

Strengthen the Evidence for MCH Programs: Environmental Scan of Strategies

National Performance Measure (NPM) #14: Smoking

A) Percent of women who smoke during pregnancy

B) Percent of children who live in households where someone smokes

Introduction

This environmental scan identifies collections of strategies to advance performance for NPM #14, Smoking. The information provided in this document focuses on strategies to achieve the NPM, not on the content of care or specified health outcomes. Please note that the quality of the evidence in this compilation has not been evaluated, and that data sources describing a single strategy, rather than a collection of strategies, have been excluded.

This compilation includes the following sections:

- **Reviews and Compilations:** Identifies existing compilations for strategies that intend to improve performance for each measure
- **Frameworks and Landmark Initiatives:** Frameworks includes conceptual models underlying strategy implementation; Landmark Initiatives include seminal programs/policies related to the NPM
- **Data Sources:** Indicates sources, search criteria, links to search strategy and selected organizational websites
- **Inclusion and Exclusion Criteria:** Denotes types of studies, setting, populations of interest and exclusion criteria

Technical assistance for State Title V MCH programs related to using evidence to inform State Action Plans, selection of strategies, and development of evidence-based or evidence-informed Strategy Measures may be requested at <http://www.semch.org/technical-assistance.html>

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Reviews and Compilations

Review/Compilation	Summary	Web Link
Albrecht et al. (1994). Smoking Among Low-Income, Pregnant Women: Prevalence Rates, Cessation Interventions, and Clinical Complications. <i>Birth</i> . [Target ¹ : B,C,D,G]	<ul style="list-style-type: none"> • Reviewed 6 studies • Findings <ul style="list-style-type: none"> ○ WIC studies demonstrated that implementing a minimal-contact smoking cessation program as part of a clinic visit is feasible ○ Success found in various self-help interventions (self-help manuals/written materials) ○ Interventions used in conjunction with self-help materials (counseling sessions, behavioral reinforcement) were brief, with little long-term follow-up 	http://dx.doi.org/10.1111/j.1523-536X.1994.tb00515.x
Arborelius et al. (2000). How to Prevent Exposure to Tobacco Smoke among Small Children: A Literature Review. <i>Acta Paediatr Suppl</i> . [Target: B,C,D,G]	<ul style="list-style-type: none"> • Strategies in antenatal care <ul style="list-style-type: none"> ○ Intervention to prevent relapse into smoking (counseling + self-help manual): minimal effects ○ Intervention focusing on information about risk factors (individual counseling focusing on risk factors for fetus): no effects ○ Interventions geared to behavioral strategies (customary self-help manual): demonstrable effects ○ Intervention geared to the patient's belief (customary information and counseling, concrete planning): demonstrable effects ○ Interventions to reduce stress (antenatal care group counseling, home visits, social networking): demonstrable effects • Strategies in child healthcare <ul style="list-style-type: none"> ○ Intervention at time of delivery: no effects ○ Intervention focusing on factual information (brief counseling, brochures, self-help manual): no effects ○ Interventions involving pediatricians (brief parent counseling, training in behavioral strategies): no effects ○ Interventions aimed at strengthening parents' self-efficacy 	http://dx.doi.org/10.1111/j.1651-2227.2000.tb03098.x

	(client-centered home visits): demonstrable effects	
Baxi et al. (2014). Family and Carer Smoking Control Programmes for Reducing Children's Exposure to Environmental Tobacco Smoke. <i>Cochrane Database of Systematic Reviews</i> . [Target: A,B,C,D,F,G]	<ul style="list-style-type: none"> • Reviewed 57 studies • Findings <ul style="list-style-type: none"> ○ 14 studies found a statistically significant intervention effect for child environmental tobacco smoke (ETS) exposure reduction: 7 used intensive counseling or motivational interviewing, 1 used telephone counseling, 1 used a school-based strategy, 1 used picture books, 2 used educational home visits, 1 used brief intervention, and 1 unknown ○ 42 studies did not show an effect: 14 used intensive counseling or motivational interviewing, 9 used brief advice or counseling, 6 used feedback of a biological measure of children's ETS exposure, 1 used feedback of maternal cotinine, 2 used telephone smoking cessation advice or support, 8 used educational home visits, 1 used group sessions, 1 used informational kit and letter, 1 used a booklet and no smoking sign, 1 used a school-based policy and health promotion ○ Review was unable to determine if any particular interventions reduced parental smoking and child smoke exposure more effectively than others 	http://dx.doi.org/10.1002/14651858.CD001746.pub3
Baxter et al. (2011). The Effectiveness of Interventions to Establish Smoke-Free Homes in Pregnancy and in the Neonatal Period: A Systematic Review. <i>Health Education Research</i> . [Target: B,C,D,G]	<ul style="list-style-type: none"> • Included 17 papers, restricted analysis to 12 papers <ul style="list-style-type: none"> ○ 10 RCTs, 1 non-RCT, 1 before/after studies ○ 7 US studies ○ Categorized into counseling, counseling + additional elements, individually adapted programs and motivational interviewing • Findings <ul style="list-style-type: none"> ○ Mixed, inconclusive evidence for the effectiveness of interventions to reduce parental environmental tobacco smoke in early infancy 	http://dx.doi.org/10.1093/her/cyq092
Chamberlain et al. (2013). Psychosocial	<ul style="list-style-type: none"> • Reviewed 86 randomized controlled trials (RCTs) 	http://dx.doi.org/10.1002/14651858.CD001055.pub4

<p>Interventions for Supporting Women to Stop Smoking in Pregnancy. <i>Cochrane Database of Systematic Reviews</i>. [Target: B,C,D,G]</p>	<ul style="list-style-type: none"> • Findings <ul style="list-style-type: none"> ○ Counseling interventions demonstrated a significant effect compared with usual care (average RR=1.44) and a borderline effect compared with less intensive interventions (average RR=1.35) ○ A significant effect was only seen in subsets where counseling was provided in conjunction with other strategies ○ Incentive-based interventions had the largest effect size compared with a less intensive intervention (RR=3.64) and an alternative intervention (RR=4.05) ○ Feedback interventions demonstrated a significant effect only when compared with usual care and provided in conjunction with other strategies, such as counseling (average RR=4.39), but effect was unclear when compared with a less intensive intervention (RR=1.19) ○ The effect of health education was unclear when compared with usual care (RR=1.51) or less intensive interventions (RR=1.50) ○ Social support interventions appeared effective when provided by peers (average RR=1.49), but the effect was unclear in a single trial of support provided by partners ○ The effects were mixed where the smoking interventions were provided as part of broader interventions to improve maternal health, rather than targeted smoking cessation interventions 	
<p>Crawford et al. (2008). Smoking Cessation in Pregnancy: Why, How, and What Next. <i>Clinical Obstetrics and Gynecology</i>. [Target: B,C,G,H]</p>	<ul style="list-style-type: none"> • Continuous and persistent patient education and assessment and documentation of smoking status at every visit is recommended • Brief counseling supplemented by self-help materials significantly increased smoking cessation rates <ul style="list-style-type: none"> ○ An office-based cessation counseling session with a trained provider is associated with a smoking cessation rate of 5-10% ○ With provision of specific educational printed materials in addition to brief counseling, the rate of cessation doubled to ~20% ○ Additional teaching with other media such as videos or interactive computer feedback programs did not increase the 	<p>http://dx.doi.org/10.1097/GRF.0b013e31816fe9e9</p>

