Measuring Our Health

The Health Status
of El Dorado County
2008

2008 Health Status Report

- Fifth report in series
- Most comprehensive
- Available primarily at the Public Health Department web page
  - Easily updated
- Lead author
  - Lois Hathway, MPH, chief deputy registrar Vital Statistics Office

Measuring Our Health

The Health Status Report
of El Dorado County
2008

Why Measure Health Status?

- Information feeds action
  - Identifies preventable diseases or injuries in the population of interest
  - Targets sub-groups at higher risk of poor health
  - Generates hypotheses about possible causes
  - Helps the Public Health Department set priorities
 - Evaluates interventions

What Should We Measure?

- Disease and death
  - Infections, chronic diseases, injuries
- Risk factors
  - Health behaviors, environmental quality, access to health care
- Indirect factors
  - Income, poverty, school achievement

What Sources are Used?

- Any existing datasets we can get our hands on!
  - Vital statistics
  - Routinely collected disease surveillance data
  - Random telephone-based surveys like the California Health Interview Survey
  - Other sources, depending on the health-related indicators of interest
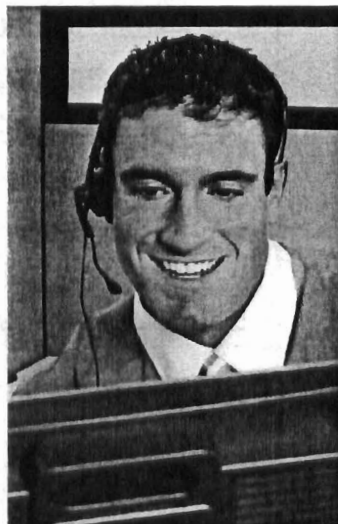
Limitations of the Data We Use

- Data were collected by others for other purposes
- Several outcomes are rare, so rates are unstable
- Some datasets are old, so data may not be current
- Differences in risk may be due only to differences in population, ie race, income
- Results demand caution!

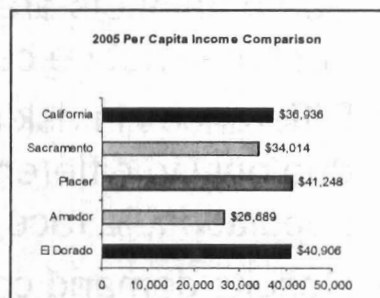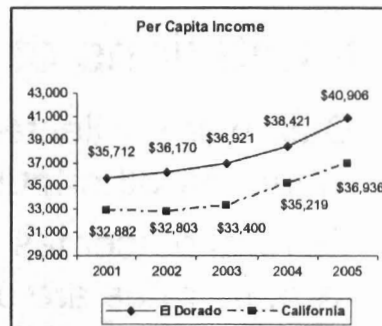*HALT!*

NIET IN SCHAKELEN DEFEKT

3

Our Methods

- Raw data collected from primary sources
  - Rates age-adjusted for valid comparisons
  - Statistically unstable rates identified
- Comparisons made
  - Between recent years
  - Between EDC and the state, region and targets

Income

- El Dorado is a wealthy county overall
  - 11th highest per capital income in the state
- Higher incomes are associated with
  - Good housing, sound diets, fewer unhealthy behaviors, better use of preventive care
  - Higher self-esteem

Per Capita Income

	2001	2002	2003	2004	2005
El Dorado	$35,712	$36,170	$36,921	$38,421	$40,906
California	$32,882	$32,803	$33,400	$35,219	$36,936

2005 Per Capita Income Comparison

California	$36,936
Sacramento	$34,014
Placer	$41,248
Amador	$26,689
El Dorado	$40,906

Poverty

- El Dorado County has relatively few residents living in poverty
  - Defined as income under $19,350 for a family of four (2005)
- Poverty is linked to
  - Insufficient housing and nutrition, greater risk of chronic illness, injury, ↑ health costs

