



## Appendices



Article Title	Authors	Study Population	Study Design	Strengths	Limitations	Exposures	Results	Biologic Mechanism	Outcomes
<b>Population-based study on occupational risk factors for pre-eclampsia and gestational hypertension</b>	Haelterman, E., Marcoux, S., Croteau, A., & Dramaix, M. (2007)	A random sample of women who delivered a singleton live birth in 1997-1999 in 6 regions of Quebec and worked during pregnancy. Cases of pre-eclampsia (N=102) and gestational hypertension (N=99) were compared to normotensive controls (N=4381).	Case-control study	Study population was restricted to primiparous women; a physician reviewed medical records to verify diagnoses; restricted study pop to women who had a paid occupation; preeclampsia and hypertension were analyzed separately; job strain was assessed before diagnoses.	Sample size was larger than previous studies but power was still limited; occupational exposures were self-reported retrospectively; possible nondifferential misclassification; healthy worker effect	Work schedules, postures, physical exertion, work organization, noise, vibration, and extreme temp.	Women standing daily at least 1 hour consec w/o walking experienced a higher risk of pre-eclampsia; as well as women climbing stairs frequently, and women working more than 5 days w/o day off. Assoc were weaker for gestational hypertension	Strenuous physical exercise may be detrimental through induction of oxidative stress; preeclampsia is also associated with decreased uteroplacental blood flow	Pre-eclampsia and gestational hypertension
<b>Working conditions and prevalence of pre-eclampsia, Norway 1989</b>	Wergeland, E. & Strand, K. (1997)	National sample of 5388 women who gave birth to singletons in Norway during a 6 week period in 1989 completed an extensive questionnaire after delivery while still in a maternity instit.	Cross-sectional	Ethnically homogeneous population-less confounders; high response rate; results similar to past studies	Retrospective nature of the questionnaire; women with hypertension may be more prone to recall exposures and to be more vigilant with getting medical attention; there is some question about the definition of hypertensive disorders in pregnancy-measured by self-report in study; population was Nordic, may not be generalizable	Various working conditions	The prevalence of pre-eclampsia was incr in work involving the lifting of heavy loads of 10-20 kg, hectic work pace, work with hands above the shoulder level, and for parous women, shift work. It was reduced when women had control over work pace.	Catecholamine response/ reductions in uterine blood flow	Pre-eclampsia

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\*\* This chart contains direct quotations from the critiqued articles

**Appendix A: Critique of the Literature**

Article Title	Authors	Study Population	Study Design	Strengths	Limitations	Exposures	Results	Biologic Mechanism	Outcomes
<b>Job strain and pregnancy-induced hypertension</b>	Marcoux, S., Berube, S., et al. (1999).	Cases (128 with preeclampsia and 201 with gestational hypertension) and controls (401) were primiparous who had paid work for at least 1 week during first 20 weeks of pregnancy. (Quebec hospitals)	Case-control study	Study population was restricted to primiparous women; a physician reviewed medical records to verify diagnoses; restricted study pop to women who had a paid occupation; preeclampsia and hypertension were analyzed separately; job strain was assessed before diagnoses.	Case control study was conducted 8-10 years before the NPHS, psychosocial environ at work may have changed; study was conducted in Quebec while the NPHS sample was rep of whole Canadian population.	Exposure to high job strain during first 20 weeks of pregnancy.	Women exposed to high job strain were more likely to develop preeclampsia than women exposed to low job strain. High job strain increased the risk of gestational hypertension only slightly.	Not described.	Preeclampsia and gestational hypertension
Recreational physical activity during pregnancy and risk of preeclampsia	Sorensen, T., Williams, M, Lee, I. et al. (2003)	Cases included 201 preeclamptic and 383 normotensive pregnant women; Conducted at a hospital in Tacoma, Washington.	Case-control study	Very few studies have addressed this topic; attempts to fulfill a research gap; cases and controls were matched for certain risk factors; controlled for confounders such as age, parity, and BMI.	Participation rate for controls was low, only 50% agreed to participate in study-potential for selection bias; questionnaire was administered postpartum and participants self-reported leisure activities-possible recall bias	Recreational physical activity year before pregnancy and during first 20 weeks of pregnancy.	Women who engaged in recreational physical activity during their first 20 weeks of pregnancy had a 34% reduced risk of preeclampsia compared to those women who did not participate in physical activity.	Metabolic disorders such as hypertriglyceridemia, oxidative stress, insulin resistance, systemic chronic inflammation (p. 1279)	Preeclampsia

