

## Secondhand Smoke (SHS) Deserves More Than Secondhand Attention: Modifying the 5As Model to Include Counseling to Eliminate Exposure

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*Most Americans smoke or are exposed to secondhand smoke (SHS) on a daily basis. Current tobacco treatment guidelines recommend the use of the 5As model to screen and treat primary tobacco users. Evidence supports that SHS is harmful, that the diseases caused by SHS are preventable, and that public health policies and individual counseling are effective in reducing exposure. Further, smoke-free environments are*

*associated with increased cessation in primary smokers. When patients screen positive for SHS, they should be counseled to avoid it by negotiating smoke-free homes and cars, particularly if they have cardiovascular disease or if they have children. Thus, all patients should be screened for primary tobacco use and for exposure to SHS via a suggested modification of the 5As.*

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The right to swing my fist ends where the other man's nose begins.—Oliver Wendell Holmes, Jr.

The 2000 Report of the Surgeon General has concluded that the health risks from secondhand smoke (SHS) are completely preventable (U.S. Department of Health and Human Services, 2000). An estimated 50,000 deaths occur from SHS each year in the United States (California Air Resources Board, 2004), roughly equal to the annual number of colon cancer deaths in the country (Coffield et al., 2001). Although certain populations are particularly vulnerable (e.g., children and patients with coronary artery disease or asthma), everyone who is exposed has increased risk for heart and other diseases. Yet screening and counseling regarding avoidance of SHS

have not been incorporated into clinical care guidelines (American Diabetes Association, 2005; Chobanian et al., 2003; Expert Panel on Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults, 2001; Fiore et al., 2000). In this article, we advocate for the screening and counseling of all patients regarding avoidance of SHS. Screening and counseling to avoid SHS can be added to the existing 5As model for tobacco dependence recommended by the U.S. Preventive Services Task Force (Goldstein, Whitlock, DePue, & the Planning Committee of the Addressing Multiple Behavioral Risk Factors in Primary Care Project, 2004; Kenford & Fiore, 2004) and to other relevant national guidelines.

SHS is a complex mixture of some 4,000 chemicals, with over 60 known carcinogens and 6 developmental or reproductive toxicants (National Cancer Institute, 1999). SHS causes 35,000 cardiac deaths, 3,400 lung cancer deaths, 24,000 low birth weight babies, 8,000 to 26,000 new cases of asthma, and 400,000 to 1 million exacerbations of asthma in the United States annually (California Air Resources Board, 2004; Dhala, Pinsker, & Prezant, 2004; DiFranza & Lew, 1996). The California Air Resources Board's (2004) meta-analysis documents

the causal relationship between SHS and breast cancer (relative risk 1.26 to 1.90) and between SHS and nasopharyngeal carcinoma (relative risk 1.7 to 3.0). The board's conclusion that SHS causes breast cancer is interesting and somewhat provocative, because primary smoke has not yet been causally linked to breast cancer. SHS is a major cause of sudden infant death syndrome (SIDS), ear infections, asthma, bronchitis, meningococcal meningitis, and pneumonia (Arcavi & Benowitz, 2004; National Cancer Institute, 1999; U.S. Environmental Protection Agency, 1992; U.S. Public Health Service, 1986). It is responsible for one death for every eight deaths caused by primary smoking (Fiore et al., 2000). (Table 1 lists the relative risks for diseases caused by SHS.)

#### THE RISKS FROM SHS MAY BE UNDERESTIMATED

Recent evidence suggests that the cardiovascular disease burden attributable to SHS may be considerably greater than previously estimated (Law & Wald, 2003; Sargent, Shepard, & Glantz, 2004; Whincup et al., 2004). A dramatic example of the biological effect of reduced SHS exposure was recently observed in Helena, Montana (a

Table 1  
*Relative Risks and Deaths Caused by Exposure to Secondhand Smoke*

Sample and illness	Relative risk	Annual deaths in United States	Annual cases in United States
<b>Adults</b>			
Heart disease mortality	1.2–1.7	22,700–69,600	
Nasal sinus cancer	1.7–3.0	Not estimated	
Breast cancer	1.3–1.9	Not estimated	
Lung cancer	1.2–1.3	3,400	
<b>Children</b>			
Low birth weight	1.4		24,300
Asthma exacerbation	1.75–2.25		400,000–1,000,000
Middle ear infection	1.6		789,000
Lower respiratory tract infection	1.5–2.0		150,000–300,000
Sudden infant death syndrome	3.5	431	

