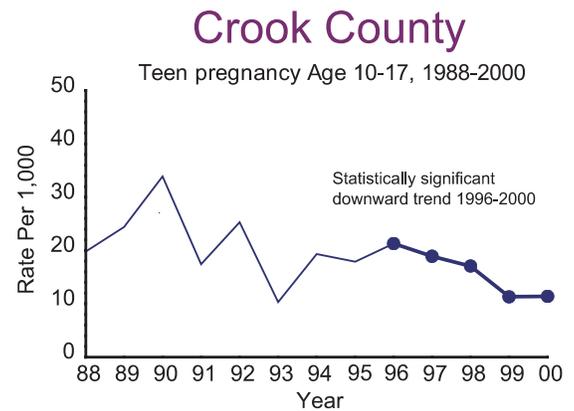
- Five-year average of 40 teen pregnancies per year with a rate of 14.4.
- Rate is statistically significantly **lower** than the state.
- The trend downward is statistically significant.



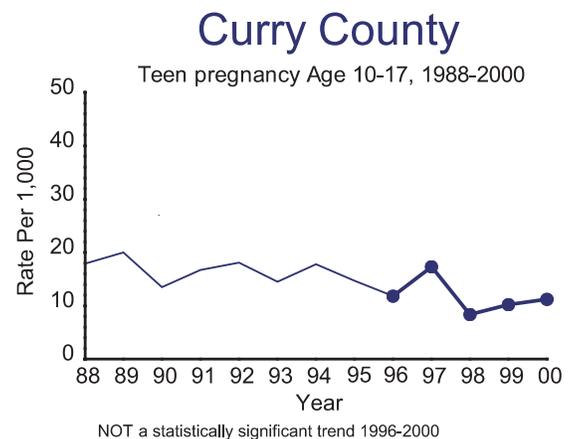
- Five-year average of 52 teen pregnancies per year with a rate of 15.2.
- Rate is not statistically significantly different than the state.
- Trend is not statistically significant.



- Five-year average of 15 teen pregnancies per year with a rate of 15.7.
- Rate is not statistically significantly different than the state.
- The trend downward is statistically significant.

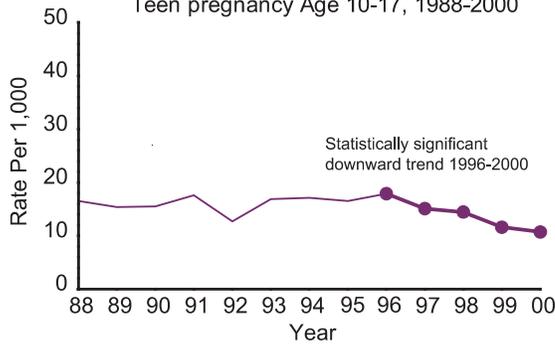


- Five-year average of 12 teen pregnancies per year with a rate of 11.6.
- Rate is statistically significantly **lower** than the state.
- Trend is not statistically significant.



### Deschutes County

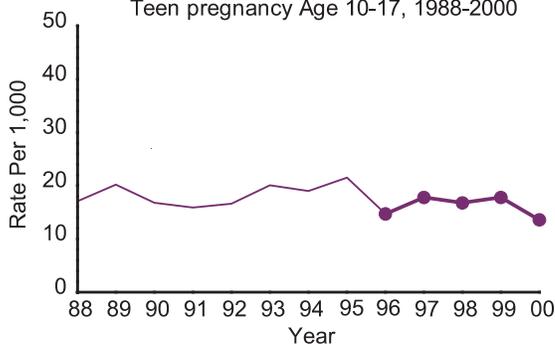
Teen pregnancy Age 10-17, 1988-2000



- Five-year average of 81 teen pregnancies per year with a rate of 13.8.
- Rate is statistically significantly **lower** than the state.
- The trend downward is statistically significant.

### Douglas County

Teen pregnancy Age 10-17, 1988-2000



NOT a statistically significant trend 1996-2000

- Five-year average of 94 teen pregnancies per year with a rate of 16.2.
- Rate is not statistically significantly different from the state.
- Trend is not statistically significant.

### Gilliam County

Teen pregnancy Age 10-17

Trend not calculated due to small numbers per year.