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Work, leisure-time physical activity, and risk of preeclampsia and gestational hypertension	Saftlas, A., Logsdan-Sackett, N., et al. (2004).	Cohort of pregnant women receiving prenatal care at one of 13 private obstet practices in New Haven. 2,638 subjects were analyzed: 2,422 normotensive controls, 172 subjects with gestational hypertension, and 44 subjects with preeclampsia.	Prospective cohort	Data were collected from women before diagnoses of preeclampsia or gestational hypertension and close to when behaviors were performed. Medical charts were used to confirm patient self-reports.	Sample included mostly white, well-educated, high socio-econ women. Results may not be generalizable. Also, preeclampsia symptoms may have an effect on activity levels of women.	Occupational factors such as employment status, hours worked per week, per day, hours spent sitting, standing, and walking. Leisure-time physical activities were also assessed.	Women who engaged in regular leisure-time activities, were unemployed, or had non-sedentary jobs were at decreased risk for preeclampsia. Workplace activity, leisure activity, or unemployment had no protective effect on gestational hypertension. Regular physical activity during pregnancy may reduce preeclampsia risk.	Regular exercise reduces oxidative stress and may minimize/prevent pathologic change related to preeclampsia.	Preeclampsia and gestational hypertension
<b>High blood pressure during pregnancy and working conditions among hospital personnel</b>	Saurel-Cubizolles, M., Kaminski, M., Du Mazaubrun, C., et al. (1991)	Survey conducted among 621 pregnant hospital employees working at 7 public hospitals in Paris region.	Cross-sectional	Women were excluded if they worked less than 13 weeks during their pregnancy or if they went back to work later than 36 weeks after delivery; controlled for factors known to be associated with high blood pressure such as body weight, age, smoking, parity.	Survey was conducted during postnatal medical visit. Potential for recall bias; Survey only included one question about blood pressure.	Various working conditions including prolonged standing, carrying heavy loads, night work, climbing stairs, weekly working hours, occupational category.	Three working conditions were associated with high blood pressure: standing up, heavy cleaning tasks and carrying heavy loads.	Not described.	High blood pressure

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Article Title	Authors	Study Population	Study Design	Strengths	Limitations	Exposures	Results	Biologic Mechanism	Outcomes
<b>The effect of work activity in pregnancy on the risk of severe preeclampsia</b>	Spinillo, A., Capuzzo, E., Colonna, L. (1995)	Cases included 160 nulliparous pregnant women with severe preeclampsia and controls included 320 normotensive nulliparous women who received prenatal care from Dept of OB/GYN at Univ of Pavia (Italy)	Case-control study	Cases and controls were drawn from a similar population; controlled for many factors including socio-economic status, parity, time of quitting work.	Women were interviewed about their occupational status/physical activity at the time of birth. Potential for recall bias.	Type of employment, level of physical activity, posture, weekly working hours, physical intensity of work.	Moderate/high physical activity at work was associated with a 2-fold increase in the risk of severe preeclampsia compared to mild activity.	Effect of physical exertion on maternal haemodynamics; effect of intense physical activity on uteroplacental blood flow.	Preeclampsia
<b>Psychosocial work stress and pregnancy-induced hypertension</b>	Landsbergis, P & Hatch, M. (1996)	Subjects were a consecutive series of prenatal patients (N=717) drawn from two similar suburban-rural sites in Pennsylvania and NY btwn Jan 1987 and June 1989.	Prospective cohort	Prospective study design	Study population was largely white and middle class; small number of cases; possible selection bias.	Psychosocial job stress	Stressful job characteristics did show assoc with pregnancy-induced hypertension. Gestational hypertension was assoc with low decision latitude and low job complexity among women in lower-status jobs. Among women in higher status jobs, GH was assoc with job pressures/low control.	The role of corticotropin-releasing hormone in the stress response as well as in the genesis of PIH provides a plausible biological link.	Pregnancy-induced hypertension

