

Part Two: Tobacco

- I. Health Risks
  - I.a. Coronary Heart Disease
    - a.i. Smokers have a 70% higher death rate of this disease than nonsmokers
    - a.ii. 120,000 deaths (total) of Coronary Heart disease annually
  - I.b. Lung Disease
    - b.i. Smoking is the major cause of chronic obstructive pulmonary disease in American adults
    - b.ii. Nearly 80,000 Americans die each year from smoking-related reparatory problems
  - I.c. Cancer
    - c.i. Smoking causes cancer of the lung, larynx, oral cavity, pancreas, bladder, and esophagus
  - I.d. Other:
    - d.i. Bronchitis
    - d.ii. Emphysema
    - d.iii. Sinusitis
    - d.iv. Peptic Ulcers
    - d.v. Influenza
    - d.vi. Hypertension
    - d.vii. Atherosclerosis
  - I.e. The more smoked, the higher the rate of the illnesses
- II. Stats
  - II.a. The average age to begin is 13
  - II.b. 4/5 smokers develop the habit before e 21
  - II.c. It is illegal in 44 states and DC to sell or advertise to minors
  - II.d. Each day, 3000 teens start smoking
  - II.e. There are now 2.8 million smokers under 18
  - II.f. Under 18, 1.54 billion is spent on cigarettes a year.
- III. Quitting
  - III.a. Methods:
    - a.i. Nicorette gum
    - a.ii. Nicotine patches
    - a.iii. Nasal Spray\*
    - a.iv. Nicotrol Inhaler\*
    - a.v. Zyban (pills)\*
    - a.vi. \* = by prescription only
  - III.b. Seeking help is the best way to quit, success rates for “Cold Turkey” quitters are not that high
- IV. Effects on the Body
  - IV.a. Lung Cancer

- a.i. Low incidences 60 yrs ago, because of less smoking
- a.ii. Today 100,000 deaths per year- cure rat 10%
- a.iii. Chemicals, and hot gases paralyze cilia
- a.iv. 90% of tars and resins remain in smokers lungs
- a.v. 400% increase in lung cancer in women
- a.vi. Shadows show up on x-ray usually too late
- a.vii. Stopping creates improvements within 2 weeks, after 10 years= nonsmoker
- IV.b. Emphysema
  - b.i. Hydrogen Cyanide and other gases damage the air sacs in the lungs
  - b.ii. Lungs lose elasticity and cant deflate, trapped air in sacs explodes when coughing
  - b.iii. Difficulty in breathing leads to heart failure or problems
- IV.c. Heart and Circulatory Diseases
  - c.i. Nicotine increases heart rats, blood pressure, fatty acids, lowers good cholesterol
  - c.ii. CO displaces O2 and damages blood vessel walls; fat collects
  - c.iii. Reynard's Disease: smoke ruins microscopic blood vessels and valves in the legs, hands
  - c.iv. Burger's Disease: smoke increases blood clotting
- IV.d. Bronchitis
  - d.i. 75% of cases caused by smoking
- IV.e. Ulcers
  - e.i. Smoking stimulates digestive juices but food is not there, so stomach lining is broken down instead
- IV.f. Cancer
  - f.i. Lip
  - f.ii. Throat
  - f.iii. Mouth
  - f.iv. tongue
  - f.v. Larynx
- IV.g. Impotency
  - g.i. 50% more if a smoker
- IV.h. Second Hand Smoke
  - h.i. CO and excess chemicals inhaled
  - h.ii. Might be even worse for you
- IV.i. Cigarettes
  - i.i. Lose effectiveness of vitamins, medicine, birth control pill, etc.
- IV.j. Taste buds
  - j.i. Numbed
- IV.k. Damage to senses
  - k.i. Hearing
  - k.ii. Eyesight
  - k.iii. Teeth
- IV.l. Maternal Smoking

- IV.m. 1 pack of cigarettes= 1000 extra heart beats a day
- IV.n. Over 50,000 deaths a year due to 2<sup>nd</sup> hand smoke
  - n.i. CO causes premature births, stillborns, miscarriage, and birth defects and underdeveloped babies
- V. Chewing Tobacco
  - V.a. Just as bad
  - V.b. Leukoplachia
    - b.i. Skin on mouth hardens
    - b.ii. NOTE: it is not cancer, but a prerequisite
  - V.c. Affects anything in the mouth
- VI. Hammond Study:
  - VI.a. 1 pack; 16 yrs old; 1 million studies duplicated worldwide
    - a.i. Between 45-64 yrs old smokers had 2x higher death rates
    - a.ii. Lung Cancer: 10x higher death rate
    - a.iii. Bladder 3x “ “
    - a.iv. Heart Disease: “ “
    - a.v. Emphysema: 20X “ “
    - a.vi. Average 8 yrs off of life- 3- 12 min per cigarette
    - a.vii. Quality of life destroys regardless of life expectancy
- VII. Contents of a Cigarette
  - VII.a. At least 43 different carcinogenic substances
  - VII.b. Acetone
  - VII.c. Hydrogen Cyanide
  - VII.d. Formaldehyde
  - VII.e. Methanol
  - VII.f. Tar
  - VII.g. High Nitrate content
  - VII.h. “Flavor Enriching Materials”
  - VII.i. Acetic Acid
  - VII.j. Ammonia
  - VII.k. Arsenic
  - VII.l. Butane
  - VII.m. Cadmium
  - VII.n. Carbon Monoxide
  - VII.o. Nicotine and DDT
  - VII.p. Hexamine
  - VII.q. Methane
  - VII.r. Methanol
  - VII.s. Naphthalene
  - VII.t. Nitrobenzene
  - VII.u. Naphthalene
  - VII.v. Nitrobenzene
  - VII.w. Nitrous Oxide Phenols
  - VII.x. Satiric Acid
  - VII.y. Toluene
  - VII.z. Vinyl Chloride

- VIII. Vocabulary:
- VIII.a. Cilia- the hairs in your throat that move dirt out
  - VIII.b. Hemoglobin- a metal in your blood that O<sub>2</sub> attaches to bring oxygen to your cells
  - VIII.c. Carbon Monoxide- a poisonous gas because it replaces O<sub>2</sub> in the hemoglobin and makes you suffocate
  - VIII.d. Sinusitis-
  - VIII.e. Bronchitis- inflammation of the bronchial tubes, therefore constricting them
  - VIII.f. Tar-
  - VIII.g. Leukplachia-
  - VIII.h. Atherosclerosis-
  - VIII.i. Benzopyrene-
  - VIII.j. Anoxia-
  - VIII.k. Emphysema- the damaging or destroying of air sacs in the lungs therefore making it hard to breathe
  - VIII.l. Tolerance-
  - VIII.m. Snuff- chewing tobacco
  - VIII.n. Nicotine
  - VIII.o. Carcinogens