	<p>rates</p> <ul style="list-style-type: none"> ○ Social support tools such as telephone hotline numbers and group sessions have shown efficacy in the general population but not specifically in pregnant women ○ Brief cognitive-behavioral interventions accompanied by pregnancy-specific self-help materials are the most effective interventions for pregnant smokers ● Financial incentives can be especially effective in low-income women but early success tends to dissipate when rewards are no longer offered ● Free distribution of nicotine replacement therapy + brief counseling appear to be promising ● There are no proven effective strategies for preventing postpartum relapse, but good chart documentation to follow-up and track the patient's smoking status and positive counseling may be useful 	
<p>Dolan-Mullen et al. (1994). A Meta-Analysis of Randomized Trials of Prenatal Smoking Cessation Interventions. <i>American Journal of Obstetrics and Gynecology</i>. [Target: B,C]</p>	<ul style="list-style-type: none"> ● Reviewed 11 RCTs (9 in the US) ● Interventions: personal visit, phone contact with educators, mailed materials, self-help manual, brief counseling by health educator, personal letter/pamphlet, educational videotape/audiotape, support system ● Findings <ul style="list-style-type: none"> ○ RRs for smoking cessation ranged from 0.9 to 7.1, combined RR for homogenous group of 10 studies was 1.50 (50% increase in smoking cessation) ○ Prenatal smoking cessation interventions increase rates of smoking cessation during pregnancy 	<p>http://dx.doi.org/10.1016/002-9378(94)90156-2</p>
<p>Dolan-Mullen. (1999). Maternal Smoking During Pregnancy and Evidence-Based Intervention to Promote Cessation. <i>Primary Care: Clinics</i></p>	<ul style="list-style-type: none"> ● Effective components of pregnancy smoking cessation strategies: pregnancy-specific manual for smoking cessation, more intensive counseling treatment, nicotine therapy for addicted smokers ● Recommendations for relapse prevention in spontaneous quitters, postpartum maintenance 	<p>http://dx.doi.org/10.1016/S0095-4543(05)70118-4</p>

<p><i>in Office Practice.</i> [Target: B,C]</p>		
<p>Donatelle et al. (2004). Incentives in Smoking Cessation: Status of the Field and Implications for Research and Practice with Pregnant Smokers. <i>Nicotine & Tobacco Research.</i> [Target: B,C,D]</p>	<ul style="list-style-type: none"> • Contingency management methods have been effective in modifying smoking behavior in volunteers not seeking cessation assistance in highly controlled settings • Incentives have been used primarily as a component of worksite interventions, in community-wide quit-and-win programs, in quasi-experimental and experimental trials, and more recently with low-income pregnant women • Worksite studies have rarely been designed to isolate the impact of incentive, but appear to be useful in these settings, especially in increasing participation and increasing awareness about the deleterious effects of smoking • Quit-and-win programs are used widely in the United States and internationally and appear to attract many participants and produce modest quit rates <ul style="list-style-type: none"> ○ Quality of the evaluations of quit-and-win programs varies considerably, and none has employed rigorous control or comparison groups to sufficiently identify the effect of incentives <p>Recent controlled studies have yielded promising results with pregnant smokers, and larger trials are in progress</p> 	<p>http://dx.doi.org/10.1080/14622200410001669196</p>
<p>Duckworth & Chertok. (2012). Review of Perinatal Partner-Focused Smoking Cessation Interventions. <i>MCN: The American Journal of Maternal/Child Nursing.</i> [Target: A,B,G]</p>	<ul style="list-style-type: none"> • Reviewed 5 studies with perinatal smoking cessation intervention with a partner-focused program • Interventions: telephone support, couple support and communication, nicotine patches, various modes of cessation education (booklet, video) • Used the family systems theory approach • Findings <ul style="list-style-type: none"> ○ 4 studies yielded reduced post-intervention smoking rates among the partners ○ Efforts to promote smoking cessation among pregnant women should be inclusive of partners, recognizing that partners influence maternal prenatal health behaviors 	<p>http://dx.doi.org/10.1097/NMC.0b013e31824921b4</p>

<p>Einarson & Riordan. (2009). Smoking in Pregnancy and Lactation: A Review of Risks and Cessation Strategies. <i>European Journal of Clinical Pharmacology</i>. [Target: G]</p>	<ul style="list-style-type: none"> • Behavior interventions (multi-media education campaigns, telephone quit lines, financial incentives, biomarker feedback) report only modest success rates • Nicotine replacement therapy and antidepressants appear to be safe to use in pregnancy, but do not achieve a substantially higher success rate for quitting 	<p>http://dx.doi.org/10.1007/s00228-008-0609-0</p>
<p>Emmons et al. (2001). Intervention and Policy Issues Related to Children's Exposure to Environmental Tobacco Smoke. <i>Preventive Medicine</i>. [Target: A,B,C,D,G]</p>	<ul style="list-style-type: none"> • Reviewed 5 studies targeting ETS exposure reduction among young children • Interventions: self-help materials, telephone counseling, home-visits, counseling sessions, biomarker feedback • Interventions delivered by hospital-based nurses after birth, via self-help materials provided post-delivery, or by pediatricians as part of well-child care • Findings <ul style="list-style-type: none"> ○ No studies yielded significant reductions in objective measures of children's exposure ○ 2 of the studies showed reduction in self-reported exposure 	<p>http://dx.doi.org/10.1006/pmed.2000.0822</p>
<p>Fang et al. (2004). Smoking Cessation in Pregnancy: A Review of Postpartum Relapse Prevention Strategies. <i>The Journal of the American Board of Family Practice</i>. [Target: B,C,D]</p>	<ul style="list-style-type: none"> • Reviewed 14 articles that addressed program-based strategies to increase cessation among pregnant women through relapse prevention programs • Findings <ul style="list-style-type: none"> ○ Interventions that maintain smoking cessation during pregnancy <ul style="list-style-type: none"> ▪ Use of stages of change and decisional balance constructs appear to be promising (pregnancy-tailored messages, low-literacy materials) ▪ Interventions: monitoring clinical interventions, tracking the success of written cessation aids, training health care professionals on cessation interventions ▪ Clinical and social interventions that would be most effective are those that address the needs of the 	<p>http://dx.doi.org/10.3122/jabfm.17.4.264</p>