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Article Title	Authors	Study Population	Study Design	Strengths	Limitations	Exposures	Results	Biologic Mechanism	Outcomes
<b>Study of occupational risk factors for pregnancy-induced hypertension among active duty enlisted navy personnel</b>	Inwin, D., Savitz, D., et al. (1994)	All active duty U.S Navy enlisted personnel over the age of 17 years (N=5,605) who were admitted to military hospitals for singleton infant delivery btwn Oct 1987 and Sept. 1989. Excluded if preexisting hypertension.	Cross-sectional	Military personnel are a fairly homogeneous group which helps to control for some potential biases.	Exposure status was determined based on job title rather than on a classification of individual exposures; possible nondifferential misclassification; in some categories of worker there was a small N	Occupational exposures particularly physical activity. Also exposures of chemical solvents, noise, video display terminal use, and temp/humidity extremes.	Nulliparas were found to have a significantly increased risk ratio for PIH (RR=2.3) compared with parous women. Nulliparas employed in jobs involving high levels of physical activity were at significantly decreased risk of PIH compared to nulliparas working at low levels of physical activity. Occupational exposure to hazardous chemicals was not related to risk of PIH.	Not described.	Pregnancy-induced hypertension
<b>Work activity in pregnancy, preventive measures, and the risk of preterm delivery</b>	Croteau, A., Marcoux, S., & Brisson, C. (2006)	The 1536 cases and 4441 controls were selected from 43,898 women who had single live births btwn Jan. 1997-March 1999 in Quebec, Canada. The women were interviewed by telephone after delivery.	Case-control study	High participation rate; large number of confounders were considered in the analysis; secondary analysis based on job titles reduces risk of recall bias	Possible recall bias could overestimate the associations; possible healthy worker effect	Work schedules, postures, physical effort, pushing/pulling, work organization, and environmental occupational conditions	Increased risk of PTD was significantly associated with demanding posture for at least 3 hours per day, whole-body vibrations, and high job strain combined with low or moderate social support	Not described.	Preterm delivery

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Article Title	Authors	Study Population	Study Design	Strengths	Limitations	Exposures	Results	Biologic Mechanism	Outcomes
Pregnant women's working conditions and their changes during pregnancy: A national study in France	Saurel-Cubizolles, M. & Kaminski, M. (1987)	National sample of births in France in 1981 (N=2387).	Cross-sectional	Large sample	Women were interviewed after they had already given birth	Various working conditions; effect of working modifications	Manual, service and shop workers had a higher preterm delivery rate than professional, admin, or clerical workers. Assembly line work was assoc with a higher preterm delivery rate even when production workers only were considered. Cumulated physically tiring working conditions were related to higher preterm delivery and LBW.	Not described.	Preterm delivery & SGA.
Employment-related stress and preterm delivery: A contextual examination.	Hickey, C., Cliver, S., Mulvihill, F, et al. (1995)	Study participants (N=1,368) included low-income black and white mothers expecting their 2nd and 3rd births who were at risk for a SGA infant. 7 prenatal clinics operated jointly by the Jefferson County Health Dept. and Dept of Ob/gyn at the Univ of Alabama at Birmingham.	Prospective cohort	Evaluation of possible contextual confounders, the homogeneity of the population, and avoidance of recall bias by assessing work-related factors at mid-pregnancy	Small number of white women in the clinic population, changes in work activity after mid-pregnancy weren't assessed, high risk population was studied.	Various work characteristics and occupational fatigue (posture, work on industrial machine, physical exertion, mental stress, environment)	Black (but not white) women who continued to work at midpregnancy and who reported being able to take rest breaks when they felt tired had a lower preterm delivery rate (10.4 percent vs. 21.9 percent; P=0.031) compared with those who could or did not. Fatigue index scores were unrelated to preterm delivery.	Not described.	Preterm delivery