- Five-year average of 1 teen pregnancy per year.
- Rate is not statistically significantly different than the state.

### Grant County

Teen pregnancy Age 10-17

Trend not calculated due to small numbers in certain years.

- Five-year average of 5 teen pregnancies per year with a rate of 10.6.
- Rate is statistically significantly **lower** than the state.

- Five-year average of 7 teen pregnancies per year with a rate of 14.3.
- Rate is not statistically significantly different from the state.

## Harney County

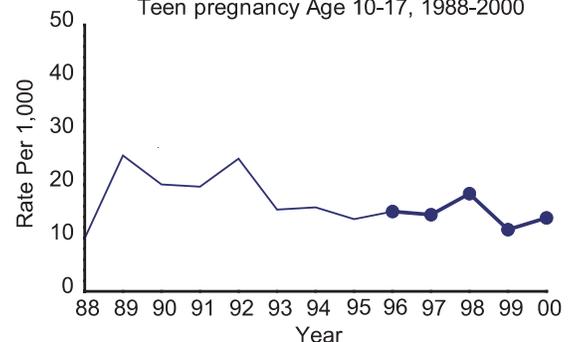
Teen pregnancy Age 10-17

Trend not calculated due to small numbers in certain years.

- Five-year average of 17 teen pregnancies per year with a rate of 14.7.
- Rate is not statistically significantly different than the state.
- Trend is not statistically significant.

## Hood River County

Teen pregnancy Age 10-17, 1988-2000

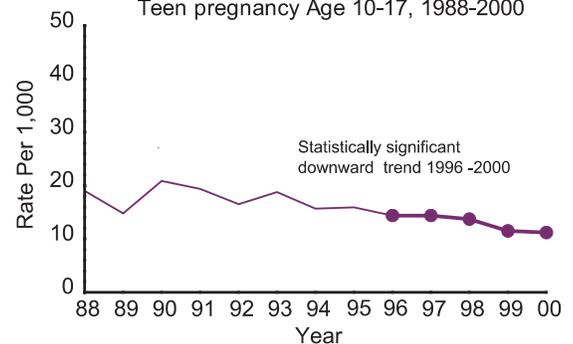


NOT a statistically significant trend 1996-2000

- Five-year average of 132 teen pregnancies per year with a rate of 13.5.
- Rate is statistically significantly **lower** than the state.
- The trend downward is statistically significant.

## Jackson County

Teen pregnancy Age 10-17, 1988-2000

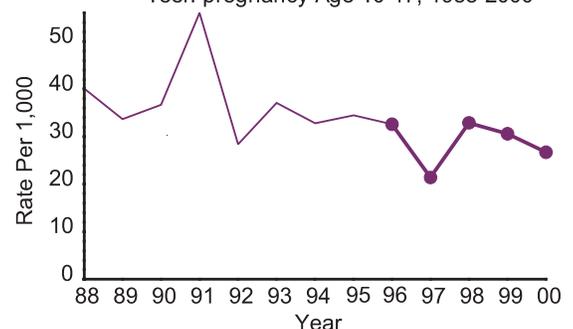


Statistically significant downward trend 1996-2000

- Jefferson has the **highest** teen pregnancy rate in the state.
- Five-year average of 32 teen pregnancies per year with a rate of 28.8.
- Rate is statistically significantly **higher** than the state.
- Trend is not statistically significant.

