

Tobacco in Australia

Facts & Issues

Relevant news and research

3.7 Pregnancy and smoking

Last updated September 2019

Research:

Allen, S, Harrison, K, Petersen, A, & Goodson, J. (2019). Smoking-related symptomatology in pregnant smokers during ad libitum smoking and following overnight smoking abstinence. *BMC Res Notes*, 12(1), 473. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/31370907>

Ratnasiri, AWG, Gordon, L, Dieckmann, RA, Lee, HC, Parry, SS, Arief, VN et al. (2019). Smoking during Pregnancy and Adverse Birth and Maternal Outcomes in California, 2007 to 2016. *Am J Perinatol*. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/31365931>

Slomski, A. (2019). More Folic Acid for Pregnant Smokers. *JAMA*, 321(20), 1965. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/31135849>

Walker, N, Filis, P, O'Shaughnessy, PJ, Bellingham, M, & Fowler, PA. (2019). Nutrient transporter expression in both the placenta and fetal liver are affected by maternal smoking. *Placenta*, 78, 10-17. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/30955705>

Lokki, AI, Heikkinen-Eloranta, J, Ohman, H, Heinonen, S, Surcel, HM, & Nielsen, HS. Smoking during pregnancy reduces vitamin D levels in a Finnish birth register cohort. *Public Health Nutr*, 2019. 1-5. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/30732669>

Milnerowicz, H, Wrzesniak, M, Krolik, M, & Kowalska, K. Influence of tobacco smoke on zinc, cadmium, iron, iron-binding proteins, and low-weight anti-oxidant status in pregnancy. *Inhal Toxicol*, 2019. 1-8. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/30794012>

Reynolds, CME, Egan, B, Daly, N, McKeating, A, Sheehan, SR, & Turner, MJ. The interaction between maternal smoking, illicit drug use and alcohol consumption associated with neonatal outcomes. *J Public Health (Oxf)*, 2019. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/30753536>

tobaccoinaustralia.org.au

Tobacco in Australia

Facts & Issues

Tanaka, K, Nishigori, H, Watanabe, Z, Iwama, N, Satoh, M, Murakami, T et al. Higher prevalence of hypertensive disorders of pregnancy in women who smoke: the Japan environment and children's study. *Hypertens Res*, 2019. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/30662062>

Song C, Li W, Leng J, Wang L, Li W, et al. Passive smoking and postpartum depression among chinese women: A prospective cohort study in tianjin, china. *Women Health*, 2018. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/29924720>

Mistry R, Jones AD, Pednekar MS, Dhumal G, Dasika A, et al. Antenatal tobacco use and iron deficiency anemia: Integrating tobacco control into antenatal care in urban india. *Reprod Health*, 2018; 15(1):72. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/29720206>

Lee SW, Han YJ, Cho DH, Kwak HS, Ko K, et al. Smoking exposure in early pregnancy and adverse pregnancy outcomes: Usefulness of urinary tobacco-specific nitrosamine metabolite 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanol levels. *Gynecol Obstet Invest*, 2018:1-10. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/29739005>

Heidari Z, Mahmoudzadeh-Sagheb H, and Sheibak N. Placenta structural changes in heavy smoking mothers: A stereological aspect. *Curr Med Res Opin*, 2018:1-9. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/29469634>

Coleman-Cowger VH, Oga EA, Peters EN, and Mark K. Prevalence and associated birth outcomes of co-use of cannabis and tobacco cigarettes during pregnancy. *Neurotoxicol Teratol*, 2018; 68:84-90. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/29883744>

Chen HL, Cai JY, Zha ML, and Shen WQ. Prenatal smoking and postpartum depression: A meta-analysis. *J Psychosom Obstet Gynaecol*, 2018:1-9. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/29514549>

Belhareth R, Mezouar S, Ben Amara A, Chartier C, Azzouz EB, et al. Cigarette smoke extract interferes with placenta macrophage functions: A new mechanism to compromise placenta functions? *Reprod Toxicol*, 2018; 78:120-9. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/29673796>