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Article Title	Authors	Study Population	Study Design	Strengths	Limitations	Exposures	Results	Biologic Mechanism	Outcomes
Heavy lifting during pregnancy-A hazard to the fetus? A prospective study	Ahlborg, G., Bodin, L., et al. (1990)	All pregnant women who made their first contact with the ante-natal care center in Orebro county, Sweden (1980-1983) were invited to participate (N=3,906).	Prospective cohort	Exposure info was collected early in pregnancy by self-admin questionnaire; an industrial hygienist validated the exposure info given by women	Some possible misclassification of preterm birth; study population didn't include many women involved in industrial work; possible selection bias; women's pre-pregnancy weight and weight gain weren't recorded; results may not be generalizable to women outside of Sweden who have different labor policies.	Heavy lifting during pregnancy	Women who reported heavy lifting didn't have more unfavorable outcomes than other women, although the risk est varied btwn diff occupational categories. Lifting of weights ? 12kg more than 50 times per week increased the risk of preterm birth but only women who stopped working before the 32nd week of pregnancy.	Muscular activity alters blood distrib in the body; hormonal disturbances; heavy lifting incr the intra-abdominal pressure which might provoke uterine contractions (90)	Preterm delivery, LBW, and risk of fetal death (SA or stillbirth).
Occupational fatigue and preterm premature rupture of membranes	Newman, RB., Goldenberg, RL, Moawad, AH., et al. (2001).	2929 women with singleton pregnancies at 22 to 24 weeks gestation; multicenter (10 sites) Preterm Prediction Study.	Prospective cohort	Large sample size; prospective design; many risk factors were controlled for.	Sample population (mostly low income) may not be generalizable to larger population; survey questions on mental stress didn't capture enough info; study didn't include measures of both physical exertion and mental stress in the home; study was unable to assess the changing nature of the work experience across time.	Occupational fatigue	Each source of occupational fatigue was independently assoc with a significantly increased risk of preterm premature rupture of membranes among nulliparous women but not among multiparous women; Significant relationship btwn preterm premature rupture of membranes and incr # of hrs worked among nulliparous women.	Not described.	Preterm delivery

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Article Title	Authors	Study Population	Study Design	Strengths	Limitations	Exposures	Results	Biologic Mechanism	Outcomes
The association between occupational factors and preterm birth: A United States nurses' study	Luke, B., Mamelle, N., Keith, L., Munoz, F., et al. (1995)	210 U.S nurses whose infants were delivered prematurely (< 37 weeks) (cases) and 1260 nurses whose infants were delivered at term (? 37 weeks) (controls).	Case-control study	Study examined a rather homogeneous population which helped to control for confounders; results were similar to other studies looking at preterm birth	Study was retrospective in nature; possible selection bias given the limited response rate, recall bias if more nurses with preterm deliveries responded,	Various occupational factors: area of work, hours worked per shift, hours worked per week, description of working conditions, and degree of tiredness at the end of the shift	Factors significantly associated with with preterm birth included: hrs worked per week, per shift, and while standing; noise; physical exertion, and occupational fatigue score.	Not described.	Preterm delivery
Outcomes of pregnancy in a national sample of resident physicians	Klebanoff, M., Shiono, P., et al. (1990)	A national questionnaire-based survey was used to study the outcomes of pregnancy during residency for 4412 women who graduated from medical school in 1985 and for the wives of 4236 of their male classmates who served as controls.	Cross-sectional	Prospective cohort study; large sample; data on activity were not limited to occupational factors, but included all physical activity	Some loss to follow up; little socioeconomic variability in the study population (more high risk, low income women)	Demanding, highly-stressful work (residents)	There were no signif diff in the proportion of pregnancies ending in miscarriage, ectopic gestations, and stillbirths. The freq of preterm births was similar. The women residents more freq reported preterm labor but not preterm delivery. Preeclam was also more common in residents.	Not described.	Preterm birth, SGA, LBW
<b>Pregnancy and its outcome among hospital personnel according to occupation and working conditions</b>	Saurel-Cubizolles, M., Kaminski, M. et al. (1985)	Study was conducted on all women working in 7 public hospitals in Paris (N=621). Doctors weren't included.	Cross-sectional	Many possible confounders were considered; looked at a fairly homogeneous population	Women were interviewed after giving birth	Occupation and working conditions (heavy cleaning, carrying heavy loads, long pds of standing)	Ancillary staff members experienced more uterine contractions during pregnancy, more preterm deliveries, and more low birth-weight infants than those performing other duties; this remained true even after adjusting for social characteristics.	Not described.	Preterm delivery, birth weight, hypertension, uterine contractions occurring btwn 4th and 7th months.