Percent of People of All Ages Below Poverty

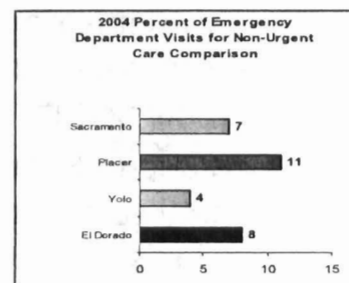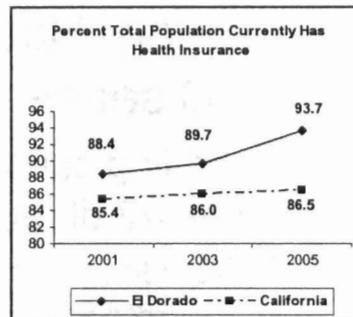|	2002	2003	2004	2005
California	13.3	13.8	13.2	13.3
El Dorado	7.1	7.5	6.9	7.7

2005 Percent of People of all Ages Below Poverty Comparison

California	13.3
Sacramento	13.6
Placer	5.5
El Dorado	7.7
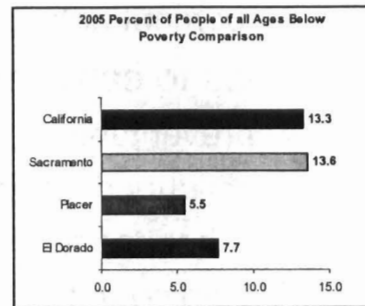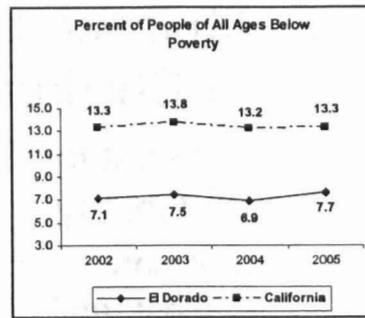
Access to Care

- Two main indicators
  - Insurance rate
  - Emergency visits for non-urgent care
- High insurance level
  - Linked to more timely and appropriate care
- High usage of ER for non-urgent services
  - Suggests inadequate access to primary care

Percent Total Population Currently Has Health Insurance

	2001	2003	2005
El Dorado	88.4	89.7	93.7
California	85.4	86.0	86.5

2004 Percent of Emergency Department Visits for Non-Urgent Care Comparison

Sacramento	7
Placer	11
Yolo	4
El Dorado	8

5

Health Insurance for Children

- A bright spot for El Dorado County
  - Fewer than 4 percent are uninsured here
  - 11 percent nationally
- Access to care links to
  - ↓ preventable illness
  - ↓ childhood disability
  - ↑ school performance
  - ↑ earning potential

Percent of Children Ages 0 - 18 Who Currently Have Health Insurance

El Dorado: 91.4 (2001), 92.3 (2003), 96.2 (2005)
California: 89.7 (2001), 92.3 (2003), 92.7 (2005)

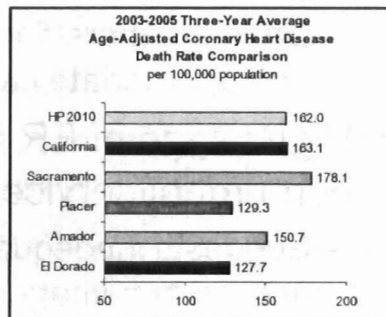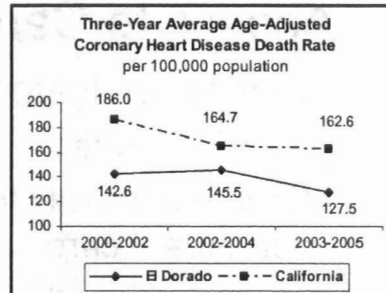— El Dorado — ·■· — California

2005 Percent of Children Ages 0 - 18 Who Currently Have Health Insurance Comparison

California	92.7
Sacramento	92.8
Placer	97.1
Yolo	93.5
El Dorado	96.2
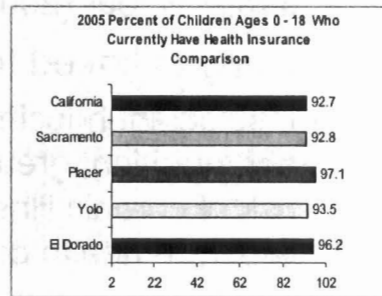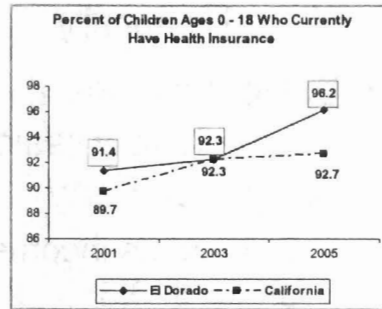
Coronary Heart Disease

