



Green Health Care

Good for People and the Environment

Teleosis Institute

**Calista Hunter, MD
Joel Kreisberg, DC**



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6th Great Extinction



Δ 40 million acres of forest lost every year (1)



Δ Extinction rates are 1,000 to 10,000 times faster (1)



Δ By 2050 climate change could wipe out up to 35% of all plant and animal species. (1)

Health and the Environment



Δ 60% of the benefits provided by the global ecosystem are being degraded or used unsustainably. (2)



Δ Poor environmental quality is responsible for 25% of the world burden of disease. (2)



Health Care and the Environment



Δ Hospitals generate more than two million tons of waste each year. In the past, many hospitals simply dumped all waste together, and burned them in incinerators. (3)

Δ Up to 25% of medical waste is hazardous. (3)

Environmental Health Advocate



Environmental Leadership



- △ Be knowledgeable about local environmental health issues
- △ Recognize the signs and symptoms of-and report environmental illness
- △ Teach and promote the importance environmental wellness
- △ Reconnect with your passion for nature and the purpose of environmental action



Environmental Health Issues of SF Bay Area – Air Pollution



Δ San Francisco is 4th worst county in the nation in terms of an individual's added cancer risk. (4)



Δ Bay Area has exceeded state health-based air quality standards for ground ozone concentration on 22 days thus far in 2006. (5)

- » Increase in asthma, respiratory ailments, cancers, cardiopulmonary disease, and premature death



Environmental Health Issues of SF Bay Area – Air Pollution



- Δ The single largest source of pollution in the Bay Area is the motor vehicle. (5)
 - » Contributing tons of nitrogen oxides, reactive organic gases, and particulate matter.



- Δ The second largest source of dioxin in the Bay Area is wood smoke.
 - » Produces 30% of the particulate pollution on a typical winter night (6)



Environmental Health Issues of SF Bay Area – Air Pollution



Δ Motor vehicles affect indoor air quality - West Oakland Port residents are exposed to 5x the level of diesel particulates **indoor** that people are exposed to outdoor in other parts of Oakland. (7)



Δ West Oakland children are 7 times more likely to be hospitalized for asthma. (8)



Environmental Health Issues of SF Bay Area – Air Pollution



△ In 1999, the health impacts of diesel soot on adults in Alameda County included:

- » 106 premature deaths
- » 130 non-fatal heart attacks
- » 2,772 asthma attacks
- » 80 chronic bronchitis
- » 17,172 work loss days (9)



Environmental Health Issues of SF Bay Area – Water Pollution



- Δ An analysis of tap water tests (1998 - 2003) shows that customers drank: (10)
 - » SF Regional Water System = 10 contaminants, incl. 4 unregulated
 - » EBMUD = 18 cont, 3 unregulated
 - » Contra Costa Water District = 39 cont, 10 unregulated

- Δ San Francisco tap water averages 0.3 mg/L of fluoride above recommended National Academy of Science's "safe dose". (11)
 - » Health risks: IQ deficit, bone fractures and dental fluorosis.



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Environmental Health Issues of SF Bay Area – Water Pollution



Δ Bay Area municipal drinking water typically has 100 or so pharmaceutical medicines and personal care products in significant concentrations. (12)



Δ A recent study found that a mixture of 13 common chemicals found in drinking water inhibits cell growth and causes negative changes to human embryonic cells. (13)



Environmental Health Issues of SF Bay Area – Water Pollution



Δ Pollutants of concern in Bay Area water: mercury, PCBs/Dioxins, pesticides and insecticides, and copper. (14)



Δ In an analysis of six species of Bay fish, a common flame-retardant chemical (PBDE) was detected in every fish sampled. (15)