	<p>individual woman, address her social network, and are incorporated into routine health care</p> <ul style="list-style-type: none"> ○ Interventions to prevent postpartum relapse <ul style="list-style-type: none"> ▪ Interventions: brief motivational interviewing, telephone support by nurses, additional individual behavior change counseling during prenatal care ▪ Successful programs target the smoking habits of partners, others living in the home, and close friends; support women with positive encouragement; understand the time and financial commitment required; encourage women's social networks to support her; take place throughout pregnancy and through early childhood care; and distinguish between women with concrete plans for not relapsing and those who have not thought out possible challenges 	
<p>Filion et al. (2011). The Effect of Smoking Cessation Counseling in Pregnant Women: A Meta-Analysis of Randomized Controlled Trials. <i>BJOG: An International Journal of Obstetrics & Gynaecology</i>. [Target: B,C,G]</p>	<ul style="list-style-type: none"> ● Reviewed 8 RCTs examining the isolated effect of counseling ● Findings <ul style="list-style-type: none"> ○ The proportion of women that remained abstinent at the end of follow-up was modest, ranging from 4-24% among those randomized to counseling and from 2-21% among control women ○ No evidence to suggest that efficacy differed by counseling type 	<p>http://dx.doi.org/10.1111/j.1471-0528.2011.03065.x</p>
<p>Fitzgerald. (2012). Evidence-Based Tobacco Cessation Strategies with Pregnant Latina Women. <i>Nursing Clinics of North America</i>.</p>	<ul style="list-style-type: none"> ● Tobacco cessation interventions <ul style="list-style-type: none"> ○ Nicotine replacement therapy, lay health advisor programs, transtheoretical model of health behavior change, technology-based and telephonic interventions 	<p>http://dx.doi.org/10.1016/j.cnur.2011.11.001</p>

[Target: D,G,H]		
<p>Floyd et al. (1993). A Review of Smoking in Pregnancy: Effects on Pregnancy Outcomes and Cessation Efforts. <i>Annual Review of Public Health</i>. [Target: B,C]</p>	<ul style="list-style-type: none"> • Reviewed 13 studies • Interventions: cessation advice and counseling by doctor or health educator, self-help cessation materials, taped messages, home visit • Findings <ul style="list-style-type: none"> ○ 10 studies reported some type of intervention effect ○ The more successful programs reinforced the advice and counseling through printed materials, home visits, and/or telephone contacts ○ Cessation trials involving predominantly private populations or clients who attend HMOs apparently achieve greater cessation efforts than those involving public health clients 	N/A
<p>Gehrman & Hovell. (2003). Protecting Children from Environmental Tobacco Smoke (ETS) Exposure: A Critical Review. <i>Nicotine & Tobacco Research</i>. [Target: A,B,C,D]</p>	<ul style="list-style-type: none"> • Reviewed 19 studies • Interventions: minimal contact, physical office-based interventions, intensive home-based interventions- counseling, advice, booklets, self-help manual, biomarker feedback, phone call • Findings <ul style="list-style-type: none"> ○ 4 out of 10 physician-based interventions resulted in significant reductions in ETS exposure, 7 out of 8 home-based interventions resulted in significant effects ○ Interventions can be effective in reducing children's exposure ○ More rigorous study designs, interventions of greater intensity and duration, and those based on sound behavior change theory have yielded the most promising results 	http://dx.doi.org/10.1080/1462220031000094231
<p>Hemsing et al. (2012). Partner Support for Smoking Cessation During Pregnancy: A Systematic Review. <i>Nicotine & Tobacco Research</i>. [Target: A,B,C,H]</p>	<ul style="list-style-type: none"> • Reviewed 9 studies • Interventions: mass media campaigns, ultrasound scans, video, self-help manuals, counseling, nicotine replacement therapies aimed at pregnant women and/or their partners • Findings <ul style="list-style-type: none"> ○ 1 RCT showed significant results for an intervention, which included a partner-targeted component in which pregnant women received health counseling, video and printed information while partners received a booklet explaining the 	http://dx.doi.org/10.1093/ntnr/ntr278

	<p>importance of quitting together</p> <ul style="list-style-type: none"> ○ 3 studies (1 RCT cluster, 1 pre-post test, 1 RCT) demonstrated no effect in improving smoking cessation among pregnant women ○ Two RCTs included free NRTs, telephone counseling, and multiple contacts as components of effective intervention for male partners, but impact on overall quit rates may not be sustainable postpartum ○ 7 studies (4 pre-post test, 2 RCT, 1 RCT cluster) found no effect of the intervention on partner smoking cessation 	
<p>Higgins et al. (2012). Financial Incentives for Smoking Cessation among Pregnant and Newly Postpartum Women. <i>Preventive Medicine</i>. [Target: D,G,H]</p>	<ul style="list-style-type: none"> ● Reviewed 6 studies ● Findings <ul style="list-style-type: none"> ○ Results with economically disadvantaged pregnant smokers support the efficacy of financial incentives for increasing smoking abstinence rates antepartum and early postpartum 	<p>http://dx.doi.org/10.1016/j.pmed.2011.12.016</p>
<p>Hoedjes et al. (2010). Effect of Postpartum Lifestyle Interventions on Weight Loss, Smoking Cessation, and Prevention of Smoking Relapse: A Systematic Review. <i>Obstetrical & Gynecological Survey</i>. [Target: A,B,C,D,G]</p>	<ul style="list-style-type: none"> ● Reviewed 11 articles describing the effect of 9 interventions on smoking cessation and smoking relapse prevention ● Findings <ul style="list-style-type: none"> ○ Successful smoking relapse prevention interventions <ul style="list-style-type: none"> ▪ 1 face-to-face counseling session at birth followed by 8 telephone counseling sessions or home visits delivered by a nurse ▪ 4 home visits or telephone contacts over 2 months delivered by a nurse based on motivational interviewing and the “5As” ○ Successful smoking cessation and smoking relapse prevention interventions <ul style="list-style-type: none"> ▪ Office-based, delivered by a pediatrician, and implemented during 4 routine “well baby” office visits-hospital packet, videotape, brief discussion ▪ Home counseling session, 2 telephone counseling sessions based on motivational interviewing and 	<p>http://dx.doi.org/10.1097/OGX.0b013e3182077f64</p>