- The leading cause of death – 1/3 of total
  - El Dorado rate is good and is getting better
  - Highly dependent on lifestyle: tobacco, diet, physical activity
  - Also depends on good primary care to control BP, lipids, diabetes

Three-Year Average Age-Adjusted Coronary Heart Disease Death Rate per 100,000 population

California: 186.0 (2000-2002), 164.7 (2002-2004), 162.6 (2003-2005)
El Dorado: 142.6 (2000-2002), 145.5 (2002-2004), 127.5 (2003-2005)

— El Dorado — ·■· — California

2003-2005 Three-Year Average Age-Adjusted Coronary Heart Disease Death Rate Comparison per 100,000 population

HP 2010	162.0
California	163.1
Sacramento	178.1
Placer	129.3
Amador	150.7
El Dorado	127.7

Diabetes

- Prevalence steadily climbing with obesity
  - 21 million Americans or 7% of population
  - One in three children born today can expect to become diabetic
- Diabetes mortality is low in El Dorado
  - 5th lowest in California
  - An indirect measure

Three-Year Average Age-Adjusted Diabetes Death Rate
per 100,000 population
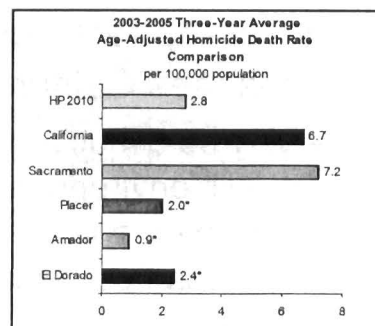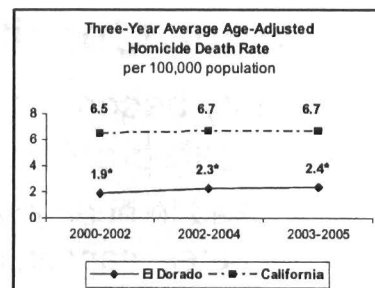
	2000-2002	2002-2004	2003-2005
California	21.0	21.3	22.3
El Dorado	13.6	11.9	12.0

— El Dorado — ■ — California

2003-2005 Three-Year Average Age-Adjusted Diabetes Death Rate Comparison
per 100,000 population

California	22.3
Sacramento	21.1
Placer	15.2
Amador	11.8*
El Dorado	12.0
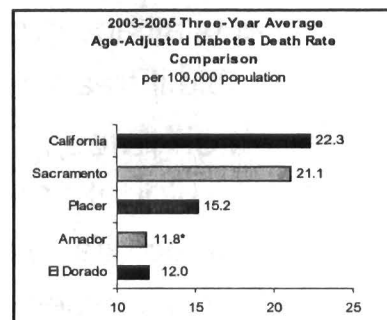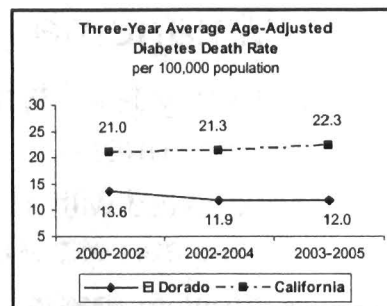
Homicide

- Relatively rare event in El Dorado County
  - 15th best in California
  - Half national rate and below the 2010 target
  - Still very high by international standards
- Strong association with substance abuse
  - 2/3 involve firearms

Three-Year Average Age-Adjusted Homicide Death Rate
per 100,000 population

	2000-2002	2002-2004	2003-2005
California	6.5	6.7	6.7
El Dorado	1.9*	2.3*	2.4*

— El Dorado — ■ — California

2003-2005 Three-Year Average Age-Adjusted Homicide Death Rate Comparison
per 100,000 population

