Appendix C – Indicator Rationale

Community Indicators	Rationale	Extent that determinant puts a community at risk for tobacco related health disparities
• Access to health care	Populations that have limited access to health care have limited access to routine preventative care, suffer from poorer health outcomes, delay seeking treatment when ill. Lack of health insurance negatively impacts individuals both in terms of health status and financially.[1]	• *Less access* to health care puts a community more at risk for negative health outcomes.
• Percentage of population aged 5-24 years old	Smoking prevalence among 18-24 continues to be the highest among any age group.[2] Tobacco industry marketing continues to reach underage vulnerable populations through strategies such as advertising heavily at the retail store level.[3]	• *Higher percentage* of population aged 5-24 years indicates more vulnerable population for smoking initiation.
• Country of birth (foreign born)	Specific immigrant Asian and Pacific Islander communities have some of the highest per capita smoking rates in the country, such as the 72% smoking rate within the Laotian community, and 71% smoking rate within the Cambodian community in the Unites States.[1] Recent evidence indicates that alcohol and tobacco use *increases* as Latino immigrants become acculturated to the United States.[2]	• Geographic areas with *higher percentages* of foreign person residents or communities with *higher percentages* of immigrant community members indicates a more vulnerable population for smoking initiation or for higher smoking rates.
• Income	Cigarette smoking is more common among adults who live below the poverty level (32.9%) than among those living at or above the poverty level (22.2%).[3]	• *Lower income* is linked with higher rates of smoking.
• Language isolation	Language barriers can have deleterious effects in health care. Patients who face such barriers are less likely than others to have a usual source of medical care; they receive fewer preventive services; and they have an increased risk of non-adherence to prescribed medications.	• *Low levels* of literacy and/or *high levels* of members with English as a second language are indicators for a more vulnerable population for health disparities.
• Race/Ethnicity, Sexual Orientation	Race and ethnicity are major determinants of socioeconomic status, Communities of color are more likely to have poor health and to die early due to disparities in health.[4,5,6] Tobacco related illness is no exception as communities of color and low socioeconomic status groups have higher prevalence of tobacco use. [7] African Americans have the highest lung cancer incidence and mortality rates. American Indians and specific AAPI communities have the highest prevalence of tobacco use. Lung cancer is the leading cause of cancer deaths for Latinos [8].	• Communities or geographic areas with *large proportion of people of color or LGBT population are* more at risk for tobacco related health disparities as higher rates of smoking are linked to certain races and ethnicities as well as the LGBT community.
• Smoking prevalence	The tobacco industry engages in aggressive marketing and promotion targeted at communities of color, women, youth, the Lesbian, Gay, Transgender (LGBT) community, and communities of low socio-economic status resulting in higher prevalence rates in some of these communities and subsequent disproportionate rates of tobacco related diseases.	• Communities with *higher rates of smoking* are more at risk for tobacco related disparities.

[1] "About the Numbers: A profile of Uninsured Adults in San Francisco"; SF Health Plan, Planning and Evaluation, February 2006; http://www.sfhp.org/files/PDF/SFHAP/2006_ProfileofUinsuredinSF.pdf

[2] " 18-24 Year Old Smoking Prevalence"; California Department of Health Services, Tobacco Control Section http://www.dhs.ca.gov/tobacco/documents/pubs/18-24YearOlds06.pdf

[3] " **Tobacco Company Marketing to Kids; Campaign for Tobacco Free Kids;** http://tobaccofreekids.org/research/factsheets/pdf/0008.pdf