Zhao R, Wu Y, Zhao F, Lv Y, Huang D, et al. The risk of missed abortion associated with the levels of tobacco, heavy metals and phthalate in hair of pregnant woman: A case control study in chinese women. *Medicine (Baltimore)*, 2017; 96(51):e9388. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/29390543>

tobaccoinaustralia.org.au

Tobacco in Australia

Facts & Issues

Mohammadi S, Domeno C, Nerin I, Aznar M, Samper P, et al. Toxic compounds from tobacco in placenta samples analyzed by uplc-qtof-ms. *J Pharm Biomed Anal*, 2017; 145:331-8. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/28710994>

Meyer KF, Krauss-Etschmann S, Kooistra W, Reinders-Luinge M, Timens W, et al. Prenatal exposure to tobacco smoke sex dependently influences methylation and mrna levels of the igf axis in lungs of mouse offspring. *Am J Physiol Lung Cell Mol Physiol*, 2017:ajplung 00271 2016. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/28130259>

Lucendo-Villarin B, Filis P, Swortwood MJ, Huestis MA, Meseguer-Ripolles J, et al. Modelling foetal exposure to maternal smoking using hepatoblasts from pluripotent stem cells. *Arch Toxicol*, 2017. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/28510779>

Kim CW, Lee HM, Lee K, Kim B, Lee MY, et al. Effects of cigarette smoke extracts on cell cycle, cell migration and endocrine activity in human placental cells. *Reprod Toxicol*, 2017. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/28736174>

Heidari Z, Mahmoudzadeh-Sagheb H, and Sheibak N. Quantitative changes of extravillous trophoblast cells in heavy smoker mothers compared with healthy controls. *Reprod Fertil Dev*, 2017. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/28723341>

Wrzesniak M, Kepinska M, Krolik M, and Milnerowicz H. Influence of tobacco smoking on transferrin sialylation during pregnancy in smoking and non-smoking women with iron deficiency. *Environ Toxicol Pharmacol*, 2016; 46:95-102. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/27448041>

Wilbanks HE, Von Mohr M, Potenza MN, Mayes LC, and Rutherford HJ. Tobacco smoking and the resting maternal brain: A preliminary study of frontal eeg. *Yale J Biol Med*, 2016; 89(2):115-22. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/27354838>

Sirvinskiene G, Zemaitiene N, Jusiene R, Smigelskas K, Veryga A, et al. Smoking during pregnancy in association with maternal emotional well-being. *Medicina (Kaunas)*, 2016; 52(2):132-8. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/27170487>

Reese SE, Zhao S, Wu MC, Joubert BR, Parr CL, et al. DNA methylation score as a biomarker in newborns for sustained maternal smoking during pregnancy. *Environ Health Perspect*, 2016. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/27323799>

tobaccoinaustralia.org.au

Tobacco in Australia

Facts & Issues

Paropkari AD, Leblebicioglu B, Christian LM, and Kumar PS. Smoking, pregnancy and the subgingival microbiome. Sci Rep, 2016; 6:30388. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/27461975>

Moore E, Blatt K, Chen A, Van Hook J, and Defranco EA. Relationship of trimester specific smoking patterns and risk of preterm birth. Am J Obstet Gynecol, 2016. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/26827877>

Jenabi E and Fereidooni B. The association between maternal smoking and hyperemesis gravidarum: A meta-analysis. J Matern Fetal Neonatal Med, 2016:1-11. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/27123776>

Jacob N, Golmard JL, and Berlin I. Fetal exposure to tobacco: Nicotine and cotinine concentration in amniotic fluid and maternal saliva. J Matern Fetal Neonatal Med, 2016:1-22. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/27001007>

Chelchowska M, Gajewska J, Mazur J, Ambroszkiewicz J, Maciejewski TM, et al. Serum pregnancy-associated plasma protein a levels in the first, second and third trimester of pregnancy: Relation to newborn anthropometric parameters and maternal tobacco smoking. Arch Med Sci, 2016; 12(6):1256-62. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/27904516>

Salimi S, Terplan M, Cheng D, and Chisolm MS. The relationship between postpartum depression and perinatal cigarette smoking: An analysis of prams data. J Subst Abuse Treat, 2015. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/25841705>