» PBDE is toxin to our nervous system



Environmental Health Issues of SF Bay Area – Solid Waste



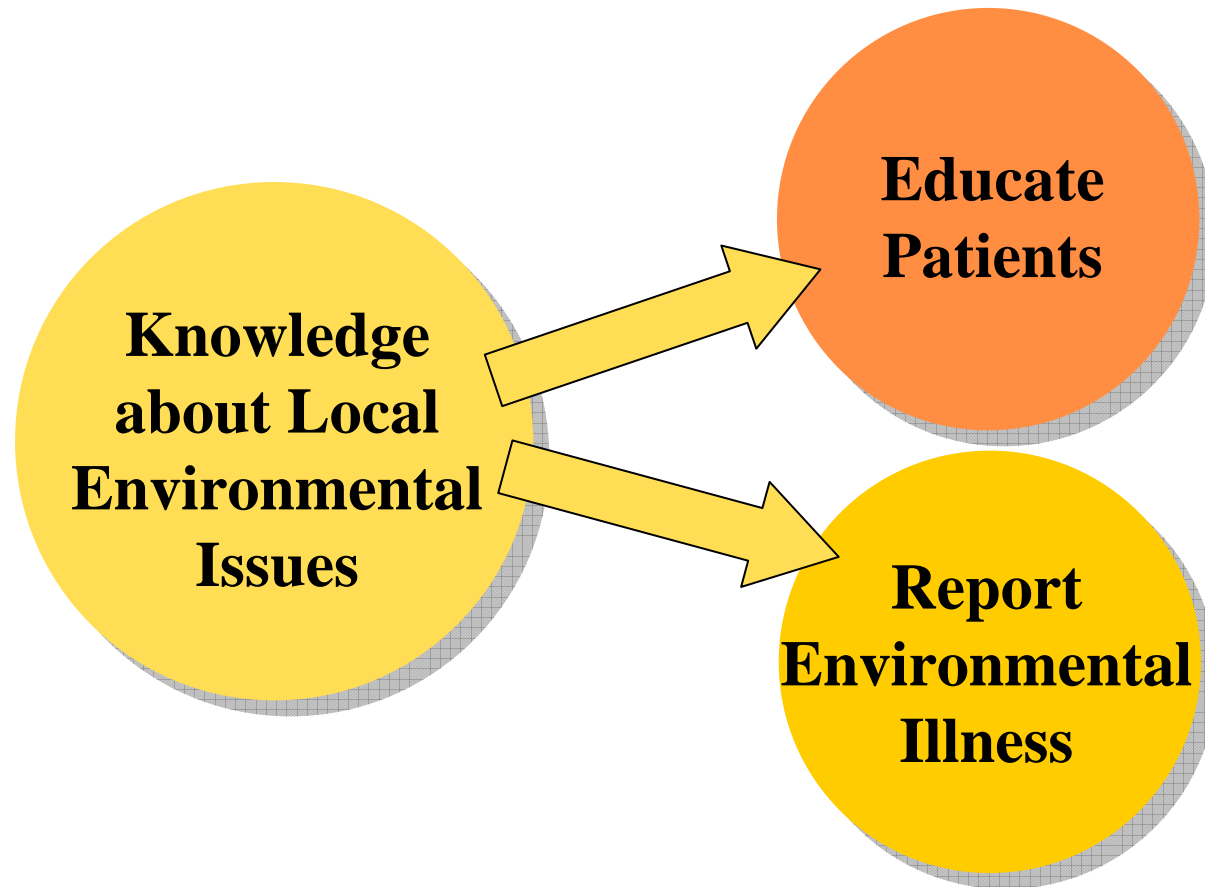
Δ According to 1995 EPA data, Contra Costa County was the largest generator of hazardous waste in West Coast. (16)



Δ Electronic waste accounts for 40% of the lead and 75% of the heavy metals found in landfills. (17)



Education & Environmental Illness



Green Health Care Leader



Δ A leadership model for health care that is good for people *and* the environment:

- » Advocate for environmental health
- » Practice sustainable medicine
- » Work in toxic-free facilities

Δ The Teleosis Institute provides training to support emerging Green Health Care Leaders.



Green Health Care Leaders



Practice Sustainable Medicine



Advance Medicine with Environmental Integrity



△ Understand the consequences of pharmaceutical and high-tech medicine

△ Emphasize wellness in medical practice



△ Offer and choose sustainable treatments

△ Explore the role of nature in healing



△ Promote the psychological and cultural benefits of prevention and sustainability



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The Principles of Ecologically Sustainable Medicine



