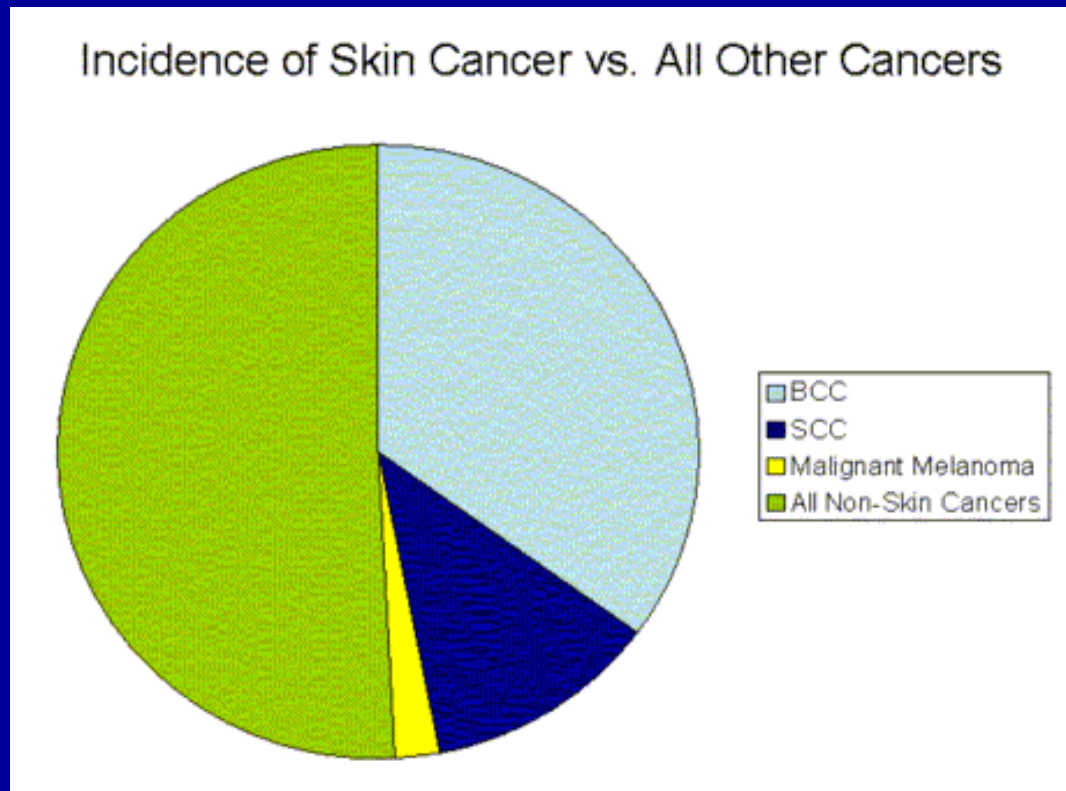


Kaiser Kids Sun Care Program

Lori A. Crane
Principal Investigator

Skin Cancer Prevalence

Skin Cancer is the Most Common Cancer in the US

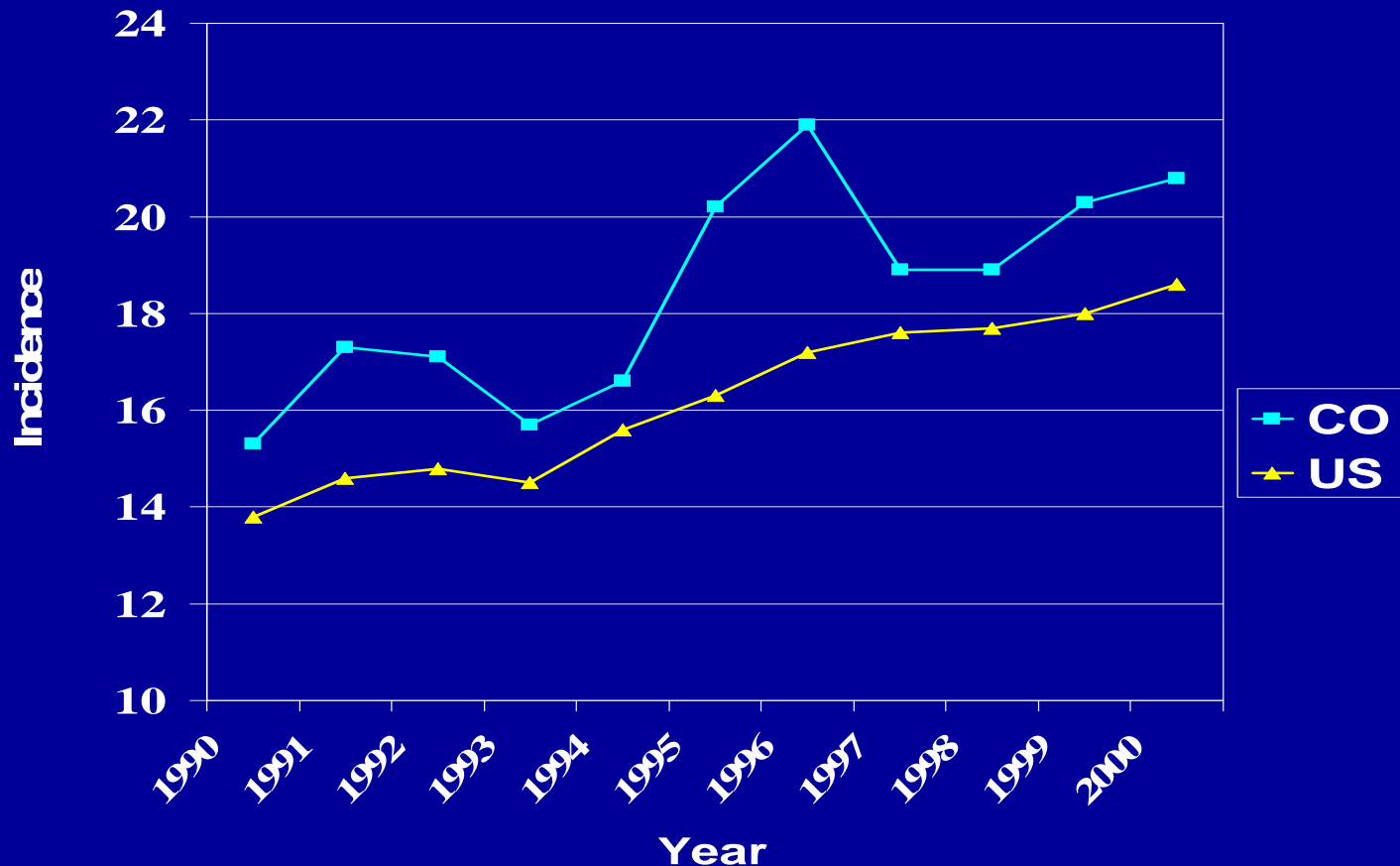


Years of life lost due to cancer

- **Melanoma is the most common cancer for women 25-29**
- **2nd to breast cancer for women 30-34**
- **Melanoma deaths represent an ave. of 17.1 years of potential life lost (YPLL)**
- **Ranks second in YPLL only to adult leukemia**
- **Outranks breast cancer (12.2 YPLL) and colon cancer (9.5 YPLL)**

Melanoma in Colorado

- Consistently outpaces US Incidence
- Incidence increasing over time



Skin Cancer in Colorado

- **Colorado's high altitude and sunny climate increase risk**
- **From 1993-2003 the melanoma incidence rate for non-Hispanic whites rose 12% for men, and 30% for women**



Skin Cancer Deaths

- **10,071 skin cancer deaths in the US (2006)**
- **Over 3X the number of motorcycle deaths**
- **Over 3X the number of drownings**
- **10X the number of people killed on a bicycle**



Types of Skin Cancer: Basal Cell Carcinoma



Types of Skin Cancer: Squamous Cell Carcinoma



Types of Skin Cancer: Melanoma



Skin Cancer Age of Onset (all types)

- May be seen as early as late teens
- Incidence rises rapidly after age 40
- Continues to increase with age



Children's Risk

- Childhood is a critical period for developing melanoma risk
- Most moles developed in childhood
- Sun exposure is related to mole development
- Higher number of moles is a major risk factor for malignant melanoma
- Each beach, or water-related vacation in childhood leads to an average of three new moles
- Light skinned children who tan have an average 11 more moles than those who do not tan



Risk Factors

- Freckling
- Sunburns
- Multiple nevi
- Abnormal nevi
- Susceptible phenotype
- Chronic sun exposure
- Presence of multiple factors can lead to a 200 fold increase in risk



Special Considerations with Children

- Moles may grow because the child is growing
- Such moles will grow at the same rate as nearby moles, and are not cause for concern
- Moles that grow at a different rate than, or appear markedly different from the others should be evaluated



UV Exposure

- Estimated 65-90% of melanoma cases are attributable to UV sunlight exposure
- UV intensity increases approx. 4% with every 1000 feet of altitude
- Children with a higher # of nevi have a history of more sun exposure
- Sunburns in childhood and adolescence increase melanoma risk



Why target infants and young children for skin cancer prevention?

- Estimated that 80% of lifetime sun exposure occurs in childhood