	<p>stages of change</p> <ul style="list-style-type: none"> ○ Successful smoking cessation interventions <ul style="list-style-type: none"> ▪ Face-to-face and telephone counseling sessions based on motivational interviewing and relapse prevention ○ Conflicting smoking cessation intervention: client-centered approach and aimed at increasing self-efficacy delivered by a child health nurse 	
<p>Hovell et al. (2000). Reducing Children's Exposure to Environmental Tobacco Smoke: The Empirical Evidence and Directions for Future Research. <i>Tobacco Control</i>. [Target: B,C,D,H]</p>	<ul style="list-style-type: none"> ● Interventions: policy/legal regulations, minimal clinical services, counseling services ● Findings <ul style="list-style-type: none"> ○ CTs of clinicians' one time counseling services have shown null results ○ 1 CT found that repeated physician ETS counseling increased parent cessation ○ 3 trials found that repeated counseling/shaping procedures reduced quantitative estimates of ETS exposure in asthmatic children ○ Insufficient controlled studies of repeated session counseling procedures have been completed to determine efficacy for ETS exposure reduction, but evidence is warranted 	<p>http://www.jstor.org/stable/20207843</p>
<p>Kintz et al. (2014). Nursing Interventions to Promote Smoking Cessation During Pregnancy: An Integrative Review. <i>Journal of Nursing Education and Practice</i>. [Target: B,C,D,G]</p>	<ul style="list-style-type: none"> ● Reviewed 24 articles <ul style="list-style-type: none"> ○ Interventions used: support-person (friend/family), meeting/counseling, telephone, nicotine replacement therapy, voucher, written material, audio/videotapes, computer program, referrals, home visit ● Findings <ul style="list-style-type: none"> ○ 70% of the reviewed studies reported either smoking cessation or a reduction in smoking as a result of participating in a smoking cessation program ○ Smoking cessation interventions should begin at the beginning of pregnancy, as early pregnancy is a peak opportunity for education ○ Highly beneficial if the interventions last throughout the 	<p>http://dx.doi.org/10.5430/jnep.v4n9p77</p>

	pregnancy to ensure smoking cessation lasts through the postpartum period	
Klerman. (2004). Protecting Children: Reducing Their Environmental Tobacco Smoke Exposure. <i>Nicotine & Tobacco Research</i> . [Target; B,C,D,G]	<ul style="list-style-type: none"> • Included 9 US experimental or quasi-experimental studies • Findings <ul style="list-style-type: none"> ○ Most studies showed a significant impact on maternal smoking and on the number of cigarettes smoked in the home, although intervention-control differences were relatively small ○ Training in techniques for reducing tobacco dependence should be included in professional education programs ○ Public and private insurance should reimburse providers for efforts in this area ○ An overall strategy for reducing children's ETS exposure should combine individual counseling and education in offices, clinics, and homes with community education and regulatory and economic policies (i.e., smoking bans and excise taxes) 	http://dx.doi.org/10.1080/14622200410001669213
Klesges et al. (2001). Smoking Cessation in Pregnant Women. Obstetrics & <i>Gynecology Clinics of North America</i> . [Target: B,C,D,F,H]	<ul style="list-style-type: none"> • Behavioral interventions for smoking cessation <ul style="list-style-type: none"> ○ Every person who smokes should be offered smoking cessation treatment at every office visit ○ Clinicians should ask about and record the tobacco-use status of every patient ○ Cessation treatments even as brief as 3 minutes are effective ○ More intense treatment is more effective in producing long-term abstinence from tobacco ○ Nicotine replacement therapy, clinician-delivered social support, and skill training are particularly effective components ○ Health care systems should make institutional changes that result in the systematic identification, and intervention with, tobacco users at every visit • Comprehensive interventions for smoking cessation during pregnancy <ul style="list-style-type: none"> ○ Prenatal visitation programs have been shown to be effective ○ Community-based prenatal smoking cessation programs that are made available at schools, work sites, faith-based organizations, and in welfare-to-work programs may lead to 	http://dx.doi.org/10.1016/S0889-8545(05)70200-X

	<ul style="list-style-type: none"> ○ reductions in maternal smoking <ul style="list-style-type: none"> ○ Work-place health promotion for improving maternal health, including prenatal smoking cessation, is receiving increased attention ● Pharmacologic therapies for smoking cessation during pregnancy: inconclusive evidence 	
Lancaster et al. (2001). Helping Parents to Stop Smoking: Which Interventions are Effective? <i>Paediatric Respiratory Reviews</i> . [Target: B,C,G]	<ul style="list-style-type: none"> ● Advice from health professionals: more effective when linked to further support and treatment for nicotine dependence, little known about ideal content of advice ● Behavioral/psychological interventions: both individual counseling and group therapy increase the chances of quitting, usually multicomponent (cognitive and behavioral techniques, relaxation techniques, reward/punishment contracts, social support) ● Self-help materials (leaflets, complex manuals, audiotapes, videotapes, computer programs): little evidence of whether the mode of delivery affects the effectiveness of materials ● Nicotine replacement therapy, antidepressants, other pharmacological therapies 	http://dx.doi.org/10.1053/prrv.2001.0144
Levitt et al. (2007). Systematic Review of the Literature on Postpartum Care: Effectiveness of Interventions for Smoking Relapse Prevention, Cessation, and Reduction in Postpartum Women. <i>Birth</i> . [Target: B,C]	<ul style="list-style-type: none"> ● Reviewed 5 papers based on 3 trials ● Findings <ul style="list-style-type: none"> ○ No statistically significant benefits of advice materials and interventions in hospital, pediatrician's offices, or child health centers on relapse prevention, cessation rates, or smoking reduction in the postpartum period 	http://dx.doi.org/10.1111/j.1523-536X.2007.00194.x
Lorenatto et al. (2012). Specifying Evidence-Based Behavior Change Techniques to Aid	<ul style="list-style-type: none"> ● Reviewed 7 interventions that increased the odds of cessation by at least 50% and differences between intervention and control conditions were statistically significant ● 37 behavioral change techniques (BCTs) were identified across trials 	http://dx.doi.org/10.1093/ntr/ntr324

