

CHAPTER ONE: INTRO – EVALUATION OF EVIDENCE . . .

- Regarding the four-level hierarchy for classifying the strength of causal inferences from available evidence, Level 1 states that evidence is:
 - sufficient
 - suggestive but not sufficient
 - inadequate
 - not sufficient at all
- Mode of _____ refers to the process by which an agent causes disease.
 - transference
 - mobility
 - action
 - movement
- Of the 9 area in Austin Bradford Hill's criteria, number 7 is:
 - Plausibility
 - Consistency
 - Biological gradient
 - Coherence

CHAPTER TWO: THE CHANGING CIGARETTE

- Before _____, only 0.6 percent of cigarettes were filtered.
 - 1930
 - 1950
 - 1970
 - 1980
- Cigarette smoke contains more than _____ chemicals, including at least 69 known carcinogens.
 - 7,000
 - 700
 - 500
 - 300
- The _____ provides that premarket review of certain tobacco products by FDA is required before the products may be marketed.
 - Tobacco Control Act
 - Stomp Tobacco Act
 - Nicotine Act
 - Smoking Advertisement Act

CHAPTER THREE: CHEMISTRY AND TOXICOLOGY . . .

- Mainstream smoke (from the butt end) contains considerably more cyanide than sidestream smoke (from the opposite end) does.
 - True
 - False
- The tobacco leaf contains many alkaloid chemicals; _____ is the most abundant.
 - piperidine
 - isoxazole
 - nicotine
 - tropane
- (_____-)nitrosamines are a class of chemical compounds containing a nitroso group attached to an amine nitrogen.
 - O
 - N
 - X
 - R
- _____s are chemical compounds with two or more condensed aromatic and other cyclic rings of carbon and hydrogen atoms.
 - JKE
 - VTR
 - PAH
 - WSA
- _____ amines (HCAs) are a class of chemical compounds that contain at least one cyclic ring and an amine-substituted ring.
 - Heterogeneous
 - Helical
 - Heterocyclic
 - Hyperactive
- In addition to lamina, cigarette filler often contains puffed or expanded tobacco, tobacco stems, humectants, and various flavor additives.
 - True
 - False
- Cigarette smoking is a risk factor for bladder cancer. The increased mutagenicity of smokers' urine was first shown in:
 - 1967
 - 1957
 - 1987
 - 1977
- In human studies, smoking was shown to increase the frequency of HPRT mutants in peripheral blood lymphocytes by approximately:
 - 30%
 - 18%
 - 50%
 - 3%
- Study findings indicate that cytotoxicity may play a role in several tobacco-related chronic diseases, including emphysema.
 - True
 - False
- In one study, researchers observed nonneoplastic tumors throughout the _____ of animals exposed to smoke.
 - liver
 - respiratory tract
 - skeletal system
 - brain
- Researchers demonstrated fetotoxicity from cigarette smoke exposure by reporting _____ in rats and mice exposed during gestation.
 - increased nausea
 - reduced fetal weight
 - increased fetal weight
 - increased mortality
- It has been shown that direct nicotine administration to humans or animals _____ body weight and caloric intake.
 - slightly increases
 - sharply increases
 - decreases
 - has no effect on

CHAPTER FOUR: NICOTINE ADDICTION

- The pharmacologic and behavioral processes that determine tobacco addiction are similar to those found in heroin and cocaine.
 - True
 - False
- Researchers have used the _____ Test for Nicotine Dependence (FTND) to determine the degree of dependence in smokers.
 - Fairview
 - Fenabi
 - Ferrovie
 - Fagerström