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<b>Standing at work and preterm delivery</b>	Brink-Henriksen, T., Hedegaard, M., et al. (1995)	A prospective cohort of 8711 pregnant women attending routine antenatal care at a hospital in Denmark (1989-1991). Analyses were restricted to 4259 respondents who worked during the 16th week of pregnancy.	Prospective cohort	Asked women in first part of their 2nd trimester about their hrs of standing and walking thus avoiding the misclassification from exposure; study pop was restricted to women who worked for at least the first 16 wks of preg; considered changes in exposure over the course of pregnancies	Possible selection bias-healthy worker effect; some women had difficulty separating hrs of walking from hrs of standing at work	Standing and walking at work in the 2nd trimester	After adjusting for confounders, women standing more than 5 hrs per work day had an OR for preterm delivery of 1.2 compared with women standing 2 hrs or less. For walking, the OR was 1.4. No adverse effects were seen for lifting or other types of physical exertion.	Increased uterine contractions coincide with the uterine compression of the pelvic vessels due to standing during late pregnancy. Ambulatory tocodynamometry has shown that walking after the 30th week of pregnancy is associated with increased frequency of uterine contractions. (203)	Preterm delivery
<b>Shift work, duration of pregnancy, and birth weight: The national birth cohort in Denmark</b>	Zhu, J., Hjollund, N., et al. (2004)	Danish national birth cohort (1998-2001) (N=41,150)	Prospective cohort	Exposure info was collected twice during pregnancy and twice after delivery; recall bias and selection bias were not an issue; 3 sources were used to determine the gestational age; adjusted for occupation which is a proxy for SES	Study results are dissimilar from other studies looking at shift work and preterm delivery; shift workers in Denmark have more free time and short working hrs and more shift workers took a leave of absence; study results may not be generalizable to workers in other countries.	Shift work during pregnancy	No statistically significant differences in gestational age at birth or birth weight at term between any types of shift work and daytime work. Fixed night work had a high risk of postterm birth, fixed evening work had a high risk of full term LBW, and shift work as a group showed a slight excess of SGA babies.	Night work may disturb the circadian rhythm; role of melatonin levels; various hormonal disturbances.	Preterm birth and LBW

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<b>Maternal work during pregnancy and the risks of delivering a small-for-gestational-age or preterm infant</b>	Fortier, I., Marcoux, S. & Brisson, J. (1995).	4390 women who lived in Quebec City, Canada and the surrounding area, and who gave birth between Jan and Oct 1989 to a singleton liveborn neonate were included.	Cross-sectional	Study adjusted for confounding	Findings with regard to time at work cessation and preterm birth are likely due to selection bias; healthy worker effect;	Hours spent standing, lifting, perception of physical effort, nonoccupational activities	The risk of having a SGA infant was increased among the women who worked at least 6 h a day in a standing position. The risk for a SGA infant also slightly increased as the gestational age at work cessation increased. A modest increment in the risk of delivering preterm was found in women who worked regularly at night.	Standing, by reducing venous return, could cause uteroplacental underperfusion and thus alter the supply of oxygen and nutrients to the fetus. (416)	Preterm delivery or SGA
Prematurity and occupational activity during pregnancy	Mamelle, N., Laumon, B et al. (1984)	Survey was carried out from 1977-1978 of 3437 women whose infants were delivered in two maternity hospitals in Lyon (large city) and Haguenau (small town).	Cross-sectional	Development of an index to measure fatigue	Women were interviewed after they had already given birth; didn't control for cigarette smoking, alcohol consumption	Occupational activity	There is a significant relationship between the prematurity rate and the number of high fatigue scores observed on the job. When the number of scores varies from 0 to 5 the rate of premature births increases from 2.3% to 11.1%. This relationship is significant after controlling for confounding factors.	Not described.	Preterm delivery