<p>Smoking Cessation in Pregnancy. <i>Nicotine & Tobacco Research</i>. [Target: G]</p>	<ul style="list-style-type: none"> • Findings <ul style="list-style-type: none"> ○ 11 BCTs were present in at least 2 effective interventions (facilitate goal setting, advise on social support, action planning, provide rewards contingent on successful cessation) 	
<p>Melvin et al. (2000). Recommended Cessation Counseling for Pregnant Women Who Smoke: A Review of the Evidence. <i>Tobacco Control</i>. [Target: B,C,D]</p>	<ul style="list-style-type: none"> • Reviewed 16 trials based on the Agency for Healthcare Research and Quality's recommended cessation counseling • Findings <ul style="list-style-type: none"> ○ A brief cessation counseling session of 5–15 minutes, when delivered by a trained provider with the provision of pregnancy specific, self help materials, significantly increases rates of cessation among pregnant smokers (RR=1.7) 	http://dx.doi.org/10.1136/tc.9.suppl_3.iii80
<p>Miyazaki et al. (2011). Smoking Cessation in Pregnancy: Psychosocial Interventions and Patient-Focused Perspectives. <i>International Journal of Women's Health</i>. [Target: B,C,G]</p>	<ul style="list-style-type: none"> • Reviewed 52 citations (mostly US studies) • Findings <ul style="list-style-type: none"> ○ Psychosocial interventions, such as counseling, are effective methods for increasing smoking cessation ○ Smokers may have various psychosocial problems in addition to health problems; it is important to understand each individual's social situation or psychosocial characteristics, and a psychosocial intervention focused on the characteristics of the individual is required 	http://dx.doi.org/10.2147/IJWH.S54599
<p>Murin et al. (2011). Smoking and Smoking Cessation in Pregnancy. <i>Clinics in Chest Medicine</i>. [Target: G]</p>	<ul style="list-style-type: none"> • Approach to smoking cessation: the 5 A's approach • Self-help materials: booklets, videos, computer-based interventions audiocassettes, recorded telephone messages <ul style="list-style-type: none"> ○ Materials tailored to pregnancy have shown to be associated with a significant higher quit rate than general materials- can also be tailored to age, educational level, or cultural group ○ No evidence that greater intensity is associated with higher quit rates than lower intensity • Counseling: informational counseling, cognitive behavior therapy, motivational interviewing <ul style="list-style-type: none"> ○ Trained counselors are more effective than untrained counselors ○ Heavier smokers seem to be more resistant to the effects of 	http://dx.doi.org/10.1016/j.ccm.2010.11.004

	<ul style="list-style-type: none"> ○ counseling and other interventions than are lighter smokers ○ Counseling of any extent is more effective than usual care (simple advice and brief counseling) ● Pharmacologic therapies: controversial 	
Myung et al. (2012). Efficacy and Safety of Pharmacotherapy for Smoking Cessation among Pregnant Smokers: A Meta-Analysis. <i>BJOG: An International Journal of Obstetrics & Gynaecology</i> . [Target: G]	<ul style="list-style-type: none"> ● Reviewed 7 studies (5 RCTs, 1 quasi-RCT, 1 prospective study) ● Finding <ul style="list-style-type: none"> ○ Pharmacotherapy had a significant effect on smoking cessation (RR=1.80) ○ Subgroup meta-analysis by type of study design also showed similar findings for RCTs (RR=1.48) and other types of studies (RR=3.25) ○ Abstinence rate at late pregnancy in the intervention ranged from 7 to 22.6% ○ A few minor and serious adverse effects were reported ○ There may be clinical evidence to support the use of pharmacotherapy for smoking cessation among pregnant smokers 	http://dx.doi.org/10.1111/j.1471-0528.2012.03408.x
Naughton et al. (2008). Self-Help Smoking Cessation Interventions in Pregnancy: A Systematic Review and Meta-Analysis. <i>Addiction</i> . [Target: B,C,G]	<ul style="list-style-type: none"> ● Reviewed 15 trials ● Findings <ul style="list-style-type: none"> ○ Primary meta-analysis pooled 12 trials comparing usual care (median quit rate 4.9%) with self-help (median quit rate 13.2%) → OR=1.83 → self-help interventions nearly doubled the odds of quitting compared with standard care ○ A further meta-analysis failed to find evidence that intervention materials of greater intensity increase quitting significantly over materials of lesser intensity (OR=1.25) ○ Self-help interventions appear to be more effective than standard care although, due mainly to a lack of trials, it is unclear whether more sophisticated and intensive approaches increase intervention effectiveness 	http://dx.doi.org/10.1111/j.1360-0443.2008.02140.x
O'Campo et al. (1995). Smoking Cessation Interventions for	<ul style="list-style-type: none"> ● Successful clinic-based interventions share similar characteristics and tailoring cessation messages to clients may enhance the 	http://dx.doi.org/10.1016/S0146-0005(05)80042-4

<p>Pregnant Women: Review and Future Directions. <i>Seminars in Perinatology</i>. [Target: B,C,H]</p>	<p>effectiveness</p> <ul style="list-style-type: none"> • Assessing a smoker's degree of addiction and tailoring counseling for cessation according to the patient's readiness might enhance practices • Additional strategies are needed to achieve population-wide reductions in addition to individual counseling: increased taxation on cigarettes, community-based anti-tobacco programs, increase the number of smoke-free environments 	
<p>Phelan. (2014). Smoking Cessation in Pregnancy. <i>Obstetrics and Gynecology Clinics of North America</i>.</p>	<ul style="list-style-type: none"> • Non-pharmaceutical strategies: NCI's 5 A's and 5 R's approach • Pharmacologic strategies: NRT, bupropion, varenicline • Self-managed strategies: noncombustible forms of nicotine delivery, smartphone applications, exercise 	<p>http://dx.doi.org/10.1016/j.ogc.2014.02.007</p>
<p>Rore et al. (2008). Smoking cessation in Pregnancy. <i>Expert Opinion on Drug Safety</i>. [Target: B,C,G]</p>	<ul style="list-style-type: none"> • Options available to clinician to aid smoking cessation: nicotine replacement therapy (NRT), bupropion, varenicline, and a range of non-drug therapies (counseling, self-help, therapy) • Findings: <ul style="list-style-type: none"> ○ NRT is the agent of choice for smoking cessation in pregnancy, as the safety of other therapies have not yet been proven 	<p>http://dx.doi.org/10.1517/14740330802196756</p>
<p>Solomon & Quinn. (2004) Spontaneous Quitting: Self-Initiated Smoking Cessation in Early Pregnancy. <i>Nicotine & Tobacco Research</i>. [Target: B,C,D,G]</p>	<ul style="list-style-type: none"> • Reviewed 9 controlled outcome intervention studies to prevent relapse among spontaneous quitters during pregnancy <ul style="list-style-type: none"> ○ Mailed self-help materials <ul style="list-style-type: none"> ▪ 1 out of 3 studies showed effectiveness ▪ Do not appear to enhance maintenance of abstinence among privately insured spontaneous quitters ▪ Adding telephone counseling calls may hold promise ○ Face-to-face counseling alone or in conjunction with other cognitive intervention components <ul style="list-style-type: none"> ▪ 5 out of 6 studies observed no significant effect for additional health provider counseling during routine health care appointments ▪ Only 1 study observed an effect for a brief midwife-delivered counseling intervention 	<p>http://dx.doi.org/10.1080/14622200410001669132</p>