- Single serious sunburn in childhood can double risk for melanoma
- Establishing lifelong behaviors
- New parents are eager to do what is best for their child
- High frequency of visits in early childhood
- Health Care Providers have tremendous impact on parent's behavior towards children



Health Care Provider Advice Has Been Proven to Influence Behavior

- **Provider advice to quit smoking can double quit rates**
- **Cancer screening behaviors are closely linked to provider recommendations**
- **People of all ages report that their physician is their most important source of health information**



What pediatric care providers talk about in well-child care

- 99% car seats
- 97% nutrition
- 96% developmental milestones
- 80% Poisoning/burns
- 77% child proofing
- 68% parental smoking
- **30% sun protection**

Increasing the Effectiveness of Provider Advice

- Give strong, enthusiastic, unambiguous statements of advice
- Check for understanding
- Repeat key messages on multiple visits, over an extended period of time



Messages for Parents of Infants/Toddlers

- Avoidance is the best protection
- 10:00 am to 4:00 pm are peak hours
- When outside, cover babies
- Sunglasses and sun hats
- Evaluate daycare providers



Sunscreen

- Sunscreen alone is not enough to protect babies
- Sunscreen will not harm babies <6 mos but avoidance is recommended
- Most sunscreen is poorly applied - Use two coats!
- SPF 30 should be the minimum for kids
- Must be reapplied after prolonged exposure
- Rashes likely not due to active ingredients



Project Components

- Recommendations for provider advice at each well-child visit between 2 and 36 months.
- Written supportive materials for parents at each corresponding visit
- Sun protection resources



Parent Materials

- Tote bag with sun safe logo
- Infant/toddler sun hat
- Infant/toddler sunglasses with strap
- Visit specific literature



Practical Implementation Questions

- **What is the best way to distribute packets in this practice?**
- **Where should anticipatory guidance prompt sheets be kept for easy reference?**
- **How many bags/written materials can be stored on site? Where?**
- **Who will be responsible for identifying an eligible child and preparing materials for distribution?**
- **Who will be the liaison with Sun Safe staff?**

The Bottom Line

By adding as little as two minutes to each well-child visit by mentioning sun protection and providing materials to parents, you can help establish lifelong sun safe habits that will help reduce the likelihood of your patients developing skin cancer later in life.