HP 2010	2.8
California	6.7
Sacramento	7.2
Placer	2.0*
Amador	0.9*
El Dorado	2.4*

Melanoma

- Potentially fatal type of skin cancer
  - Associated with excess sun exposure
  - Rapidly increasing
  - Affects all age groups
  - Curable if treated early
- Very high rates in El Dorado County due to
  - ? Outdoor lifestyles
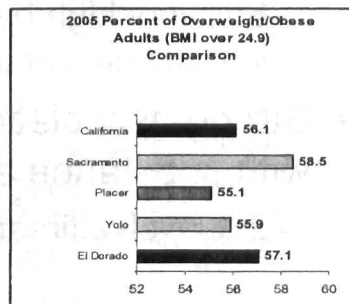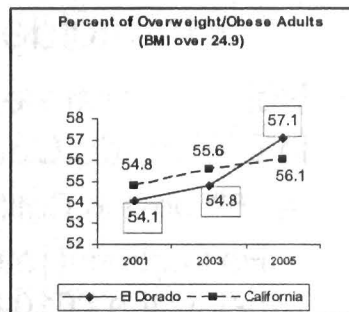 - ? Fair skin types

Five-Year Average Age-Adjusted Malignant Melanoma Incidence Rate
per 100,000 population

28.9
24.1
20.7
18.6
13.2

1994-1998   1996-2000   2000-2004

El Dorado — ■ — Sac Region

2000-2004 Five-Year Average Age-Adjusted Malignant Melanoma Death Rate Comparison
per 100,000 population

HP 2010	2.5
Sac Region	2.7
Sacramento	2.2
Placer	3.6
El Dorado	4.3

0   1   2   3   4   5
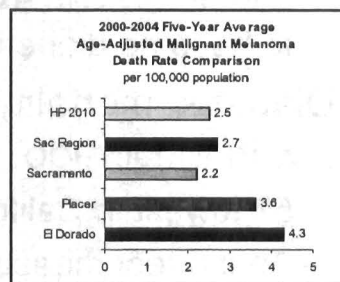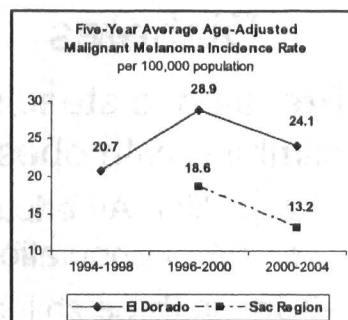
Adult Obesity

- Rapidly becoming our #1 health problem
  - Linked to heart disease, diabetes, cancer, stroke, arthritis and early death
- El Dorado rate now surpasses California
  - May be associated with a built environment that promotes automobile dependence, fast foods

Percent of Overweight/Obese Adults (BMI over 24.9)

57.1
55.6
54.8
56.1
54.1
54.8

2001   2003   2005

El Dorado — ■ — California

2005 Percent of Overweight/Obese Adults (BMI over 24.9) Comparison

California	56.1
Sacramento	58.5
Placer	55.1
Yolo	55.9
El Dorado	57.1

52   54   56   58   60

Motor Vehicle Crash Deaths

- The leading cause of years of life lost in El Dorado County under age 65 years
  - Especially common in young adults
  - Highest in rural areas
- Often preventable
  - Driver, vehicle and environmental factors
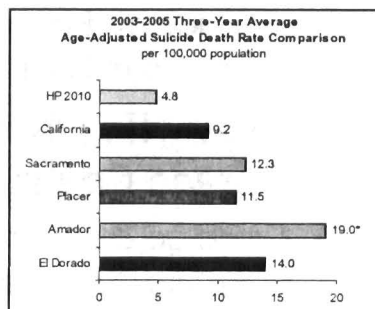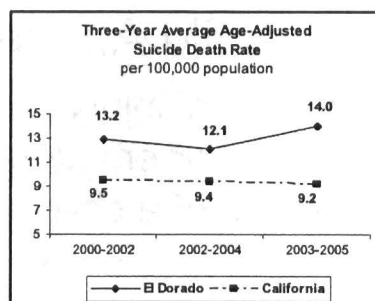
Three-Year Average Age-Adjusted Motor Vehicle Crash Death Rate
per 100,000 population

	2000-2002	2002-2004	2003-2005
El Dorado	11.9	14.6	14.5
California	11.1	12.1	11.7

2003-2005 Three-Year Average Age-Adjusted Motor Vehicle Crashes Death Rate Comparison
per 100,000 population