<p>Su & Bутtenheim. (2014). Maintenance of Smoking Cessation in the Postpartum Period: Which Interventions Work Best in the Long-Term? <i>Maternal and Child Health Journal</i>. [Target: B,C,G]</p>	<ul style="list-style-type: none"> • Review investigates interventions to prevent relapse in the long-term postpartum period with a focus specifically on nonspontaneous quitters (individuals who quit smoking as a result of an external intervention) • Reviewed 32 relevant studies of pharmacological, behavioral, and incentives-based interventions • Findings <ul style="list-style-type: none"> ○ Though intervention groups showed consistently higher quit rates during pregnancy than control groups, none of the intervention types were effective at preventing relapse in the longer-term postpartum period ○ One study maintained significantly higher abstinence in the longer-term period postpartum using a mix of behavioral and incentives strategies 	<p>http://dx.doi.org/10.1007/s10995-013-1298-6</p>
<p>Agency for Healthcare Research and Quality (AHRQ). (2014). Smoking Cessation Interventions in Pregnancy and Postpartum Care. [Target: B,C,G]</p>	<ul style="list-style-type: none"> • Reviewed 72 publications from 59 unique studies (56 RCTs, 3 prospective cohort studies) • Findings <ul style="list-style-type: none"> ○ Approaches that combine multiple components will have the best likelihood of success ○ Results from 23 RCTs (8068 participants) <ul style="list-style-type: none"> ▪ Incentives: consistent, OR=3.23 (moderate for effect) ▪ Feedback: inconsistent, OR=1.43 (low for effect) ▪ Information: inconsistent, OR=1.32 (low for effect) ▪ Personal follow-up: inconsistent, OR=1.25 (low for effect) ▪ Nicotine replacement therapy: inconsistent, OR=1.24 (low for effect) ▪ Quit guide: inconsistent, OR=1.18 (low for effect) ▪ Prescription to quit: inconsistent, OR=1.13 (low for no effect) ▪ Peer support: inconsistent, OR=1.07 (low for no effect) ▪ Clinic reinforcement: inconsistent, OR=1.05 (low for no effect) 	<p>http://effectivehealthcare.ahrq.gov/ehc/products/517/1871/smoking-pregnancy-infants-report-140226.pdf</p>

<p>Association of Maternal & Child Health Programs (AMCHP). (2012). Forging a Comprehensive Initiative to Improve Birth Outcomes and Reduce Infant Mortality: Policy and Program Options for State Planning [Target: A,B,C,D,E,G]</p>	<ul style="list-style-type: none"> • Compendium of state/national efforts, as well as programmatic and policy options states can consider in their work to improve birth outcomes and reduce infant mortality • Examples of strategies related to smoking cessation include: <ul style="list-style-type: none"> ○ Coordinate with current smoking cessation efforts (e.g. WIC, Medicaid, community organizations) ○ Promote resources for smoking cessation and drug treatment programs ○ Implement reminder systems for medical and dental providers to identify and intervene with women ○ Provide tobacco cessation training to obstetric and neonatal providers, and other public health providers who interact with pregnant women ○ Partner with Medicaid to create strategies for increasing reimbursement in cessation programs ○ Collaborate with Environmental Health and Healthy Homes programs 	<p>http://www.amchp.org/AboutTitleV/Resources/Documents/AMCHP%20Birth%20Outcomes%20Compendium.pdf</p>
<p>AMCHP Innovation Station [Target: A,B,C,G]</p>	<ul style="list-style-type: none"> ○ The Missouri Model for Brief Smoking Cessation Training Location: Missouri ○ Provided free training sessions to health care providers working with women of reproductive age, at eight locations across the state ○ Training was based on the evidence-based intervention, the “5 A’s” – which includes five steps: Ask, Advise, Assist, and Arrange <ul style="list-style-type: none"> • One Tiny Reason to Quit <ul style="list-style-type: none"> ○ Location: Virginia Campaign to promote calls from pregnant African American smokers to the toll-free smoking cessation quitline in Richmond, VA. ○ Used various media channels (e.g. radio, billboards, bus advertisements); emphasized message through ‘branded give-away items’ (e.g. lip balm, cell phone-shaped tins of mints) 	<p>http://www.amchp.org/programsandtopics/BestPractices/InnovationStation/ISDocs/Smoking%20cessation-MO_2015.pdf</p> <p>http://www.amchp.org/programsandtopics/BestPractices/InnovationStation/ISDocs/One-Tiny-Reason_2015.pdf</p>
<p>Association of State and Territorial Health</p>	<ul style="list-style-type: none"> • Recommendations to improve smoking cessation include: <ul style="list-style-type: none"> ○ Provide training and technical assistance to healthcare and 	<p>http://www.astho.org/Prevention/Tobacco/Smoking-</p>

<p>Officials (ASTHO). (2013). Smoking Cessation Strategies for Women Before, During, and After Pregnancy: Recommendations for State and Territorial State Health Agencies. [Target: A,B,C,D,G,H]</p>	<p>public health providers on helping women quit using tobacco before, during, and after pregnancy</p> <ul style="list-style-type: none"> ○ Extend pregnancy-specific and postpartum-specific quit line services to women ○ Implement coordinated media campaigns that specifically target women during childbearing years ○ Develop customized programs for specific at-risk populations of women ○ Include WIC sites as points for intervening with pregnant and postpartum women ○ Design and promote barrier-free cessation coverage benefits for pregnant and postpartum women in public and private health plans ○ Promote cessation service integration aimed at improving birth outcomes ○ Implement evidence-based tobacco control policies 	<p>Cessation-Pregnancy/</p>
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¹ Target specifies Target Audience for the strategies mentioned in each Review/Compilation: A = Hospital Inpatient (includes physical, mental, and oral health); B = Hospital Outpatient (includes physical, mental, and oral health); C = Non-Hospital Outpatient Providers (e.g. community health centers, private medical groups, health maintenance organizations); D = Community Organizations (e.g. WIC, advocacy organizations, child care providers, home visiting services); E = Social Service Organizations (e.g. Head Start, child welfare); F = Schools and School Systems; G = Consumers/Families; H = Other