41. Researchers believe that aromatic amines in tobacco smoke contribute to smoking-related _____ cancer.
 A pancreatic B colon C bladder D thyroid
42. Researchers have established cigarette smoking as a major cause of lung cancer: more than _____ of cases are attributable to smoking.
 A 50 percent B 65 percent C 73 percent D 85 percent
43. The GSTM_____ enzyme is important in detoxifying carcinogens.
 A 1 B 2 C 3 D 4
44. Tobacco smoke is *lacking* in reactive oxygen species that can oxidize DNA bases.
 A True B False
45. The _____ assay measures the expression level of damaged reporter genes, which are involved in reactivation of the host cell.
 A TLR B HCR C RRY D OIC
46. The RAD23B gene is an evolutionary, well-conserved gene with _____ exons.
 A 8 B 4 C 25 D 10
47. DNA polymerases are key players in mutation induction, introducing mutations during cellular:
 A replication B osmosis C diffusion D respiration
48. The most frequently inactivated tumor-suppressor gene in lung cancer is:
 A IU89 B TP53 C RR34 D BN21
49. _____ gene expression is common in lung cancer.
 A Slight decreased B Increased C Marked decreased D An absence of
50. In oral cancers, it is shown that the TP53 mutation has _____ in the prevalence of mutations among heavy smokers versus nonsmokers.
 A a seven fold increase B an almost 4 fold increase C a 2 fold increase D an eight fold increase
51. Apoptosis was first described in 1972. The term "apoptosis" is from the Greek word for "_____."
 A breaking down B bringing together C falling off D building around the center
52. Activation of the RAS pathway sends a strong anti-apoptotic signal, and the constitutive activation of RAS can _____ normal cells.
 A dissolve B speed the duplication of C do no damage to D transform
53. Cigarette smoke _____ COX-2 expression by lung fibroblasts in vitro.
 A increases B slightly decreases C markedly decreases D has no effect on
54. COX-2 over-expression in lung cancer is associated with tumor angiogenesis and survival and proliferation of tumor cells.
 A True B False
55. More than _____ genes are inactivated by gene promoter hypermethylation in lung cancer.
 A 12 B 22 C 42 D 50
56. A hallmark of the _____ cell is the ability to disrupt the tightly regulated cell-cycle control and enable the cell to bypass checkpoints.
 A cardiac muscle B pulmonary tissue C neoplastic D hepatic tissue
57. Smoking and exposure to asbestos interact synergistically to increase the risk for lung cancer.
 A True B False

CHAPTER SIX: CARDIOVASCULAR DISEASES

58. In a US CDC 2008 report, smoking accounted for 33 percent of all deaths from CVD in persons older than _____ years of age.
 A 20 B 27 C 35 D 54
59. The risks of MI and death from CHD are _____ among former smokers than among continuing smokers in many studies.
 A slightly higher B lower C much higher D about equal
60. The _____ study is a case-control investigation of acute MI in 52 countries around the world, including North and South America.
 A ALLHEART B INTERHEART C PERIHEART D BIGHEART

61. In regular smokers, carboxyhemoglobin levels average about _____ percent, compared with 10 percent or higher in heavy smokers.
 A 8 B 5 C 12 D 15
62. In one study, intravenous nicotine, nicotine nasal spray, and nicotine chewing gum all increased the heart rate up to _____ per minute.
 A 2 beats B 7 beats C 10 to 15 beats D 21 beats
63. Smoking impairs the ability of the endothelium to resist thrombosis.
 A True B False
64. Administration of vitamin _____ reverses the impairment of endothelium-mediated vasodilation in smokers.
 A D B K C A D C
65. Studies have reported that sudden cardiac death is _____ times higher in smokers than in nonsmokers.
 A 2 B 1.5 C 2.5 D 3.5
66. Study findings indicate that circulating levels of _____ increase in smokers and decrease with smoking cessation.
 A red cells B white cells C white cell antibodies D fibrinogen
67. In one study, it was found that insulin sensitivity was significantly lower (by 10 to _____ percent) in smokers versus nonsmokers.
 A 15 B 20 C 30 D 40
68. One study showed that the albumin excretion rate was _____ times higher in smokers than in nonsmokers, after statistical corrections.
 A 2.8 B 2.1 C 1.5 D 1.3
69. Cigarette smoking is thought to raise the LDLc to HDLc ratio by _____ percent.
 A 5 B 10 to 12 C 15 to 20 D 35
70. _____ standard markers of lipids may be altered in cigarette smokers.
 A Only LDLc B Only serum triglyceride levels C Numerous D Only HDLc
71. Smoking cessation after MI reduces the risk of cardiovascular morbidity and mortality by _____ percent.
 A 17 to 19 B 36 to 50 C 22 D 5
72. Even with the most successful counseling interventions, at least 40 percent of smokers who have cardiac disease resume smoking within:
 A 1 year B 5 years C 3 years D 7 years
- CHAPTER SEVEN: PULMONARY DISEASES**
73. Natural respiratory defenses are critical because of the substantial volume of air inhaled daily: about _____ liters per day.
 A 75 B 100 C 1,000 D 10,000
74. Emphysema was first described by _____ in 1834 on the basis of observations made on the cut surface of postmortem human lungs.
 A René Laënnec B Ronaldo Rosselini C Brian Cartwright D Giuseppe Vitorelli
75. The _____ cells covering the lung surface are a key in defending the lung against inhaled gases and particles.
 A epithelial B prokaryotic C erythroid D bristle
76. The epithelium that covers the follicles in lung tissue contains _____ cells that transport antigens from the lumen to the lamina propria.
 A specialized Q B specialized L C specialized M D specialized R
77. Free radicals are molecules with at least _____ unpaired electron.
 A four B three C two D one
78. Catalase is a tetrameric _____ that undergoes oxidation and reduction at its active site in the presence of H₂O₂.
 A eosinophil B hemoprotein C platelet D carbohydrate
79. _____ trapping, a technique in which a radical reacts with a more stable molecule, can be used to measure oxidants in biologic systems.
 A Spin B Turn C Flip D Reverse
80. _____, the major thiol antioxidant in the lungs, rapidly decreases in the lung tissue of rats after exposure to cigarette smoke.
 A TTR B GSH C RUI D BEW