*Note.* Data reported are from two sources: California Air Resources Board (2004) and Dhala et al. (2004).

geographically isolated community). After a 6-month public smoking ban went into effect, there was a 40% drop in admissions for acute myocardial infarction at the local hospital. Prior to the ban, some (38%) of the myocardial infarctions occurred in active smokers in this study, and 29% were former smokers, but a full 33% had never smoked at all. These data suggest that the effect may be considerably larger than previously attributed to SHS and that reduced exposure to SHS rapidly reduces the risk of myocardial infarction (Sargent et al., 2004).

The argument for the causal biological relationship between SHS exposure and cardiovascular events is that environmental tobacco smoke causes platelet aggregation and endothelial dysfunction (Glantz & Parmley, 2001; Law & Wald, 2003). There is a markedly increased risk for cardiovascular events at even very low levels of exposure (Law & Wald, 2003) experienced over a short duration (Otsuko et al., 2001), on the basis of the nonlinear dose–response relationship between exposure to cigarette smoke and cardiovascular events at low doses. In this model, SHS exposure rises rapidly initially, with the risk for ischemic heart disease increasing by 30% with exposure to the equivalent of actively smoking 0.2 cigarettes per day and then becoming linear and rising more slowly above the exposure to the equivalent of smoking 5 cigarettes per day (Law & Wald, 2003). In addition, exposure to SHS interacts with other traditional cardiovascular risk factors (e.g., hypercholesterolemia, diabetes mellitus, hypertension; Panagiotakos et al., 2002). Experimental studies that demonstrate a marked increase in platelet aggregation in humans and animals at low levels of exposure to SHS confirm the cause and effect relationship of exposure to SHS and the substantially increased risk for ischemic heart disease events (Law & Wald, 2003).

A second report, this time from the British Regional Heart Study (Whincup et al.,

2004), found that cotinine exposure among nonsmokers was associated with an excess risk of coronary heart disease of 50%–60%. Overall, the serum cotinine levels found indicate that more than 75% of the cohort was at increased risk for coronary artery events, compared with previous estimates that had relied on reports of partner smoking and estimated that only 50% or less of the population was at risk.

This new evidence has led the Centers for Disease Control (CDC) to suggest that if results from these studies are replicated, thousands of deaths from acute myocardial infarction in nonsmokers throughout the world could be avoided by implementation of comprehensive smoke-free policies such as those put into practice in Helena, Montana (Pechacek & Babb, 2004). The CDC now recommends that health care practitioners advise all patients with known coronary artery disease and those at increased risk for the disease to avoid all exposure to SHS (Pechacek & Babb, 2004); furthermore, families of these patients and patients with asthma should be counseled not to allow smoking in the home or in vehicles (Dhala et al., 2004; Law & Wald, 2003; Pechacek & Babb, 2004).

## EXPOSURE TO SHS

Exposure to SHS is a common problem in the United States. For example, the prevalence of daily exposure to SHS in California, according to studies conducted in the 1980s and 1990s, was 38% for children ages 0–11 years, 64% for adolescents ages 12–17, and 56% for adults. Smoking prevalence has dropped slightly in the United States in the last 10 years, and California has one of the lowest smoking rates in the country. Thus, these exposure data may be conservative estimates for the prevalence of exposure in the rest of the country. Worldwide, about 50% of children are exposed to SHS at home (World Health Organization, in press). Exposure to SHS can be reduced by over 80% through the elimination of smoking in public spaces and

workplaces (Centers for Disease Control, 2004a); seven states have passed clean indoor air legislation as of mid 2005. Smokers have been encouraged to adopt smoke-free rules in their homes and cars (California Department of Health Services, 2004). Overall, exposure to SHS in the United States has decreased considerably over the past decade (U.S. Department of Health and Human Services, 2000), largely as a result of public policies that reduce exposure in public settings. Clinicians have an opportunity to advocate for smoke-free environments in private settings, including homes and vehicles.