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Article Title	Authors	Study Population	Study Design	Strengths	Limitations	Exposures	Results	Biologic Mechanism	Outcomes
Occupational physical activity and other risk factors for preterm birth among US army primigravidas	Ramirez, G., Grimes, R., et al. (1990)	US army active-duty primigravidas between 1981 and 1984 using 604 cases and 6,070 controls.	Cross-sectional	Consistency of observed relationship between occupational physical activity and risk of preterm birth even after controlling for various risk factors; population was relatively homogeneous and had undergone physical demand assessments.	Missing data-births occurring in civilian hospitals and SS # for parents didn't always match for the infants; info was also not available for some potential confounders such as nutrition, smoking, and alcohol consumption.	Physical activity	Women employed in the highest physical activity levels had increased odds of preterm delivery ranging from 1.69 to 1.75. The relation was not changed by adjustment for the effects of age, marital status, SES or educ.	Not described.	Preterm delivery
<b>Employment, working conditions, and preterm birth: Results from the Europop case-control survey</b>	Saurel-Cubizolles, M., Zeitlin, J., Lelong, N., et al. (2004)	16 European countries: Cases included all consecutive singleton preterm births (N=2369) and controls included one of every 10 singleton term births (N=4098) in each participating maternity unit.	Case-control study (hospital-based)	Looked at data from 16 European countries; large numbers of preterm births, the diversity of participating centers and the use of a common protocol, including an identical instrument for collecting info on characteristics of the sample and working conditions.	Case control design: an information bias could exist if mothers of preterm infants didn't answer questionnaire in the same way as controls. Data about working conditions were obtained from women after delivery	Various working conditions	Employed women did not have an excess risk of preterm birth. Among working women, a moderate excess risk was observed for women working more than 42 hours a week, standing more than 6 hours a day and for women with low job satisfaction.	Not described.	Preterm birth

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<b>Effect of maternal work activity on preterm birth and low birth weight</b>	Teitelman, A., Welch, L., et al. (1990)	All women who accessed care from a hospital outpt dept or HMO, mid-wives/physicians in private practice in New Haven, Conn. Between 1980-1982 (N=1206).	Prospective cohort	Study population was large, with a high participation rate, little selection bias, risk factors were identified prospectively, and interviewers were blind to the hypothesis of the study, jobs were classified using an indep scale, women who weren't working were excluded.	Two potential sources of misclassification-classification of jobs into activity status was performed retrospectively; most interviews were conducted in 1st trimester and study didn't take into account how long into the pregnancy women worked.	Prolonged standing required by certain jobs; level of job activity	The rate of preterm births was higher among women with jobs requiring prolonged standing compared with those with sedentary or active jobs. The LBW rate was higher among those in the standing group compared with those in the sedentary and active groups but this association was not signif when confounding factors were controlled.	Standing during late pregnancy has been assoc with strong intermittent rise in maternal pulse and reduction in blood pressure with an increase in fetal heart rate; standing can also cause sharp drops in arterial pressure which may operate through reduced catecholamine secretion.	Preterm birth and low birth weight.
Physical activity and the risk of spontaneous preterm delivery	Berkowitz, G., Kelsey, J., et al. (1983)	Women who delivered at Yale-New Haven Hospital. Cases (N=175) were women who delivered a singleton live birth before 37 weeks; controls (N=313) were women who delivered a singleton live birth at 37 weeks or later	Case-control study	Looked at a wide range of exposures; controlled for a number of confounding factors.	Sample size may have been insufficient for detecting associations, statistical testing of a large number of assoc may have resulted in chance or spurious findings, self-selection of results-women who exercise may be different in multiple ways from those who don't exercise, retrospective nature of study raises possibility of differential recall, physical activity was measured crudely.	Roles of employment, housework, child care and leisure-time physical activity	No evidence that employment, housework, child care, and leisure-time physical activity during pregnancy increased the risk of preterm delivery. Women who partic in sports or physical fitness exercises during pregnancy had a decreased risk of preterm delivery.	Not described.	Preterm delivery