81. After just one cigarette has been smoked, nitrite, nitrate, and cysteine _____ in peripheral blood.
 A become slightly elevated B greatly increase C decrease D levels are maintained
82. In animal models, markers of oxidative stress generally increase during the first _____ hours after exposure to cigarette smoke.
 A 2 B 4 C 6 D 17
83. _____ refers to cellular death, which is organized and noninflammatory.
 A Necrosis B Flat-lining C Lytic adhesion D Apoptosis
84. Inflammatory cells linked to the development of emphysema include neutrophils, macrophages, and lymphocytes.
 A True B False
85. The BAL (Bronchoalveolar _____) technique samples cells and mediators from the lower respiratory tract.
 A Latency B Lancaster C Lavage D Lipid
86. _____ terminal air spaces are the hallmark of emphysema
 A Enlarged B An increase of C Miniscule D A decrease of
87. _____ from exposure to tobacco smoke has a role in the pathogenetic process leading to chronic obstructive pulmonary disease.
 A Mental stress B Oxidative stress C Muscular stress D Neural stress

CHAPTER EIGHT: REPRODUCTIVE AND DEVELOPMENTAL EFFECTS

88. Tobacco smoke contains _____ compounds, some of which are known to have toxic effects on reproductive health.
 A between 100 and 200 B almost 95 C nearly 800 D thousands of
89. The PCASRM has estimated that _____ percent of infertility may be attributable to smoking.
 A 5 B 8 C 10 D 13
90. Epidemiologic studies have consistently reported a(n) _____ risk of placenta previa among smokers.
 A increased B mildly reduced C unaffected D greatly reduced
91. Preterm delivery complicated _____ percent of pregnancies in the United States in 2003.
 A 8.4 B 12.3 C 3.2 D 1.2
92. The highest quality studies indicate birth weight decrements of 15 to _____ g from exposure to secondhand smoke.
 A 35 B 50 C 100 D 245
93. Many studies have found a slightly increased risk of approximately _____ for stillbirth or neonatal mortality associated with smoking.
 A 20 to 30 percent B 8 to 10 percent C 5 percent D 44 percent
94. _____ studies show that smokers have lower circulating levels of estriol and estradiol than do nonsmokers.
 A Very few B No C Several D Only Asian-based
95. The _____ is an in vivo target of cigarette smoke and its components.
 A pancreas B urinary bladder C oviduct D distal small bowel
96. The fetus of a smoker develops under conditions of _____ partial pressure of O₂.
 A slightly increased B greatly increased C an unaffected D reduced
97. Smoking acutely increases the heart rate and blood pressure of smokers, particularly after _____ smoking.
 A a period of abstinence from B a long period of C completely quitting D changing cigarette brands in
98. A study of more than 5,000 participants found that smokers tended to have a lower mean diastolic blood pressure of _____ of mercury.
 A 8 to 10 millimeters B 1 to 3 millimeters C 5 to 7 millimeters D 8 to 9 millimeters
99. A large study, with 67 pregnant smokers, found a significant increase of _____ in maternal heart rate immediately after smoking.
 A 3 percent B only 1 percent C 6 percent D 4 to 5 percent
100. Regarding most studies for maternal blood pressure, increases of less than _____ percent were observed.
 A 12 B 15 C 9 D 5