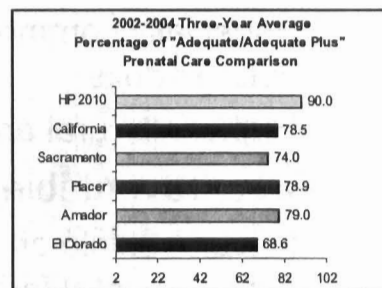|	Rate
HP 2010	8.0
California	11.7
Sacramento	12.5
Placer	12.3
Amador	27.3*
El Dorado	14.5
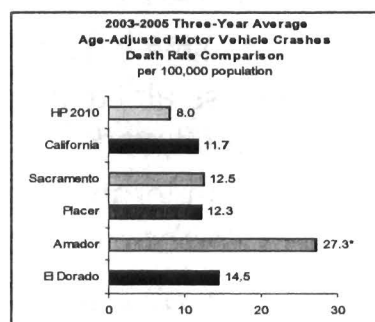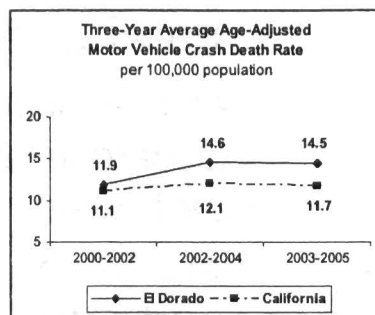
Suicide

- El Dorado's rate is higher than average
  - Linked to depression, social isolation, drug and alcohol abuse
  - Highest among white, middle-aged men
- Far more common here than homicide
  - Suicide rate is 6 times higher in El Dorado

Three-Year Average Age-Adjusted Suicide Death Rate
per 100,000 population

	2000-2002	2002-2004	2003-2005
El Dorado	13.2	12.1	14.0
California	9.5	9.4	9.2

2003-2005 Three-Year Average Age-Adjusted Suicide Death Rate Comparison
per 100,000 population

	Rate
HP 2010	4.8
California	9.2
Sacramento	12.3
Placer	11.5
Amador	19.0*
El Dorado	14.0

9

Prenatal Care

- Early and consistent prenatal care linked to healthier babies
- El Dorado County is doing worse recently
  - ? Access to providers
  - ? Less ability to take time off work
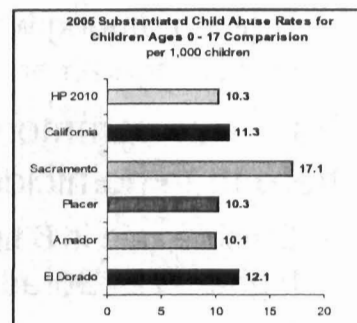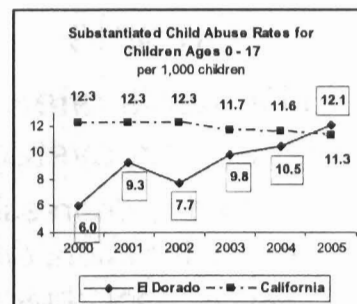 - ? Demographics of motherhood changing
- Now in lowest quartile

Three-Year Average Percentage of "Adequate/Adequate Plus" Prenatal Care

	1999-2001	2000-2002	2002-2004
El Dorado	76.4	73.9	68.6
California	77.6	76.9	78.5

◆— El Dorado —■·— California

2002-2004 Three-Year Average Percentage of "Adequate/Adequate Plus" Prenatal Care Comparison

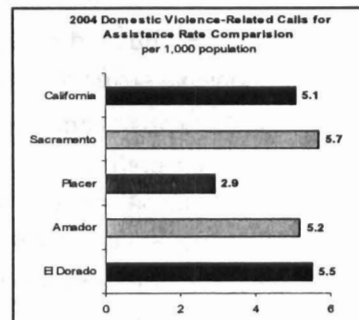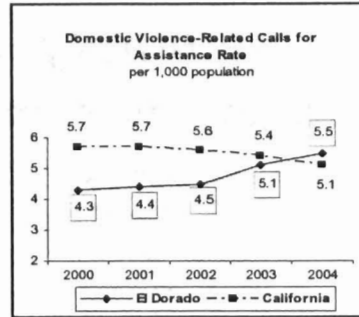|	
HP 2010	90.0
California	78.5
Sacramento	74.0
Placer	78.9
Amador	79.0
El Dorado	68.6
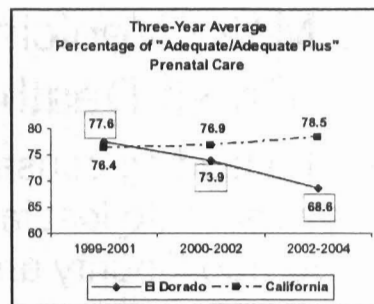
Child Abuse