Yet, in both pediatric and family practice offices, fewer than half of parents are asked about exposure to SHS in the home, and only one third of smoking parents are counseled about the risks of SHS exposure for children (Winickoff et al., 2003). Recent research has revealed that parents vary considerably on the rules for smoking in the household (Pyle, Haddock, Hymowitz, Schwab, & Meshberg, 2005) and typically do not intervene to avoid SHS exposure for their children in cars or on trains, where the toxins are as much as 23 times more concentrated. Even less is known about screening and counseling for SHS exposure for adults. However, at least one report from Ireland has demonstrated that 85% of smokers continue to smoke around patients with cardiovascular disease once the patient has been discharged home (Hevey, Slack, Cahill, Newton, & Horgan, 2002). More research is needed to quantify risks and to determine the prevalence of exposure for the general population as well as for populations of patients at high risk.

Several intervention studies intended to protect children from the harms of SHS have been critically reviewed by Gehrman and Hovell (2003). These 19 studies, published between 1987 and 2002, were too few to allow a comprehensive meta-analysis but did allow for calculation of an effect size (Cohen's  $d = 0.34$ ) in self-reported outcomes of decreased exposure to SHS across

similar studies to address several clinical questions. Analyses revealed that interventions that were based on sound behavior change theory were more effective than interventions that were not. Examples of theories used in these studies include operant theory, expectancy theory (health belief model), and social-cognitive theory. Interventions of greater intensity and duration were more effective than those that were shorter and of lesser intensity. Physician interventions—which tended to be of shorter duration and were less likely to be based on sound behavioral theory—and home-based intervention—which tended to be of longer duration with multiple visits and were more likely to be based on sound behavioral theory—were both effective in reducing self-reported exposure. However, the home-based interventions appeared to have a stronger effect when compared with the effect of the physician interventions.

Gehrman and Hovell (2003) proposed a model for clinicians to use to counsel about SHS exposure that targets three behavioral outcomes: outdoor smoking, smoking away from the child, and not smoking in vehicles. They advocated for a stepped-care approach, with initial brief advice from a physician with cotinine feedback, printed materials, and follow-up phone calls. If these efforts fail to demonstrate the elimination of cotinine in the child's system, then home visits with trained counselors are to be instituted. Recommended intervention components include motivational assessment and enhancement, increased outcomes and efficacy expectations, self-monitoring, goal setting, shaping, behavioral contracting, stimulus control, and reinforcement. Thus, results of this review yield some direction for clinicians to pursue while better evidenced models emerge. We note that each of these recommendations is consistent with the theoretical base for the 5As model that we discuss later.

We offer three additional rationales for clinicians to begin screening and counseling for avoiding SHS, without direct evi-

dence. First, a professional charter for physicians (American Board of Internal Medicine Foundation, American College of Physicians–American Society of Internal Medicine Foundation, & European Federation of Internal Medicine, 2002) provided that three fundamental principles should guide practice, including (a) the primacy of patient welfare, (b) respect for patient autonomy, and (c) social justice. Intervening to reduce patient exposure to SHS is consistent with all three principles. Second, it is reasonable to believe that intervening on SHS exposure will increase screening and counseling on primary tobacco use, and interventions on primary tobacco use are highly cost effective. A third rationale for clinicians to negotiate smoke-free policies that prohibit smoking in the home, car, or workplace is suggested by the findings of Bauer, Hyland, Li, Giovino, and Cummings (2003), which indicate that implementation of smoke-free policies is associated with increased cessation attempts and long-term cessation among the affected smokers. Thus, both smokers and non-smokers may realize a health benefit if these rules are put into place.

Clinicians already have less than a 50% likelihood of providing counseling for primary tobacco use (Coffield et al., 2001). It is unlikely that clinicians will be able to implement screening and counseling of all patients to avoid SHS if this counseling is simply added as another recommended intervention to an already overloaded agenda. The CDC has tried to help guide clinicians by rating preventive interventions on their cost effectiveness and clinically preventable burden. Interventions that score higher than a 7 on these combined scores are recommended for clinical use, because they will reduce the disease burden if implemented. SHS kills as many people in the United States as colon cancer, and screening for colon cancer received an 8 on the CDC's scale (Coffield et al., 2001). SHS screening and counseling did not appear in that report, because randomized

trials assessing its cost effectiveness have not been done. However, the diseases caused by SHS are completely preventable, and the disease burden caused by SHS is similar to that of several other important diseases that we screen for and treat (e.g., hypertension, hypotension, colon cancer; Coffield et al., 2001). Therefore, it seems justified to add screening and counseling as a separate task.