Negrini R, Jnuior EA, Piato S, Chade MC, Rios AR, et al. Expression of collagen in ovular membranes of pregnant smokers and non-smokers: A pilot study. Ginekol Pol, 2015; 86(9):678-84. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/26665569>

Hyland A, Piazza KM, Hovey KM, Ockene JK, Andrews CA, et al. Associations of lifetime active and passive smoking with spontaneous abortion, stillbirth and tubal ectopic pregnancy: A cross-sectional analysis of historical data from the women's health initiative. Tobacco Control, 2015; 24(4):328-35. Available from: <http://tobaccocontrol.bmj.com/content/24/4/328.abstract>

Huang H, Clancy KB, Burhance C, Zhu Y, and Madrigal L. Women who deliver twins are more likely to smoke and have high frequencies of specific snps: Results from a sample of african-american women who delivered preterm, low birth weight babies. Am J Hum Biol, 2015. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/25882505>

tobaccoinaustralia.org.au

Tobacco in Australia

Facts & Issues

Di Florio A, Morgan H, Jones L, Forty L, Gordon-Smith K, et al. Smoking and postpartum psychosis. *Bipolar Disord*, 2015; 17(5):572-3. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/26241192>

Braillon A and Bewley S. Re: Prenatal vitamin c and e supplementation in smokers is associated with reduced placental abruption and preterm birth: A secondary analysis. *BJOG*, 2015; 122(6):884-5. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/25892472>

Smoking and pregnancy. *Nurs Stand*, 2015; 30(13):16. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/26602653>

Yerushalmy J. The relationship of parents' cigarette smoking to outcome of pregnancy-implications as to the problem of inferring causation from observed associations. *Int J Epidemiol*, 2014; 43(5):1355-66. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/25301860>

Witt WP, Mandell KC, Wisk LE, Cheng ER, Chatterjee D, et al. Predictors of alcohol and tobacco use prior to and during pregnancy in the us: The role of maternal stressors. *Arch Womens Ment Health*, 2014. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/25449635>

Tobacco Action Committee of the A, Folan P, and Spatarella A. Smoking and pregnancy. *Am J Respir Crit Care Med*, 2014; 189(4):P7. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/24528330>

Taylor AE, Davey Smith G, and Munafo MR. Re: "Exposure to maternal smoking during pregnancy as a risk factor for tobacco use in adult offspring". *Am J Epidemiol*, 2014; 180(9):959-60. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/25294600>

Schneider HA, Gembruch U, Fimmers R, Schmitz J, and Muller AM. Expression of ap-2gamma in placentas of patients with preeclampsia and of smokers. *Arch Gynecol Obstet*, 2014. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/25315380>

Mund M, Kloft B, Bundschuh M, Klingelhoef D, Groneberg DA, et al. Global research on smoking and pregnancy-a scientometric and gender analysis. *Int J Environ Res Public Health*, 2014; 11(6):5792-806. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/24879489>

Milnerowicz-Nabzdyk E and Bizon A. Effect of cigarette smoking on vascular flows in pregnancies complicated by intrauterine growth restriction. *Reprod Toxicol*, 2014; 50:27-35. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/25461903>

Lassi ZS, Imam AM, Dean SV, and Bhutta ZA. Preconception care: Caffeine, smoking, alcohol, drugs and other environmental chemical/radiation exposure. *Reprod Health*, 2014; 11 Suppl 3:S6. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/25415846>

tobaccoinaustralia.org.au

Tobacco in Australia

Facts & Issues

Julsgaard M, Norgaard M, Hvas CL, Grosen A, Hasseriis S, et al. Influence of medical treatment, smoking and disease activity on pregnancy outcomes in crohn's disease. Scand J Gastroenterol, 2014; 49(3):302-8. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/24417179>

Ion R and Bernal AL. Smoking and preterm birth. Reprod Sci, 2014. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/25394641>

Hyland A, Piazza KM, Hovey KM, Ockene JK, Andrews CA, et al. Associations of lifetime active and passive smoking with spontaneous abortion, stillbirth and tubal ectopic pregnancy: A cross-sectional analysis of historical data from the women's health initiative. Tob Control, 2014. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/24572626>