## Jefferson County

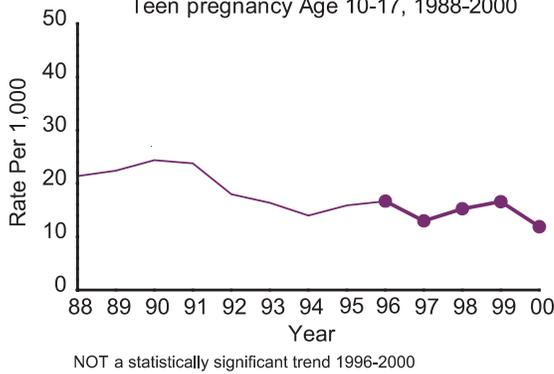
Teen pregnancy Age 10-17, 1988-2000



NOT a statistically significant trend 1996-2000

### Josephine County

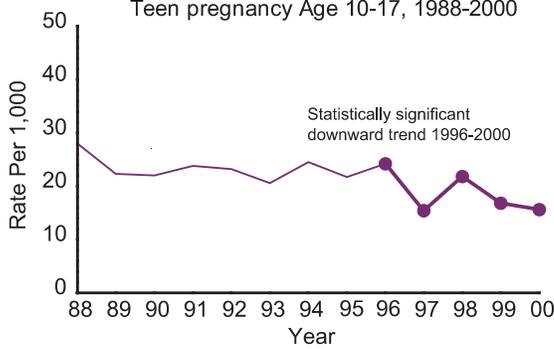
Teen pregnancy Age 10-17, 1988-2000



- Five-year average of 58 teen pregnancies per year with a rate of 14.7.
- Rate is statistically significantly **lower** than the state.
- Trend is not statistically significant.

### Klamath County

Teen pregnancy Age 10-17, 1988-2000



- Five-year average of 67 teen pregnancies per year with a rate of 18.7.
- Rate is not statistically significantly different than the state.
- The trend downward is statistically significant.

### Lake County

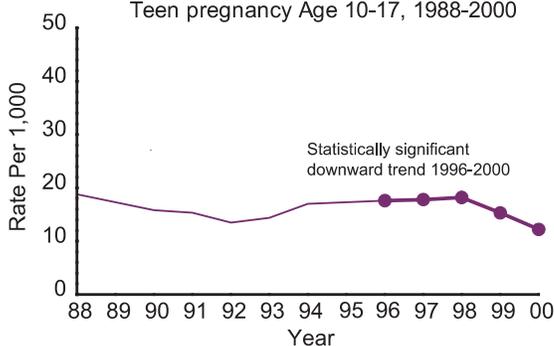
Teen pregnancy Age 10-17

Trend not calculated due to small numbers in certain years.

- Five-year average of 6 teen pregnancies per year with a rate of 12.8.
- Rate is not statistically significantly different than the state.

### Lane County

Teen pregnancy Age 10-17, 1988-2000



- Five-year average of 274 teen pregnancies per year with a rate of 16.1.
- Rate is not statistically significantly different than the state.
- The trend downward is statistically significant.

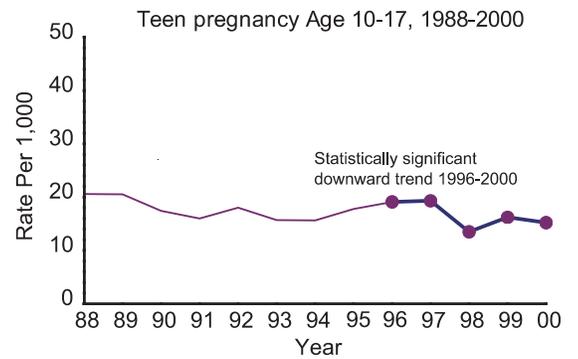
- Five-year average of 40 teen pregnancies per year with a rate of 17.1.
- Rate is not statistically significantly different than the state.
- Trend is not statistically significant.

### Lincoln County



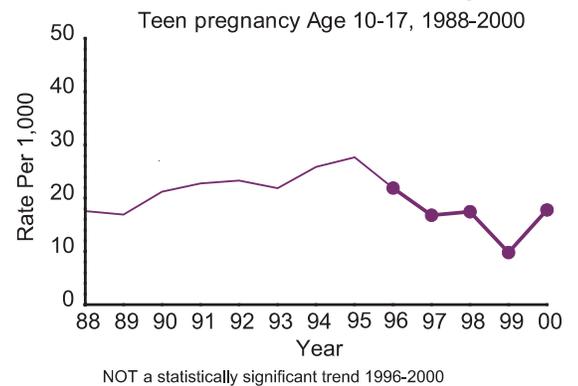
- Five-year average of 99 teen pregnancies per year with a rate of 16.7.
- Rate is not statistically significantly different than the state.
- The trend downward is statistically significant.