A more reasonable and efficient approach might be to simply "roll" screening and counseling for tobacco use and exposure to SHS into the same model. Given that 22% of the adults in the United States smoke (CDC, 2004b) and at least 40% of nonsmoking Americans have significant exposure to SHS (California Air Resources Board, 2004), use of the combined SHS and primary smoke screening and counseling 5As model may be more appealing to clinicians because it is relevant to more than half of the patients they see each day. At least one study has shown that smokers are more satisfied with their physicians if they are advised not to smoke, whether they are able to quit or not (Solberg, Boyle, Davidson, Magnan, & Carlson, 2001). We recognize that the request for clinicians to intervene on SHS when they infrequently intervene on primary smoking now may be met with resistance. Yet, in our opinion, screening and intervention for SHS should be integrated into the Public Health Service's model for treating tobacco use and dependence (Fiore et al., 2000).

#### **MODIFYING THE 5As FOR SHS COUNSELING**

The current Tobacco Use and Dependence Treatment Guidelines provide a brief model that is effective for screening and treatment for primary tobacco use, called the 5As, that will double to triple cessation rates with regular use (Fiore et al., 2000; Glynn, Manley, & Pechacek, 1990). Recently, the U.S. Preventive Services Task Force recommended use of the 5As by clinicians for brief health behavior counseling

interventions across a number of health outcomes (Coffield et al., 2001; Whitlock, Orleans, Pender, & Allan, 2002). However, neither the 5As nor traditional medical history taking recommends screening and counseling regarding SHS. On the basis of the evidence that exposure to SHS is a significant health risk that is completely avoidable, we propose a modification of the 5As that adds screening for SHS exposure and brief counseling to avoid exposure. We developed the proposed models and modified them after review by the Medical Society of the State of New York's Task Force on Tobacco.

The 5As (see Appendix A) start with *ask*: The clinician asks patients whether they use tobacco, and the clinician or an office assistant records "current," "former," or "never" on the chart. We recommend the expansion of this A to ask a second question of former smokers (beyond 3 months of abstinence) and never tobacco users: "Are you exposed to smoke from others at home, in the car, or at work?" Adding a chart reminder for SHS exposure in the home, work, or car and adding SHS to the problem list would likely increase the rate at which clinicians intervene. If the patient indicated that he or she was exposed to SHS, the clinician would complete the 5As counseling, with the goal of eliminating exposure to SHS and negotiating a smoke-free environment.

The second A is *advise*: strongly urge patients to avoid all exposure to SHS for themselves and their family members, especially children. As with advising patients who use tobacco to quit, it is important to individualize this advice and to be aware of details of the harms of SHS, so that the patient can make an informed choice about his or her behavior around those who smoke. For example, for patients who have coronary artery disease or who are at higher risk for this disease, clinicians might say, "Avoiding exposure to SHS substantially reduces your risk of dying prematurely from a heart attack. I advise you

to avoid all exposure to smoke." Alternatively, for the parents of an infant who is exposed to SHS, clinicians might say, "Your baby's chances of dying from SIDS are three times lower if you don't smoke. I advise you to avoid exposing your baby to any smoke." In making these advice statements, clinicians need to take care not to blame those exposed to SHS, as some patients are not able to control the exposure. Nor should the message intentionally shame or humiliate the smoker. Motivation for change is more likely preserved if the message is delivered in the context of improving the health of those exposed.

The third A is for *assess*. Clinicians should assess patients' willingness either to change their behavior to avoid situations where SHS exposure occurs or to negotiate with smokers for a smoke-free home, car, or workplace. It is important to elicit and acknowledge the patient's perspective on whether he or she feels these changes can be successfully negotiated without risk to the patient. Recognize that a patient may feel more confident of his or her ability to successfully negotiate a smoke-free environment in some situations than in others. It may be helpful to offer the rationale that research indicates that if nonsmokers have established policies of a smoke-free home and vehicles, smokers are more likely to quit.