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<b>Risk of prematurity, low birthweight and pre-eclampsia in relation to working hours and physical activities: a systematic review</b>	Bonzini, M., Coggon, D., & Palmer, K. (2007).	Search identified a total of 49 studies (53 reports): 34 (35 reports) on preterm delivery, 33 (34 reports) on birth weight and 8 (9 reports) on pre-eclampsia or gestational hypertension.	Meta-analysis	Meta-analysis-all articles were assessed for quality.	Some associations had a lot of literature whereas other associations had very few; differing definitions of exposures; recall bias; misclassification of health outcomes; response bias; uncontrolled confounding effects.	Prolonged working hours, shift work, lifting, standing and heavy physical workload.	For pre-term delivery, extensive evidence relating to each of the exposures of interest was found. Findings were generally consistent and tended to rule out a more than moderate effect size. For SGA, the position was similar but the evidence base was limited. For pre-eclampsia, it was too small to allow firm conclusions.	High demand for uterine and placental bloodflow in the 3rd trimester could limit reserve capacity for vigorous exercise, the gravid uterus could limit venous return and cardiac output, and raised norepinephrine levels could increase uterine contractility and increase the risk of preterm labor. (228)	Preterm delivery, low birthweight, and pre-eclampsia/gestational hypertension
<b>The effect of physical activity during pregnancy on preterm delivery and birth weight</b>	Klebanoff, M., Shiono, P, et al. (1990)	Population consisted of women who received prenatal care at one of five clinical centers (NY, Seattle, OK City, San Antonio, and New Orleans) from 1984 to 1987 (N=7101). Part of the Vaginal Infections and Prematurity (VIP) study.	Prospective cohort	Prospective cohort study; large sample; data on activity were not limited to occupational factors, but included all physical activity	Some loss to follow up; little socioeconomic variability in the study population (more high risk, low income women)	Physical activity during pregnancy (both employment and non-employment-related)	Prolonged periods of standing were associated with a modestly increased risk of preterm delivery. Heavy work or exercise was not associated with preterm delivery. The proportion of infants born preterm didn't differ among women working in predominantly standing, active, and sedentary occupations. Physical activity wasn't associated with gestational age-adjusted birth weight after controlling for confounding variables.	Not described.	Preterm birth and LBW

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Is preterm delivery still related to physical working conditions in pregnancy	Saurel-Cubizolles, M., Subtil, D. et al. (1991)	A survey was conducted in 4 public maternity units in France. In each unit, a representative sample of births was selected (N=875).	Cross-sectional	Looked at occupation as well as working conditions; thorough discussion of reasons for working conditions having little effect on pregnancy outcomes	Women were interviewed after they had already given birth; may not be generalizable since France has different leave policies.	Working conditions during pregnancy, women's occupation	Preterm birth didn't vary significantly according to working conditions whereas it differed according to occupational group. Women in sales, service and manufacturing jobs had a higher preterm delivery rate than those in managerial, health or clerical jobs.	Not described.	Preterm delivery
Maternal occupation and pregnancy outcome	Savitz, D., Olshan, A., et al. (1996)	The National Maternal and Infant Health Survey, a probability sample of US livebirths, stillbirths, and infant deaths in 1988.	Cross-sectional	Analysis of a national survey allowed for an examination of a wide range of reproductive outcomes and occupations.	Limited info on occupation and potential exposures in the work place; small numbers of women in individual occupations required aggregation of jobs into groups possibly diluting association with specific work exposures; survey nonresponse could have affected the results.	Maternal employment on late pregnancy outcomes	Relative to the referent group of clerks, textile workers had adjusted odds ratios of 1.5 or greater for all outcomes, with elevated risks also found sporadically for food service workers and electrical equipment operators. Janitors had elevated adjusted odds ratios of 2.0 or greater for preterm delivery and stillbirth. Relative to clerks, teachers and librarians tended to have reduced risks for adverse outcomes.	Not described.	Preterm delivery, very low birthweight, moderately low birthweight, SGA, stillbirth and infant death