Δ Safe, non-toxic, and harmless

Δ Effective

Δ Clean and non-polluting

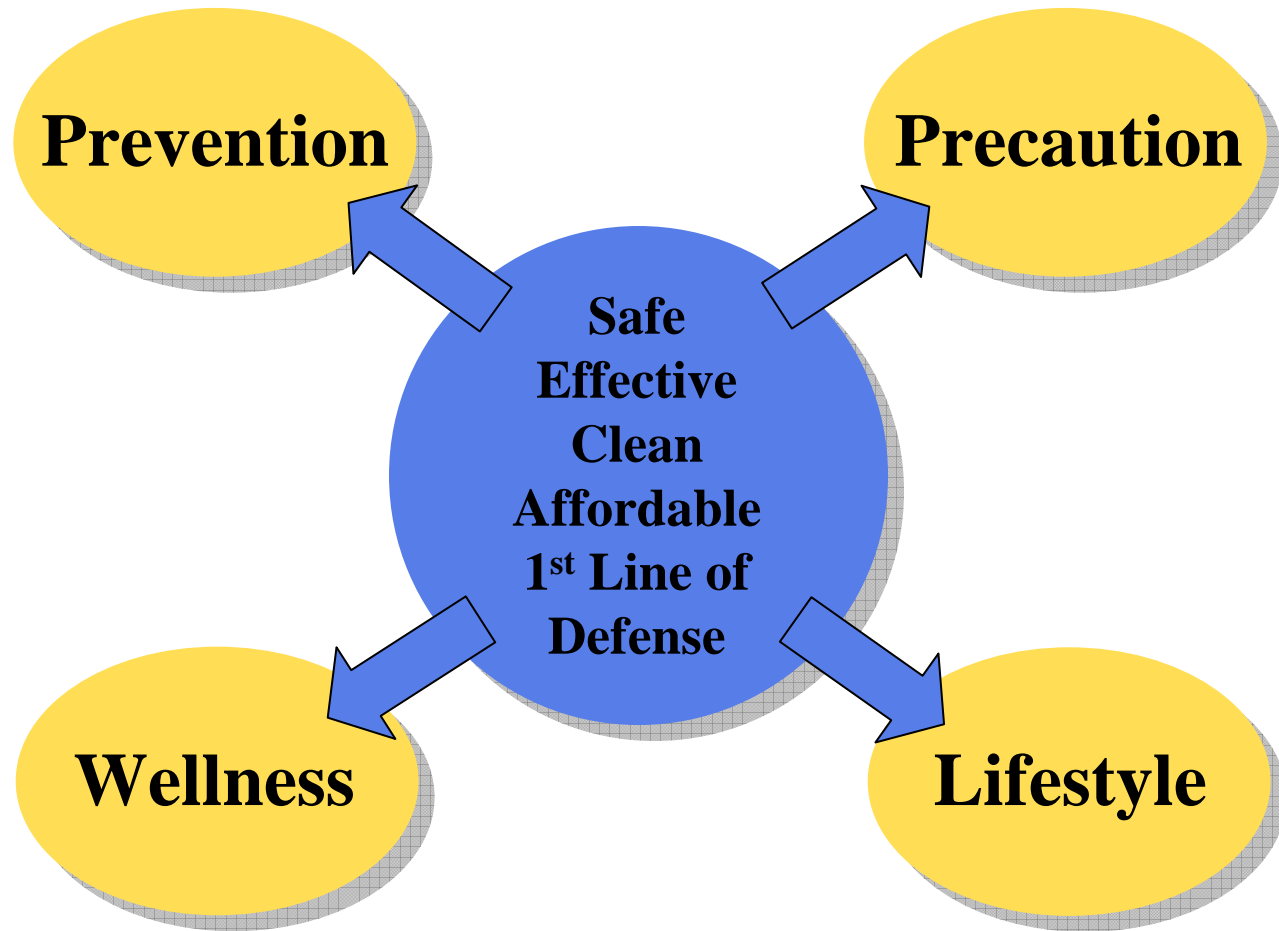
Δ Renewable and less resource-dependent

Δ Accessible and affordable

Δ First line of defense in sustainable health care



The Concepts of Sustainable Medicine



Examples of Sustainable Medical Practices



Δ Lifestyle Counseling, Nutrition,
Exercise, Health Education

Δ Physical Therapy, Massage

Δ Biofeedback, Guided Imagery,
Meditation

Δ Acupuncture, Therapeutic Touch

Δ Psychotherapy



Pharmaceutical Pollution Prevention (18)



- △ Always take environmental impact into account when comparing medications.
- △ Prescribe starter packs or refill packs when available.
- △ Encourage patients to return unused medications to the ‘take-back’ facilities.
- △ Do not prescribe more medications than can be used.
- △ Review and regularly reassess the patient’s total consumption of medication in order to reduce waste.
- △ Learn more about which drugs have large environmental impacts.

A Green Medical Office



Principles of Green Buildings



Δ Protecting the immediate health of the building occupants



Δ Protecting the health of the surrounding community



Δ Protecting the health of the global community and natural resources

– Green Guide for Health Care



A Green Office



Δ Reduce the environmental impact of the office.

- » Conserve resources
- » Reduce waste
- » Monitor environmental performance



Δ Explore the psychosocial benefits of shifting to more sustainable practices

Δ Deepen your connection to the growing green community



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Green Health Care Leader



- △ Advocates For A Healthy Environment
- △ Offer Sustainable Medicine
- △ Works In a Healthy Medical Office



- △ The Green Health Care Program is a practical, effective way of implementing environmentally responsible actions.





Green Health Care

Join Us!

www.teleosis.org

Good for People and the Environment