The fourth A is *assist*: If patients are willing to make efforts to avoid SHS, assist them in doing so. Review any past attempts they have made in avoiding exposure and negotiating smoke-free environments. Consider role playing how the conversation might go, invite the patient to bring the smoker to his or her next visit if that seems appropriate, or call the smoker on the phone if the patient gives permission. Direct the patient to information on the effects of SHS and to resources in the community that can help the smoker quit (e.g., the state's quit line or local cessation programs).

The final A in the full model is *arrange*

follow-up. Remember to ask about SHS exposure and efforts the patient has made to reduce exposure at future visits. Consider calling the patient or having the patient call you to indicate whether the negotiation went well. Offer help in explaining the importance of SHS to the smoker; if questions come up, the patient could bring the smoker to the office to plan a quit attempt. Be ready to provide information on cessation programs if the smoker is interested in trying to quit. Be positive in your interaction with the nonsmoker and smoker. It is important for clinicians to emphasize to patients exposed to SHS and to smokers that smoking is a chronic relapsing problem. Most smokers have to try several times before they are successful, but early success is possible (Fiore et al., 2000; Murray, Connett, Rand, Pan, & Anthonisen, 2002).

Very brief interventions (1–3 min) for tobacco dependence are also effective in facilitating cessation (Fiore et al., 2000). There is a strong dose–response relationship between the intensity of the intervention and cessation. Thus, very brief interventions are not expected to be as effective as the 5As and are suggested to be used when there is not enough time to provide the full 5As model. In this model of “two questions and three minutes” (see Appendix B), the clinician first asks whether the patient uses tobacco and then asks, “Do you want to quit?” After finding that a patient does not currently use tobacco, the clinician would ask the patient whether he or she is exposed to SHS. If exposure exists, the patient would be asked whether he or she wants to avoid exposure. Again, it is important for the clinician to make an advice statement and to elicit the patient’s perspective on perceived risks and benefits from avoiding SHS. It is important for the clinician to convey that SHS exposure has been scientifically and unequivocally shown to be an important health risk. We believe that the fact that the clinician values the patient’s health enough to discuss

SHS will motivate the patient exposed to SHS to change his or her behavior.

### **FAMILY INTERVENTIONS ARE NEEDED**

Interventions by clinicians that are intended to alter the behavior of people who are not patients of the clinician are likely to change the patterns of relationship between those exposed to SHS and smokers. The health of family members, particularly small children and older adults, and the relationship to smoking are highly charged issues within families. The Public Health Service’s meta-analysis indicates that if practitioners can assist patients in arranging “extratreatment support,” it may increase cessation rates by 50% (Fiore et al., 2000). However, this evidence is confounded by other variables that were changed within the same treatment arms of the studies included in the analysis. A further limitation of the research behind the 5As model (Whitlock et al., 2002) and the critical review prepared by Gehrman and Hovell (2003) is that the studies were not based on family systems theory. For example, patients who request that important others not smoke around them either indoors or in vehicles are likely to create tensions around this change. Such requests will undoubtedly have implications for control patterns within relationships, as outlined by Doherty and Whitehead (1986) in an article about a family systems perspective on the social dynamics of smoking. Requests to abstain from smoking around the patient may trigger a power struggle and possibly elicit a rebellious response from the smoker by placing the nonsmoker in an “authoritarian” or nagging parental role.

Another qualitative analysis of interviews with 60 smokers applied the family FIRO (fundamental interpersonal relations orientation) model (Whitehead & Doherty, 1989). The authors established profiles of smokers, rating them high and low on inclusion and control. A substantial subset of smokers reported strong interactions related to interpersonal control and

inclusion. The affective tone of the interactions varied widely from very negative to very positive. These findings suggest that social support may be best understood in terms of its interactional meaning to the individual smoker as opposed to its structure.