Hossain MM, Rahman ME, and Khan TH. Maternal smokeless tobacco use and adverse pregnancy outcome. Mymensingh Med J, 2014; 23(1):46-51. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/24584372>

Grarup PA, Janner JH, and Ulrik CS. Passive smoking is associated with poor asthma control during pregnancy: A prospective study of 500 pregnancies. PLoS ONE, 2014; 9(11):e112435. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/25409513>

Goldstein H. Commentary: Smoking in pregnancy and neonatal mortality. Int J Epidemiol, 2014; 43(5):1366-8. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/25301861>

de Almeida Olympio Rua E, Porto M, Louzada J, Nogueira B, Dos Santos Meyrelles S, et al. Effects of tobacco smoking during pregnancy on oxidative stress in the umbilical cord and mononuclear blood cells of neonates. J Biomed Sci, 2014; 21(1):590. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/25547987>

Chang JJ, Strauss JF, 3rd, Deshazo JP, Rigby FB, Chelmow DP, et al. Reassessing the impact of smoking on preeclampsia/eclampsia: Are there age and racial differences? PLoS ONE, 2014; 9(10):e106446. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/25337852>

Andriani H and Kuo H. Adverse effects of parental smoking during pregnancy in urban and rural areas. BMC Pregnancy Childbirth, 2014; 14(1):1210. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/25551278>

Abramovici A, Gandley R, Clifton R, Leveno K, Myatt L, et al. Prenatal vitamin c and e supplementation in smokers is associated with reduced placental abruption and preterm birth: A secondary analysis. BJOG, 2014. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/25516497>

tobaccoinaustralia.org.au

Tobacco in Australia

Facts & Issues

Mund M, Louwen F, Klingelhoef D, and Gerber A. Smoking and pregnancy--a review on the first major environmental risk factor of the unborn. *Int J Environ Res Public Health*, 2013; 10(12):6485-99. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/24351784>

Lamminpaa R, Vehvilainen-Julkunen K, Gissler M, and Heinonen S. Smoking among older childbearing women - a marker of risky health behaviour a registry-based study in finland. *BMC Public Health*, 2013; 13:1179. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/24330715>

Dinc M, Cakar M, Balta S, Akhan M, Sarlak H, et al. The importance of iodine supplementation and smoking for maternal and fetal thyroid health in pregnant women. *Eur Thyroid J*, 2013; 2(3):211-2. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/24847455>

Dietz PM, England LJ, Shapiro-Mendoza CK, Tong VT, Farr SL, et al. Infant morbidity and mortality attributable to prenatal smoking in the u.s. *Am J Prev Med*, 2010; 39(1):45-52. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/20547278>

3.7.1 Spontaneous abortion

Wang L, Yang Y, Liu F, Yang A, Xu Q, et al. Paternal smoking and spontaneous abortion: A population-based retrospective cohort study among non-smoking women aged 20-49 years in rural china. *J Epidemiol Community Health*, 2018. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/29891638>

3.7.2 Ectopic pregnancy

Horne AW, Brown JK, Nio-Kobayashi J, Abidin HB, Adin ZE, et al. The association between smoking and ectopic pregnancy: Why nicotine is bad for your fallopian tube. *PLoS ONE*, 2014; 9(2):e89400. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/24586750>

3.7.3 Complications of pregnancy

Shobeiri F and Jenabi E. Smoking and placenta previa: A meta-analysis. *J Matern Fetal Neonatal Med*, 2017:1-6. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/27936997>

Kinlaw AC, Buckley JP, Engel SM, Poole C, Brookhart MA, et al. Left truncation bias to explain the protective effect of smoking on preeclampsia: Potential, but how plausible? *Epidemiology*, 2017. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/28145985>

tobaccoinaustralia.org.au

Tobacco in Australia

Facts & Issues

Berlin I. Commentary on niemela et al. (2017): Maternal smoking during pregnancy-an independent risk factor of postnatal health disorders. *Addiction*, 2017; 112(1):144-5. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/27936503>