Geographic Indicators	Rationale	Extent that determinant puts a community at risk for tobacco related health disparities
• Availability of clinics/hospitals	Limited or lack of availability of clinics and hospitals in a specific geographic area can create barriers for those residents to receive health care services. Many low-income residents have to rely on public transportation to get work, go to school, grocery shop, and get health care services. Lack of transit access can have severe consequences. For instance, hospitalizations for many chronic diseases can be prevented with effective, regular, and timely care. Transit barriers – mainly cost and inadequate service – make it so that healthcare is unavailable to those who need it most.[4]	• *Lack of easy access* to clinics and hospitals for residents of geographic areas or *lack of access to culturally* competent health clinics and hospitals puts a community more at risk for tobacco related health disparities.
• Availability of healthy foods	Limited or lack of availability of healthy foods in a specific geographic area can create barriers to healthy food for those residents resulting in health related disparities.	• *Lack of easy access* to fresh, healthy and affordable foods puts a community more at risk for tobacco related health disparities
• Tobacco retail outlet density	Higher concentration of tobacco retail outlets in lower socioeconomic neighborhoods has been linked with higher rates of smoking among residents of those neighborhoods.[9, 10]	• Exposure to *higher concentrations* of tobacco retail outlets puts a community more at risk for tobacco related health disparities.
• Stationary* and mobile ** environmental health hazards	According to the California Air Resources Board, studies have shown an association between respiratory illnesses and other non-cancer health effects with living near high traffic roadways. Diesel exhaust and other cancer causing toxics are responsible for much of the cancer risk from airborne toxics in California.[5] Children and other vulnerable populations (the elderly, pregnant women, those with serious health problems) are especially at risk.	• Exposure to *higher concentrations* of stationary and mobile health hazards puts a community more at risk for tobacco related health disparities.

*Stationary environmental health hazards such as gas stations, power plants, dry cleaning plants , and manufacturing facilities.[6]

** Mobile environmental health hazards such as automobiles, motorcycles, trucks, off road vehicles, boats, and airplanes – generally associated with being close to airports, freeways and high traffic roads.[7]

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[1] "Racial Profiling Fact Sheet" http://www.bigtobaccosucks.org/home/center.html

[2] Katherine Culliton, Esq, "The Impact of Alcohol and Tobacco Advertising on the Latino Community as a Civil Rights Issue," National Latino Council on Alcohol and Tobacco Prevention, August 24, 2005. This finding has been reconfirmed by various nationwide studies. Similarly, in 1988, the U.S. Surgeon General reported that various studies have found smoking among Latinos in the U.S. to be positively associated with acculturation. One study found that among smokers, "more acculturated Latinos had higher levels of addiction and lower levels of self-sufficiency than did less acculturated Latinos."

[3] Center for Disease Control. Cigarette Smoking among adults - United States, 2002. Morbidity and Mortality Weekly Report 2004; 53(20): 428-431.

[4] Anderson RT, Sorlie P, Backlund, E. et al. Mortality effects of community socioeconomic status. *Epidemiology.* 1997;8:42–47

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[4] **San Francisco Department of Public Health, Program on Health, Equity and Sustainability 2005 Annual Report;** http://www.sfdph.org/phes/publications/PHES_2005_Annual_Report.pdf

[5] "Air Quality and Land Use Handbook: A Community Health Perspective", California EPA, California Air Resources Board, 2005; http://www.arb.ca.gov/ch/handbook.pdf

[6] "Air Quality and Land Use Handbook: A Community Health Perspective", California EPA, California Air Resources Board, 2005; http://www.arb.ca.gov/ch/handbook.pdf

[7] "Air Quality and Land Use Handbook: A Community Health Perspective", California EPA, California Air Resources Board, 2005; http://www.arb.ca.gov/ch/handbook.pdf

[5] Haan M, Kaplan GA, Camacho T. Poverty and health: prospective evidence from the Alameda County study. *Am J Epidemiology.* 1987;125:989–998

[6] Adler NE, Boyce T, Chesney MA, et al. Socioeconomic status and health: the challenge of the gradient. *Am Psychology.* 1994;49:15–24

[7] T*obacco Use Among U.S. Racial/Ethnic Minority Groups—African Americans, American Indians and Alaska Natives, Asian Americans and Pacific Islanders, and Hispanics: A Report of the Surgeon General.* Washington, DC: US Dept of Health and Human Services

[8] T*obacco Use Among U.S. Racial/Ethnic Minority Groups—African Americans, American Indians and Alaska Natives, Asian Americans and Pacific Islanders, and Hispanics: A Report of the Surgeon General.* Washington, DC: US Dept of Health and Human Services

[9] Journal of Epidemiology Community Health, *Effects of neighborhood socioeconomic status and convenience store concentration on individual level smoking*, Chuang et al, 2005; 59:568-573

[10] Drugs, Education, Prevention, and Policy, *Tobacco outlet density and smoking prevalence: Does racial concentration matter?*, Reid, et al, 2005:Vol 12, No 3, 233-238.