Becker, Steinhauser, and Doherty (1985) proposed a biopsychosocial protocol for smoking cessation to be used in primary care. Besides the traditional elements of the 5As, this protocol advocates for the inclusion of an important other (spouse, family member, or partner) who is interested in the smoker's continued health for all smokers who plan a quit date or who are equivocal about quitting. The goal is to integrate the partner into the quit plan. If the partner smokes, ask whether he or she will quit with the patient. Work toward agreement on a quit date and use of medications and negotiate ongoing partner support. Lead a discussion focusing on what the smoker would like help with in the quit attempt. The smoker should be given full veto power over elements of this plan to support his or her autonomy, because autonomy is associated with greater cessation, as reported in recent studies (Williams, Gagne, Ryan, & Deci, 2002; Williams et al., in press).

At the second follow-up visit with the partner, invite discussion about the experience since the previous visit. Modification of the plan may be necessary on the basis of whether the smoker is smoking. If the smoker is still smoking, remain nonjudgmental and work toward a decision about setting another quit date. If the smoker has abstained, congratulate both smoker and partner on their success. Discuss whether the agreed on behaviors were found to be helpful and negotiate a new set of "helpful" behaviors. Discuss continued use of the medications.

Adapting this model for use in reducing patients' exposure to SHS would include all of the above when the smoker is willing to quit. Otherwise, the goals need to be expanded to negotiate agreement for outdoor

smoking, smoking away from the patient, and not smoking in vehicles (Gehrman & Hovell, 2003). Clinicians should also be aware that they are part of a triangle with the nonsmoker and smoker. The decisions to smoke and where to smoke belong to the smoker. Clinicians and nonsmokers are encouraged to support and not undermine the autonomy of the smoker while negotiating limits on the smoker's behavior (Williams, Quill, Deci, & Ryan, 1991). Patients who experience difficulty in negotiating a smoke-free environment might benefit from a referral to family therapy for help in dealing with the underlying relationship dynamics. Additional research based on family systems theory is called for to demonstrate effective means of protecting people from the effects of SHS.

## CONCLUSION

The evidence that SHS is harmful to those exposed is substantial, and nearly half of the population is at risk. If SHS counseling is integrated with 5As counseling for tobacco use and dependence, the modified 5As model will apply to 60%–70% of the U.S. population, compared with the current use of the 5As model, which reaches only the 22% of the population that smokes. SHS is responsible for equivalent levels of mortality to other everyday medical problems that we address in daily practice (Woolf, 1999). Evidence exists that intervening with nonsmokers to create smoke-free homes will increase cessation among smokers. This alone justifies the addition of SHS to the 5As intervention. Initial evidence indicates that intervening with parents of children exposed to SHS will significantly reduce their exposure.

Further research is needed to demonstrate the effectiveness of this modification to the current 5As, particularly research that includes a family systems perspective. However, we feel that the health benefit is sufficiently large to recommend that clinicians actively engage in screening and counseling *all* of their patients about avoid-

ing exposure to SHS. This must be done now. In particular, patients with coronary artery disease and asthma and parents or guardians of children exposed to SHS should receive screening and counseling to avoid all SHS exposure.

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## Appendix A

### Public Health Service Clinical Guideline for Treatment of Tobacco Use and Dependence Modified to Include Secondhand Smoke (SHS) Screening

#### I. Brief Strategies (5–10 min) to Help the Patient Willing to Quit Tobacco Use—The 5As

- Step 1. **Ask:** Systematically identify and document all tobacco users at every visit.  
Add *tobacco use* to vital signs:                      Current                      Former                      Never  
or use chart stickers  
\*If former or never—systematically identify and document exposure to SHS at work, at home, or in car.  
Add *SHS exposure*:    Home    Work    Car
- Step 2. **Advise:** Strongly urge all tobacco users to quit.  
In a clear, strong, and personalized manner, urge every tobacco user to quit (e.g., “As your clinician, I need you to know that quitting smoking is the most important thing you can do to improve your health”).
- Step 3. **Assess:** Determine willingness to make a quit attempt.  
Ask every tobacco user whether he or she is willing to make a quit attempt in the next 30 days.  
Refer all patients willing to participate in an intensive treatment program.
- Step 4. **Assist:** Aid the patient in quitting.  
Provide practical counseling regarding abstinence (total); review past quit attempts; avoid alcohol.  
Provide a supportive clinical environment, while encouraging the tobacco user to stop.  
Help patient develop social support from family, friends, and coworkers.  
Recommend effective pharmacotherapy for all without contraindications.
- Step 5. **Arrange:** Schedule follow-up contact, either in person or by phone.