Taylor BD, Ness RB, Klebanoff MA, Zoh R, Bass D, et al. First and second trimester immune biomarkers in preeclamptic and normotensive women. *Pregnancy Hypertens*, 2016; 6(4):388-93. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/27939488>

Collier A, Abraham EC, Armstrong J, Godwin J, Monteath K, et al. Reported prevalence of gestational diabetes in scotland: The relationship to obesity, age, socioeconomic status, smoking and macrosomia and how many are we missing? *J Diabetes Investig*, 2016. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/27397133>

Milnerowicz-Nabzdyk E and Bizon A. How does tobacco smoke influence the morphometry of the fetus and the umbilical cord?-research on pregnant women with intrauterine growth restriction exposed to tobacco smoke. *Reprod Toxicol*, 2015; 58:79-84. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/26315940>

Collier AC, Sato BL, Milam KA, and Wright TE. Methamphetamine, smoking, and gestational hypertension affect norepinephrine levels in umbilical cord tissues. *Clin Exp Obstet Gynecol*, 2015; 42(5):580-5. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/26524802>

Azar R, Blacquiere M, Letourneau N, Belanger M, and Sermer M. Are maternal prenatal smoking and perceived stress associated with umbilical cord c-reactive protein? A pilot study. *Psychoneuroendocrinology*, 2015; 61:33. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/26383364>

Slatter TL, Park L, Anderson K, Lailai-Tasmania V, Herbison P, et al. Smoking during pregnancy causes double-strand DNA break damage to the placenta. *Hum Pathol*, 2014; 45(1):17-26. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/24125744>

British Medical Association Board of Science and Education & Tobacco Control Resource Centre, Smoking and reproductive life. The impact of smoking on sexual, reproductive and child health. London: British Medical Association; 2004. Available from: https://www.rauchfrei-info.de/fileadmin/main/data/Dokumente/Smoking_ReproductiveLife.pdf.

tobaccoinaustralia.org.au

Tobacco in Australia

Facts & Issues

3.7.4 Preterm delivery

McCall, SJ, Green, DR, Macfarlane, GJ, & Bhattacharya, S. (2019). Spontaneous very preterm birth in relation to social class, and smoking: a temporal-spatial analysis of routinely collected data in Aberdeen, Scotland (1985-2010). *J Public Health (Oxf)*. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/31125067>

Kondracki, AJ, & Hofferth, SL. (2019). A gestational vulnerability window for smoking exposure and the increased risk of preterm birth: how timing and intensity of maternal smoking matter. *Reprod Health*, 16(1), 43. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/30992027>

Soneji, S, & Beltran-Sanchez, H. (2019). Association of Maternal Cigarette Smoking and Smoking Cessation With Preterm Birth. *JAMA Netw Open*, 2(4), e192514. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/31002320>

Ion, R, Hudson, C, Johnson, J, Yuan, W, Heesom, K, & Bernal, AL. Smoking alters hydroxyprostaglandin dehydrogenase expression in fetal membranes. *Reprod Toxicol*, 2018. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/30248390>

Yusuf K, Alshaikh B, da Silva O, Lodha AK, Wilson RD, et al. Neonatal outcomes of extremely preterm infants exposed to maternal hypertension and cigarette smoking. *J Perinatol*, 2018. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/29740191>

Rouzaire M, Comptour A, Belville C, Bouvier D, Sapin V, et al. Cigarette smoke condensate affects the retinoid pathway in human amnion. *Placenta*, 2017; 58:98-104. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/28962704>

Kuper SG, Abramovici AR, Jauk VC, Harper LM, Biggio JR, et al. The effect of omega-3 supplementation on pregnancy outcomes by smoking status. *Am J Obstet Gynecol*, 2017. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/28549983>

Knobel-Dail RB, Sloane R, Holditch-Davis D, and Tanaka DT. Negative temperature differential in preterm infants less than 29 weeks gestational age: Associations with infection and maternal smoking. *Nurs Res*, 2017; 66(6):442-53. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/29095375>