### Linn County



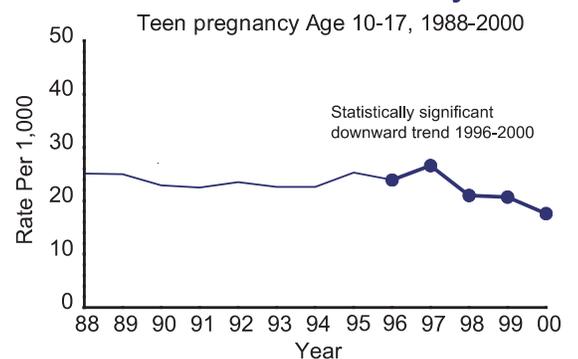
- Five-year average of 32 teen pregnancies per year with a rate of 16.6.
- Rate is not statistically significantly different than the state.
- Trend is not statistically significant.

### Malheur County

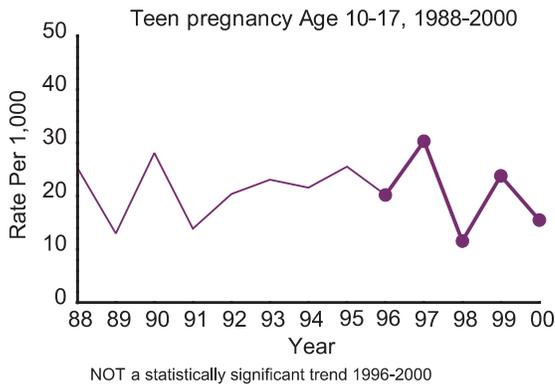


- Five-year average of 343 teen pregnancies per year with a rate of 21.8.
- Rate is statistically significantly **higher** than the state.
- The trend downward is statistically significant.

### Marion County

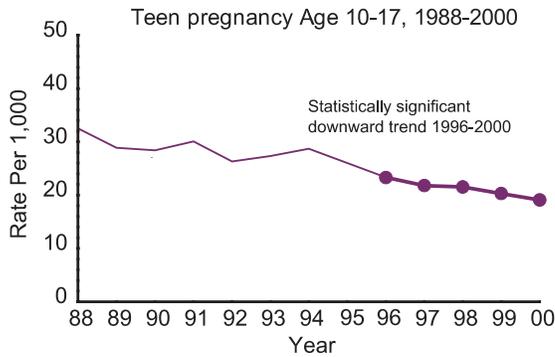


### Morrow County



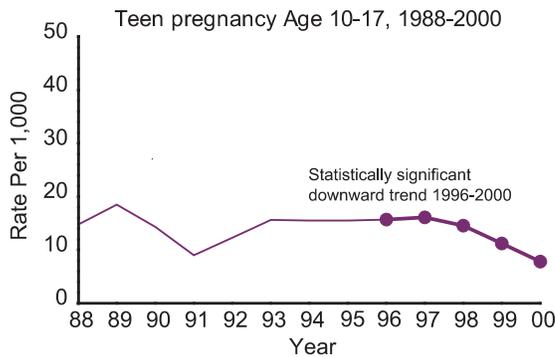
- Five-year average of 13 teen pregnancies per year with a rate of 19.9.
- Rate is not statistically significantly different than the state.
- Trend is not statistically significant.

### Multnomah County



- Five-year average of 678 teen pregnancies per year with a rate of 21.2.
- Rate is statistically significantly **higher** than the state.
- The trend downward is statistically significant.

### Polk County



- Five-year average of 45 teen pregnancies per year with a rate of 12.9.
- Rate is statistically significantly **lower** than the state.
- The trend downward is statistically significant.

### Sherman County

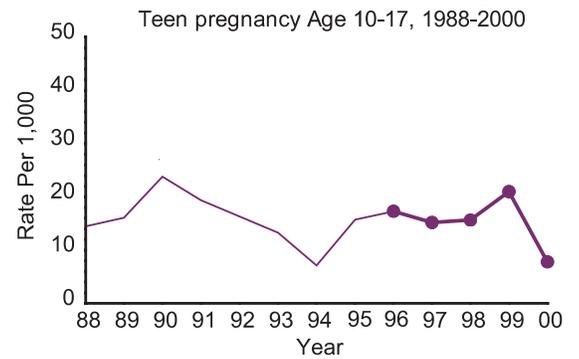
Teen pregnancy Age 10-17

Trend not calculated due to small numbers per year.