Frameworks and Landmark Initiatives

Framework/Initiative	Summary	Web Link
Albrecht et al. (2011). The SUCCESS Program for Smoking Cessation for Pregnant Women. <i>Journal of Obstetric, Gynecologic, & Neonatal Nursing.</i>	The Association of Women’s Health, Obstetric, and Neonatal Nurses (AWHONN) developed an evidence-based practice program- Setting Universal Cessation Counseling Education and Screening Standards (SUCCESS) <ul style="list-style-type: none"> • 5 A’s model: ask patient to describe smoking status, advise patient to quit smoking, assess willingness to make a quit attempt, assist in quit attempt, arrange for follow-up • 5 R’s model: relevance, risks, rewards, roadblocks, repetition • Stages of change model: precontemplation, contemplation, preparation, action, maintenance stages 	http://dx.doi.org/10.1111/j.1552-6909.2011.01280.x
Emmons et al. (2001). Intervention and Policy Issues Related to Children’s Exposure to Environmental Tobacco Smoke. <i>Preventive Medicine.</i>	Project KISS (Keeping Infants Safe from Smoke)- Heuristic Model <ul style="list-style-type: none"> • Independent variable (intervention conditions): self-help control, motivational intervention • Cognitive and behavioral mediating mechanisms: perceived vulnerability, processes of change, outcome expectations, decisional balance, response efficacy • Secondary outcomes: self-efficacy/temptations, intentions, quit attempts • Moderating mechanisms: demographics, nicotine dependence, depression, other substance use • Primary outcomes: changes in household nicotine concentrations, smoking cessation 	http://dx.doi.org/10.1006/pmed.2000.0822
Orleans et al. (2001). Helping Pregnant Smokers Quit: Meeting the Challenge in the Next Decade. <i>Western Journal of Medicine.</i>	<ul style="list-style-type: none"> • Goal: to increase the adoption, reach, and impact of evidence-based smoking cessation interventions in pregnancy • Science/intervention push: proving or improving the intervention for wide population use <ul style="list-style-type: none"> ○ Standards for defining what is “effective” ○ Identifying proven pregnancy tailored and postpartum interventions ○ Test/adapt “best practice” interventions in varied populations or settings 	N/A

	<ul style="list-style-type: none"> ○ Basic intervention studies ● Delivery capacity: building the capacity of relevant systems to deliver the intervention <ul style="list-style-type: none"> ○ Technical assistance for “real world” settings ○ Provider training and implementation tools ○ Systems level changes ○ Clinical improvement/quality control strategies ● Market pull/demand: building a market and demand for the intervention <ul style="list-style-type: none"> ○ Increase “market demand” ○ Implement policy changes that drive demand ○ Communications campaign to stimulate demand 	
<p>Pletsch. (2006). A Model for Postpartum Smoking Resumption Prevention for Women Who Stop Smoking While Pregnant. <i>Journal of Obstetric, Gynecologic, & Neonatal Nursing</i>.</p>	<ul style="list-style-type: none"> ● Assessment dimension <ul style="list-style-type: none"> ○ Behavioral (intrinsic motivation): dependence, readiness/stage, self-efficacy ○ Pregnancy specific (extrinsic motivation): concerns for the fetus, sensory changes to tobacco ○ Co-conditions <ul style="list-style-type: none"> ▪ Intrinsic: depression, body weight concerns ▪ Extrinsic: partner/household smokers & support ● Model <ul style="list-style-type: none"> ○ Behavioral → anticipate & plan for changes, increase readiness & self-efficacy, anticipate & plan for risky situations ○ Pregnancy specific → shift motivation from baby to woman, plan for loss of aversion ○ Co-conditions → skills for social support/resisting social pressure, referral for specialized services for depression and weight management 	http://dx.doi.org/10.1111/j.1552-6909.2006.00036.x
<p>Todd et al. (2001). An Integrated Approach to Prenatal Smoking Cessation Interventions. <i>MCN: The American Journal of Maternal/Child Nursing</i>.</p>	<p>Stages of Change Model</p> <ul style="list-style-type: none"> ● Precontemplation <ul style="list-style-type: none"> ○ Stage: unwilling to quit smoking, may be discouraged about ability to quit, does not believe she is susceptible to severe illness ○ Intervention: assess patient’s current/past smoking history and/or exposure to passive smoke as a routine vital sign each visit 	N/A

	<ul style="list-style-type: none"> • Contemplation <ul style="list-style-type: none"> ○ Stage: thinking about quitting, recognizes dangers of smoking, feels ready to make the attempt, may be upset at unsuccessful past attempts ○ Intervention: assess patient's current/past smoking history and/or exposure to passive smoke as a routine vital sign each visit, provide and encourage her to read printed materials and learn strategies for cessation • Preparation <ul style="list-style-type: none"> ○ Stage: ready to make a change by setting goals, may be able to build on previous successes ○ Intervention: quit date contract, relaxation and delayed techniques, light to moderate exercise • Action stage <ul style="list-style-type: none"> ○ Stage: had begun cessation process, many begin at this stage because of external motivation, may experience withdrawal symptoms ○ Intervention: support and positive reinforcement, relapse strategies, telephone follow-up • Maintenance <ul style="list-style-type: none"> ○ No longer smoking, road to lifelong abstinence, may still experience withdrawal symptoms ○ Intervention: telephone support for a year, information/referral to community-based smoking cessation programs 	
<p>Winickoff et al. (2008). Clinical Effort Against Secondhand Smoke Exposure: Development of Framework and Intervention. <i>Pediatrics</i>.</p>	<p>Conceptual Framework for Parental Tobacco Control in Child Health Care Settings</p> <ul style="list-style-type: none"> • Solberg Processes IMPROVE Model <ul style="list-style-type: none"> ○ Providing guidelines: providing the current PHS guidelines that the American Academy of Pediatrics Tobacco Consortium has endorsed, suggesting office-specific benchmarks for guideline adherence that the practice can endorse ○ Screening: screening for parents' smoking status and for rules prohibiting smoking in the home and car ○ Summarizing: organizing and updating the information obtained in the screening process so that it is all in one place and easily reviewable by those needing to know the current 	<p>http://dx.doi.org/10.1542/peds.2008-0478</p>