- Physical injury, sexual abuse or emotional abuse of a child
  - Linked to crime, drug abuse, unemployment, violence and abuse of their own children
- Rapidly rising rates in El Dorado County
  - Could be due to better reporting, investigation

Substantiated Child Abuse Rates for Children Ages 0 - 17 per 1,000 children

	2000	2001	2002	2003	2004	2005
El Dorado	6.0	9.3	7.7	9.8	10.5	11.3
California	12.3	12.3	12.3	11.7	11.6	12.1

◆— El Dorado —■·— California

2005 Substantiated Child Abuse Rates for Children Ages 0 - 17 Comparision per 1,000 children

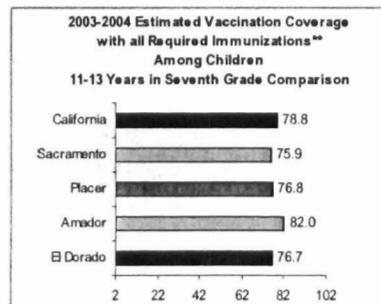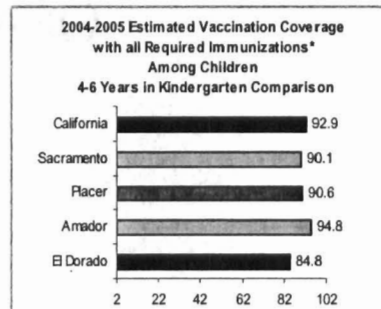|	
HP 2010	10.3
California	11.3
Sacramento	17.1
Placer	10.3
Amador	10.1
El Dorado	12.1

Domestic Violence

- A pattern of behavior aiming to control a domestic partner by fear and intimidation
  - Severe emotional and physical trauma
- Increasing steadily in El Dorado County
  - Always underreported
  - Changes may reflect improved reporting and investigation

Domestic Violence-Related Calls for Assistance Rate
per 1,000 population

Year	El Dorado	California
2000	4.3	5.7
2001	4.4	5.7
2002	4.5	5.6
2003	5.1	5.4
2004	5.1	5.5

2004 Domestic Violence-Related Calls for Assistance Rate Comparison
per 1,000 population

	Rate
California	5.1
Sacramento	5.7
Placer	2.9
Amador	5.2
El Dorado	5.5

Immunizations

- Vaccines now prevent many diseases that were killers of children
  - Required for school
  - Exemptions permitted
- El Dorado does poorly
  - 8th worst in state at kindergarten entry
  - More than enough susceptible children to sustain transmission

2004-2005 Estimated Vaccination Coverage with all Required Immunizations* Among Children 4-6 Years in Kindergarten Comparison

	Coverage
California	92.9
Sacramento	90.1
Placer	90.6
Amador	94.8
El Dorado	84.8

2003-2004 Estimated Vaccination Coverage with all Required Immunizations** Among Children 11-13 Years in Seventh Grade Comparison

	Coverage
California	78.8
Sacramento	75.9
Placer	76.8
Amador	82.0
El Dorado	76.7

In Summary: How We Stack Up

- **Target Indicators for 2010 ★ ◯ ★**

  -- Physical activity ★
  -- Obesity/Overweight
      Children ◯
      Adults ★
  -- Tobacco use (smoking) ★
  -- Substance abuse (deaths) ★
  -- Responsible sexual behavior
      STDs, births to adolescents ◯
  -- Injury and violence
      Unintentional injuries ★
      Child abuse, domestic violence ★
      Suicide, firearm-related deaths ★
      Homicide ◯

  -- Environmental quality
      Air quality ◯
      Water quality ★
  -- Immunization rates ★
  -- Access to health care
      Children's insurance ◯
      Emergency room usage ★

  HEALTHY PEOPLE 2010

Questions?

"Give it to me straight, Doc. How long do I have to ignore your advice?"