- Five-year average of 1 teen pregnancy per year.
- Rate is statistically significantly **lower** than the state.

- Five-year average of 20 teen pregnancies per year with a rate of 15.4.
- Rate is not statistically significantly different than the state.
- Trend is not statistically significant.

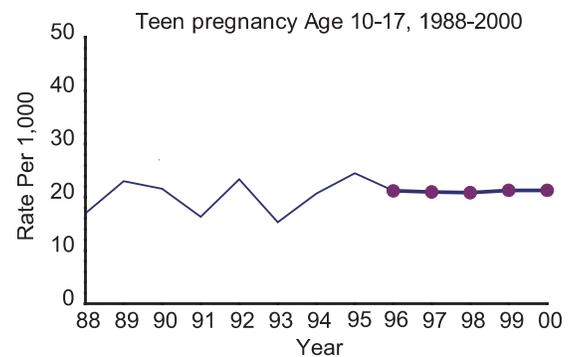
### Tillamook County



NOT a statistically significant trend 1996-2000

- Five-year average of 86 teen pregnancies per year with a rate of 21.1.
- Rate is statistically significantly **higher** than the state.
- Trend is not statistically significant.

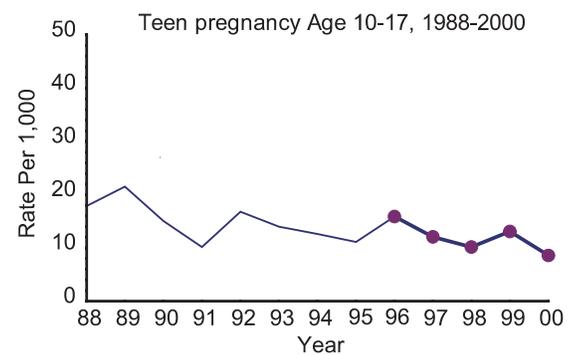
### Umatilla County



NOT a statistically significant trend 1996-2000

- Five-year average of 18 teen pregnancies per year with a rate of 11.9.
- Rate is statistically significantly **lower** than the state.
- Trend is not statistically significant.

### Union County



NOT a statistically significant trend 1996-2000

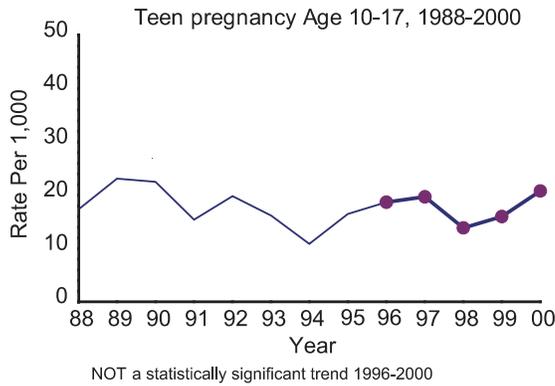
- Five-year average of 4 teen pregnancies per year with a rate of 9.5.
- Rate is statistically significantly **lower** than the state.

### Wallowa County

Teen pregnancy Age 10-17

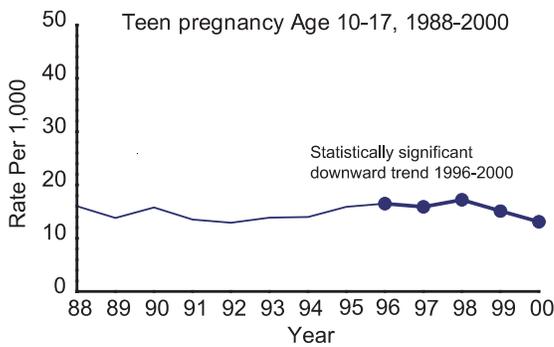
Trend not calculated due to small numbers in certain years.

### Wasco County



- Five-year average of 24 teen pregnancies per year with a rate of 17.8.
- Rate is not statistically significantly different than the state.
- Trend is not statistically significant.

### Washington County



- Five-year average of 350 teen pregnancies per year with a rate of 15.5.
- Rate is statistically significantly **lower** than the state.
- The downward trend is statistically significant.