101. A reactive NST (_____ nonstress test) is a sign of fetal well-being.
 A nominal B nosocomial C neural D noninvasive
102. The embryo is most easily disturbed during the organogenesis period, from day 15 to day _____ after conception.
 A 20 B 35 C 45 D 60
103. Epidemiologic studies show that offspring of maternal smokers have abnormal lung function.
 A True B False
104. _____, smoking appears to have immunosuppressive effects.
 A In 100 percent of cases B In general C In no studies D In very few studies
105. _____ is formed as a by-product of combustion and is thus present in tobacco smoke.
 A CO₂ B H C CO D H₂O
106. The dose of the toxin, CO, per cigarette is _____ times the dose of nicotine.
 A 5 B 12 C 10 to 20 D 3
107. The binding of CO to hemoglobin is tenacious, with a half-life of _____ hours.
 A five to six B around two C four D over eleven
108. _____, the principal alkaloid in tobacco, is a major contributor to the addictive properties of smoking.
 A Irritant bases B Nicotine C CO D Tar
109. Regarding tobacco smoke studies, arsenic was detectable but not quantifiable (limit of quantitation = _____ ng per cigarette).
 A 1.2 B 2.7 C 5.4 D 12.8
110. _____ metals can influence electron-exchange reactions and oxidative stress within cells.
 A Interim B Terminal C Transition D Alkaloid
111. Researchers have investigated _____ as the agent in cigarette smoke responsible for LBW in newborns of smokers.
 A cadmium B technetium C promethium D astatine
112. The most commonly observed effects of PAHs in animal studies are growth retardation and:
 A anemia B chronic elevated BP C physical malformations D fetal mortality
113. Cigarette smoke inhibits the growth of the chick chorioallantoic _____ (CAM).
 A membrane B mitosis C melamine D menthanol
114. _____ of women who smoke during the first pregnancy also smoke during the second.
 A One-half B Two-thirds C One-fifth D One-fourth
- CHAPTER NINE: A VISION FOR THE FUTURE**
115. The _____ Health Organization (WHO) has called tobacco use "the single most preventable cause of death in the world today".
 A Washington B Willoughby C World D Warren
116. Smokers who quit after the age of _____ years continue to have excess risk for tobacco-related diseases.
 A 25 B 32 C 37 D 44
117. If the population ceased smoking, this single behavior change would be tantamount to a vaccine against _____ of cancer deaths.
 A one-eighth B one-fifth C one-fourth D one-third
118. Data indicate that less than _____ percent of smokers are offered assistance in quitting annually.
 A 45 B 55 C 30 D 62
119. The federal excise tax on cigarettes rose from \$0.24 to _____ on April 1, 2009.
 A \$1.01 B \$0.52 C \$0.49 D \$0.88
120. Both active and involuntary smoking are the cause of at least _____ types of cancer.
 A 15 B 7 C 4 D 12

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1	25	49	73	97
2	26	50	74	98
3	27	51	75	99
4	28	52	76	100
5	29	53	77	101
6	30	54	78	102
7	31	55	79	103
8	32	56	80	104
9	33	57	81	105
10	34	58	82	106
11	35	59	83	107
12	36	60	84	108
13	37	61	85	109
14	38	62	86	110
15	39	63	87	111
16	40	64	88	112
17	41	65	89	113
18	42	66	90	114
19	43	67	91	115
20	44	68	92	116
21	45	69	93	117
22	46	70	94	118
23	47	71	95	119
24	48	72	96	120