



# Understanding Early-in-Life Exposures to Carcinogens

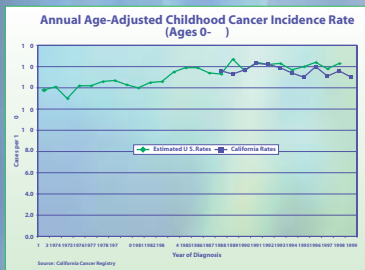
## Reducing Cancer Risks to Californians

### CANCER IN OUR CHILDREN

#### FETUS, INFANTS, AND CHILDREN



- ▶ 1,600 California Children are Diagnosed with Cancer Each Year.



- ▶ Cancer—Second Leading Cause of Death in Children. Except for Children, Overall Cancer Rates are Declining.



- ▶ Life-Time Cancer Risks from Exposures Early-in-Life are Poorly Understood for Many Carcinogens.

- ▶ Effect of Early-in-Life Exposures on Adult Cancers.

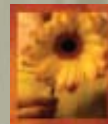


### INCREASED CANCER RISK FROM EARLY-LIFE EXPOSURES

#### EXAMPLE OF INCREASED RISK

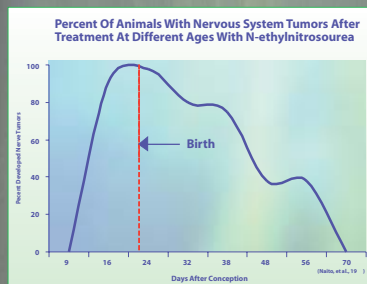
##### HUMAN STUDIES

- ▶ Ionizing Radiation — Thyroid Cancer
- ▶ DES — Female Reproductive Tissue Cancer



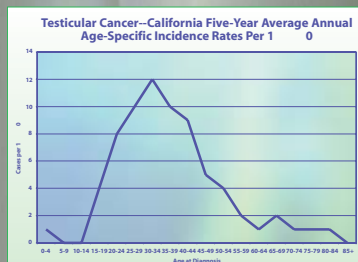
##### LAB ANIMAL STUDIES

- ▶ Vinyl Chloride — Liver Cancer
- ▶ Dioxins — Liver Cancer
- ▶ Urethane — Lung Cancer



#### SOME POSSIBLE FACTORS ASSOCIATED WITH INCREASED TESTICULAR CANCER RISK

- ▶ Cryptorchidism (Risk Factor Or Intermediary?)
- ▶ High maternal Age (Elevated Levels Of Pregnancy Estrogens)
- ▶ Birth Weight Below 3000 Grams Or Above 4000 Grams
- ▶ Childhood Residence In High Nitrate Area
- ▶ High Social Class



### DEHHA'S COMMITMENT

#### REDUCE CANCER RISKS FROM EARLY-LIFE EXPOSURES

- ▶ Improve Our Understanding of Lifetime Cancer Risk from Early Life Exposures to Carcinogens.



- ▶ Compile Database of Cancer Studies for Research and Policy.



- ▶ Develop Criteria for Evaluating Early-Life Exposures to Carcinogenic Agents.

- ▶ Identify Carcinogens Posing Special Risks to Infants and Children.

- ▶ Ensure Cancer Risk Assessment Procedures are Protective of the Fetus, Infant, and Child.

- ▶ Develop Health Standards that Protect Infants and Children.



- ▶ Reduce Cancer Incidence.