Ding G, Yu J, Chen Y, Vinturache A, Pang Y, et al. Maternal smoking during pregnancy and necrotizing enterocolitis-associated infant mortality in preterm babies. *Sci Rep*, 2017; 7:45784. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/28361963>

tobaccoinaustralia.org.au

Tobacco in Australia

Facts & Issues

Calhoun B, Hoover E, Seybold D, Broce M, Hill A, et al. Outcomes in an obstetrical population with hereditary thrombophilia and high tobacco use. J Matern Fetal Neonatal Med, 2017:1-5. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/28367651>

Moore E, Blatt K, Chen A, Van Hook J, and Defranco EA. Relationship of trimester specific smoking patterns and risk of preterm birth. Am J Obstet Gynecol, 2016. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/26827877>

Kareli D, Pouliliou S, Liberis A, Nikas I, Psillaki A, et al. Genotoxic effect of tocolytic drug ritodrine in combination with smoking during pregnancy. J Matern Fetal Neonatal Med, 2016:1-29. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/26742485>

Heyborne KD and Allshouse AA. Smoking, 17 alpha-hydroxyprogesterone caproate, and preterm birth. Am J Perinatol, 2016. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/27464018>

Dahlin S, Gunnerbeck A, Wikstrom AK, Cnattingius S, and Edstedt Bonamy AK. Maternal tobacco use and extremely premature birth - a population-based cohort study. BJOG, 2016; 123(12):1938-46. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/27411948>

Smith LK, Draper ES, Evans TA, Field DJ, Johnson SJ, et al. Associations between late and moderately preterm birth and smoking, alcohol, drug use and diet: A population-based case-cohort study. Arch Dis Child Fetal Neonatal Ed, 2015. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/25972442>

Ngo AD, Roberts CL, Chen JS, and Figtree G. Interaction of maternal smoking and preterm birth on future risk of maternal cardiovascular disease: A population-based record linkage study. Eur J Prev Cardiol, 2015. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/26157020>

Ngo AD, Chen JS, Figtree G, Morris JM, and Roberts CL. Preterm birth and future risk of maternal cardiovascular disease - is the association independent of smoking during pregnancy? BMC Pregnancy Childbirth, 2015; 15:144. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/26141292>

Findley J, Seybold DJ, Broce M, Yadav D, and Calhoun BC. Transvaginal cervical length and tobacco use in appalachian women: Association with increased risk for spontaneous preterm birth. W V Med J, 2015; 111(3):22-8. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/26050294>

Janisse JJ, Bailey BA, Ager J, and Sokol RJ. Alcohol, tobacco, cocaine, and marijuana use: Relative contributions to preterm delivery and fetal growth restriction. Subst Abus, 2014; 35(1):60-7. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/24588295>

tobaccoinaustralia.org.au

Tobacco in Australia

Facts & Issues

Abramovici A, Jauk V, Wetta L, Cantu J, Edwards R, et al. Low-dose aspirin, smoking status, and the risk of spontaneous preterm birth. *Am J Perinatol*, 2014. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/25261702>

News reports:

Welfare AloHa. Australia's mothers and babies 2016—in brief. Perinatal statistics series no. 34. Cat. no. PER 97, Canberra: AIHW 2018. Available from: <https://www.aihw.gov.au/reports/mothers-babies/australias-mothers-babies-2016-in-brief/contents/table-of-contents>.

Australian Institute of Health and Welfare. Child and maternal health in 2013–2015. My Healthy Communities, Canberra: AIHW 2018. Available from: https://www.myhealthycommunities.gov.au/Content/publications/downloads/AIHW_HC_Report_Child_and_maternal_health_April_2018.pdf?t=1524109871065.

Lines M. Research sheds new light on why smoking in pregnancy is harmful, in *Medical Xpress* 2017. Available from: <https://medicalxpress.com/news/2017-08-pregnancy.html>.

Australian institute of Health and Welfare. Maternal deaths in australia 2012–2014. Cat. no. PER 92. Canberra: AIHW, 2017.

3.7.4 Preterm delivery

McIntosh J. Smoking and preterm birth combine to triple risk of maternal cvd, in *Medical News Today* 2015. Available from: <http://www.medicalnewstoday.com/articles/296520.php?tw>.

tobaccoinaustralia.org.au