#### II. Brief Strategies to Counsel the Patient at Risk From Exposure to Environmental Tobacco Smoke—The 5As

- Step 1. **Ask:** Systematically identify and document exposure to SHS at home, at work, or in car at each visit or use chart stickers.  
Add *SHS exposure* to vital signs:    Home    Work    Car
- Step 2. **Advise:** Strongly urge all patients to avoid exposure to SHS.  
Be sure your patients are aware of what SHS means. Ask them whether they feel SHS is harmful. For example, you could inform them that infants and children who are exposed are at risk for sudden infant death syndrome, ear infections, asthma, pneumonia, and lung cancer. Adults living in the home of someone who smokes are at risk for cancers, asthma, and heart disease. For example, adults living with a two pack-a-day smoker have a 10 times greater risk of getting lung cancer and a 30% higher risk for developing heart disease than someone living in a smoke-free home. They are exposed to the equivalent of smoking 10 cigarettes (half a pack) per day themselves.  
SHS kills one person prematurely for every eight people who die from primary smoking. This is the third leading cause of preventable death in the United States. Also in the United States, about 3,400 people die each year from lung cancer, and more than 35,000 from cardiovascular disease from exposure to SHS. Their children may get asthma or respiratory infections from SHS.

Let your patient know that where home, car, and workplace bans on smoking are in place, the smoker is more likely to quit, or at least reduce his or her smoking.

In a clear, strong, and personalized manner, urge every patient to avoid exposure if possible. Suggest that he or she negotiate a smoke-free home, car, and workplace environment (e.g., “As your clinician, I need you to know that avoiding exposure will improve your health and protect your heart (cardiovascular system) and lungs from injury”).

Step 3. **Assess:** Determine willingness to establish a smoke-free home and car.

Ask every patient whether he or she is willing to ask the smoker to quit or avoid smoking in the house, workplace, or car. Provide information for the smoker about the state quit line (if one is available), suggest the smoker see a physician, or refer the smoker to an intensive treatment program in the area.

Step 4. **Assist:** Aid patients in negotiating a smoke-free environment. No exposure is safe.

Provide practical counseling regarding negotiations with others in their environment who smoke. Review past attempts to discuss a smoke-free environment with a smoker.

Suggest patients be firm but positive in their request not to have smoke around them. Try not to be critical of the smoker but to focus on the importance of staying healthy.

Offer to help patients by inviting the smoker to their next visit, by calling the smoker, or by writing a brief note to the smoker.

Step 5. **Arrange:** Schedule follow-up contact, either in person or by phone.

Ask how the discussion went.

## Appendix B

### Very Brief Intervention for Secondhand Smoke (SHS): “2 Questions, 3 Minutes”

A second very brief model of intervention, called “2 Questions, 3 Minutes” is also supported by the Public Health Service Guidelines. Used with tobacco users, the questions are as follows:

Do you use tobacco?

If no, move on to another topic.

If yes, ask “Do you want to quit?”

If the patient does not want to quit, provide an advice statement and move on.

If the patient does want to quit, establish a quit date, prescribe medications, arrange support and follow-up, and move on.

For the issue of SHS counseling by the physician, the following adaptation is recommended to the “2 Questions, 3 Minutes” model:

Do you use tobacco?

If no, ask, “Are you exposed to tobacco smoke at work, at home, or in the car?”

If no, move on to another topic after saying, “I ask because SHS is just as deadly as primary smoke, and exposure to any amount is very unhealthy for you.”

If yes, strongly advise the patient to avoid exposure by establishing a smoke-free home, car, and workplace, because any exposure substantially increases risk for premature death from heart disease and lung cancer. Elicit the patient’s perspective on risk and the possibility of avoiding exposure.

If the patient uses tobacco, ask “Do you want to quit?”

If no, provide an advice statement and move on.

If yes, establish a quit date, prescribe medications, arrange support and follow-up, and move on.