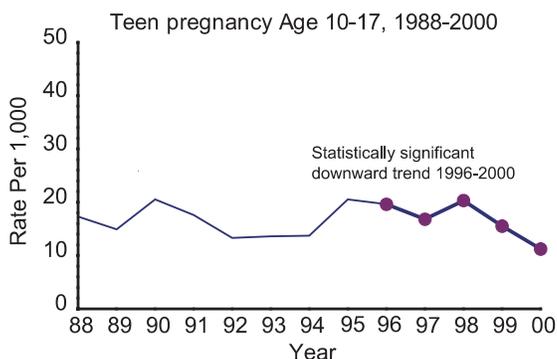
### Wheeler County

Teen pregnancy Age 10-17

Trend not calculated due to small numbers.

- Five-year average of 1 teen pregnancy per year.
- Rate is not statistically significantly different than the state.

### Yamhill County



- Five-year average of 85 teen pregnancies per year with a rate of 16.6.
- Rate is not statistically significantly different than the state.
- The trend downward is statistically significant.

# ACTION AGENDA 2000

Oregon's teens have done a remarkable job of reducing teen pregnancies over the last several years. Supporting them in their decisions are boyfriends/girlfriends, families, role models, local coalitions and state officials.

Together they have raised public awareness about the problem of teen pregnancy and prevention options.

No single approach is adequate to reduce the number of teen pregnancies in Oregon. A comprehensive approach that changes community norms, and gives young people options and protections is necessary.

That's the kind of comprehensive approach local coalitions and state officials have been working under for the last several years.

Oregon's teen pregnancy rate now stands at 14 pregnancies for every 1,000 girls ages 10 – 17 in 2000. That's even better than the state goal of 15.

The plan that helped shape this change is called *Action Agenda 2000*. It's focused on prevention.

*Action Agenda 2000* includes six key strategies. Several examples of the work being done and the strategies are listed below.

1. **Positive community values and norms.** Build positive values and norms through public awareness, adult involvement and cooperation of stakeholders.

*Local coalitions were provided with guidebooks to help them be more successful at managing and supporting their coalitions and communicating to the public.*

*A 10-minute video featuring the Governor and First Lady was produced and distributed to coalitions to raise public awareness about teen pregnancy prevention and to recruit additional support.*

*Media support with radio ads, posters and billboards was targeted to coalitions with higher teen pregnancy rates.*

2. **Skills for life.** Support and promote school- and community-based life skills development, including comprehensive sex education that is research-based and modeled after proven effective educational strategies for both girls and boys.

**Learn more about teen pregnancy prevention in Oregon at [www.hr.state.or.us/tpp](http://www.hr.state.or.us/tpp)**

3. **Abstinence education.** Make abstinence education available to all youth, emphasizing skill building to resist pressure to engage in premature sexual involvement.
4. **Contraceptive access.** Assist sexually active youth to avoid pregnancy by providing timely education, outreach and access to contraceptive services.
5. **Male involvement and leadership.** Encourage and provide opportunities for males (youth and adults) to be actively involved in adolescent pregnancy prevention, both on a personal level and in the community.

*Many coalitions in Oregon increased their attention to this strategy. A recent example was held at the school-based health center at Marshall High School in Portland.*

*Called "A meaningful and respectful approach," the project was designed to increase male involvement in adolescent pregnancy prevention efforts. The group met after school weekly, for eleven weeks, and participated in facilitated group discussions.*

*The facilitated group discussions were designed to provide an opportunity for the boys to:*

- *discuss positive images about what it means to be male*
- *learn and practice skills to communicate more effectively and develop respectful relationships*
- *gain awareness of societal influences that shape negative perceptions of being a man*
- *positively support one another*

6. **Legal Issues.** Support uniform application of statutory rape and sexual abuse statutes to reduce teen pregnancy. Ensure that children have financial and emotional support from both parents.

*Pilot programs in Crook, Marion and Josephine counties are using a multidisciplinary approach to teen sexual abuse allegations. The pilots seek a balance that will assist law enforcement to pursue predators without discouraging young moms from getting help. The pilot results will be available June 2002.*

#### **A NEW AGENDA**

**The success of *Action Agenda 2000* has lead local and state planners to fine-tune the strategies. In addition to improving the current strategies, the new plan will include support to young parents.**



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