	<p>tobacco-use prevention status of a particular parent</p> <ul style="list-style-type: none"> ○ Cueing: systematically cueing clinic staff and clinicians to address parental tobacco control and how to do it ○ Following up: communicating back to the practices results of preventive services delivered to parents by quintiles, along with the appropriate information and recommendations for follow-up visits with parents ○ Resources: organizing and maintaining parent education materials and enrollment forms needed by both parents and clinic personnel ○ Counseling: assisting parents to make needed changes in their behavior through very brief and focused messaging to parents who smoke, specifying messages needed to address teachable moments relevant to the parent-child dyad, such as using child health characteristics, such as ear infections and asthma exacerbations, as part of the longitudinal messaging process ○ Tracking and recall: documenting tobacco control services delivery to enable provision of patient centered follow-up counseling at subsequent visits ○ Patient activation: encouraging parents to take greater responsibility for their own smoking behavior particularly in the context of the child's well-being and specific health concerns ● Wagner Components Chronic Illness Model <ul style="list-style-type: none"> ○ Organization of care: making tobacco preventive services a key goal of the organization, ensuring that leadership is committed and visibly involved with parental tobacco control, encouraging periodic measurement of key intervention components ○ Clinical information systems: implementing a universal screening system, delivering proactive care to those who screen positive for tobacco use, following individual's and practice's progress over time ○ Delivery system design: ensuring that the composition of the practice team can handle the key components of parental tobacco control and that every team member knows his or her 	
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	<p>responsibilities</p> <ul style="list-style-type: none"> ○ Decision support: providing evidence-based support for all aspects of recommended intervention, establishing a promising system to increase adherence to those guidelines ○ Self-management support: offering parental smokers educational resources, skills training, and psychosocial support ○ Community resources: improving performance of child care systems by establishing linkages with effective parental tobacco control in the community and at the state level 	
<p>American College of Obstetricians and Gynecologists (ACOG). (2011). Smoking Cessation During Pregnancy: A Clinician's Guide to Helping Women Quit Smoking.</p>	<ul style="list-style-type: none"> ● 5 A's Approach: Ask, Advise, Assess, Assist, Arrange (for providers) <ul style="list-style-type: none"> ○ Ask: reminder in EMR system for screening, ask about smoking status, record smoking status as a vital sign in patient record ○ Advise: provide educational materials about health risks and benefits of quitting for mother and baby ○ Assess: choose quit date ○ Assist: "prescription to quit," referral to quit line, "quit contract," provide patient diary or phone application for recording smoking triggers, practice "no smoking" dialog ○ Arrange: program reminder into EMR system to follow-up smoking status at every visit, send a congratulatory letter if patient quits 	<p>http://www.acog.org/-/media/Departments/Tobacco-Alcohol-and-Substance-Abuse/SCDP.pdf?dmc=1&ts=20141113T1124125894</p>

Data Sources

Data Source*	Search Criteria	Web Link
Cochrane Library	Search Term: maternal smoking intervention Search Limits: Cochrane Reviews/Review; Other Reviews Sort by relevance: high to low	N/A
	Search Term: household smoking intervention Search Limits: Cochrane Reviews/Review; Other Reviews Sort by relevance: high to low	
	Search Term: child smoke exposure intervention Search Limits: Cochrane Reviews/Review; Other Reviews Sort by relevance: high to low	
	Search Term: smoking cessation pregnancy Search Limits: Cochrane Reviews/Review; Other Reviews Sort by relevance: high to low	
Campbell Systematic Reviews	Search Term: maternal smoking intervention	http://www.campbellcollaboration.org/lib/?go=monograph&search=maternal+smoking+intervention+&search_criteria=title
	Search Term: household smoking intervention	http://www.campbellcollaboration.org/lib/?go=monograph&search=household+smoking+intervention&search_criteria=title
	Search Term: child smoke exposure intervention	http://www.campbellcollaboration.org/lib/?go=monograph&search=child+smoke+exposure+intervention&search_criteria=title
	Search Term: smoking cessation pregnancy	http://www.campbellcollaboration.org/lib/?go=monograph&search=smoking+cessation+pregnancy&search_criteria=title

PubMed	Search Term: maternal smoking intervention Article Types: Meta-analysis, Review, Systematic Reviews Species: Humans Languages: English Sort by relevance	http://www.ncbi.nlm.nih.gov/pubmed/?term=maternal+smoking+intervention
	Search Term: household smoking intervention Article Types: Meta-analysis, Review, Systematic Reviews Species: Humans Languages: English Sort by relevance	http://www.ncbi.nlm.nih.gov/pubmed/?term=household+smoking+intervention
	Search Term: child smoke exposure intervention Article Types: Meta-analysis, Review, Systematic Reviews Species: Humans Languages: English Sort by relevance	http://www.ncbi.nlm.nih.gov/pubmed/?term=child+smoke+exposure+intervention
	Search Term: smoking cessation pregnancy Article Types: Meta-analysis, Review, Systematic Reviews Species: Humans Languages: English Sort by relevance	http://www.ncbi.nlm.nih.gov/pubmed/?term=smoking+cessation+pregnancy
Google Scholar	Search Term: maternal smoking intervention Sort by relevance	https://scholar.google.com/scholar?hl=en&q=maternal+smoking+intervention&btnG=&as_sdt=1%2C21&as_sdtp=
	Search Term: household smoking intervention Sort by relevance	https://scholar.google.com/scholar?q=household+smoking+intervention&btnG=&hl=en&as_sdt=0%2C21
	Search Term: child smoke exposure intervention Sort by relevance	https://scholar.google.com/scholar?q=child+smoke+exposure+intervention&btnG=&hl=en&as_sdt=0%2C21
	Search Term: smoking cessation pregnancy Sort by relevance	https://scholar.google.com/scholar?q=smoking+cessation+pregnancy&btnG=&hl=en&as_sdt=0%2C21

CINAHL Plus	Search Term: maternal smoking intervention Source Types: all results Sort by Relevance	N/A
	Search Term: household smoking intervention Source Types: all results Sort by Relevance	N/A
	Search Term: child smoke exposure intervention Source Types: all results Sort by Relevance	N/A
	Search Term: smoking cessation pregnancy Source Types: all results Sort by Relevance	N/A
AMCHP Innovation Station	State: all Region: all Practice Category: all Primary Topic: all National Performance Measures: all Year: N/A Keywords: N/A	http://www.amchp.org/programsandtopics/BestPractices/InnovationStation/Pages/default.aspx
Georgetown Knowledge Base	MCH Knowledge Base and Library Collection → Professional Resource Guides and Briefs → Smoking	http://ncemch.org/evidence/NPM-14-smoking.php
	MCH Knowledge Base and Library Collection → Professional Resource Guides and Briefs → Tobacco, Alcohol, and Substance Use During Preconception and Pregnancy	http://ncemch.org/guides/substancepregnancy.php
Healthy People 2020 Structured Evidence Queries	Search by Topic Area → Tobacco Use → PubMed Search → TU-6	http://phpartners.org/hp2020/
Infant Mortality Collaborative Improvement and Innovation Network (IM CoIIN)	N/A	http://www.nichq.org/childrens-health/infant-health/coiin-to-reduce-infant-mortality
CDC Office on Smoking and Health	N/A	http://www.cdc.gov/tobacco/about/osh/index.htm

**The Strengthen the Evidence Team of Experts and selected HRSA discretionary grantees contributed to the identification of data sources*

Inclusion and Exclusion Criteria

Inclusion Criteria	Exclusion Criteria
<ul style="list-style-type: none"> • Reviews of studies, websites, compilations of specific interventions/strategies aimed at reducing maternal and household smoking as a primary goal • Language: English • Populations of interest: pregnant and postpartum women, individuals residing in households with children ages 0 to 18 	<ul style="list-style-type: none"> • Articles describing single strategies that are not part of a larger review/compilation • Studies performed or primarily focused on international populations (included reviews of studies if US studies were included) • Studies without specific information regarding implementation of interventions • Studies focused on smoking cessation interventions/strategies in the general adult population and in children and adolescents