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Article Title	Authors	Study Population	Study Design	Strengths	Limitations	Exposures	Results	Biologic Mechanism	Outcomes
Occupational and socio-medical factors in preterm birth	Hartikainen-Sorri, A., Sorri, M. (1989)	284 women who had preterm deliveries and matched controls who had full-term deliveries. (Finland)	Case control	Data was collected from hospital records and is considered reliable. Responses from the questionnaire were cross-checked with other data sources; High response rate with questionnaires (83%)	Sample of 284; Questionnaires were mailed to mothers within 1 year of delivery-possible recall bias.	various occupational and socio-medical factors	Employment outside the home was not a significant risk factor for preterm birth. In terms of social factors, unmarried status and current smoking were assoc with preterm birth.	Not described.	Preterm delivery
<b>Working conditions and adverse pregnancy outcome: A meta-analysis</b>	Mozurkewich, E., Luke, B., et al. (2000)	58 articles were extracted and 29 met the eligibility criteria.	Meta-analysis	Meta-analysis-articles were selected based on their quality and meeting certain inclusion criteria.	Retrospective studies were subject to recall bias; conducting a meta-analysis on observational studies is complicated when it comes to analyzing combined data; healthy worker effect	Physically-demanding work, prolonged standing, long work hours, shift work, and cumulative work fatigue score.	Physically demanding work was significantly associated with preterm birth, SGA, and hypertension or preeclampsia. Other occupational exposures significantly associated with preterm birth included pronlong standing, shift work and night work and high cumulative work fatigue score. No sig assoc between work hrs and preterm birth.	Luke & Papiernik theorized that preterm birth might be related to stress and the release of catecholamines. These increase BP and uterine contractility and decrease placental function. Others discuss the role of stress hormones such as corticotropin-releasing factor. (632)	Preterm birth, hypertension or pre-eclampsia, and SGA.

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\*\* This chart contains direct quotations from the critiqued articles

Article Title	Authors	Study Population	Study Design	Strengths	Limitations	Exposures	Results	Biologic Mechanism	Outcomes
Work-related psychosocial stress and risk of preterm, low birthweight delivery	Homer, C., James, S., et al. (1990).	Women in the National Longitudinal Survey of Labor Market Experience, Youth Cohort (NLSY) who met study criteria (N=786). The NLSY consists of a national probability sample of 12,686 youth who ranged in age from 14-21 years. Oversamples blacks, Hispanics, and disadvantaged whites.	Cross-sectional	Many factors outside of work experience were taken into consideration.	Nature of the study population (young, low-income, mostly non-	Work-related psychologic stress-work with high psychologic demands and limited control	After accounting for the physical exertion entailed in a job, occupational psychologic stress as measured by job title was not associated with preterm, low birthweight delivery. For those women who didn't want to remain in the work force, work-related stress increased the risk of experiencing this outcome.	Not described.	Preterm delivery, low birthweight infants
Low birthweight and preterm delivery, Scotland, 1981-84: effect of parents' occupation	Sanjose, S., Roman, E., Beral, V. (1991)	National study of 252,147 liveborn babies delivered in Scotland between 1981-1984.	Prospective cohort	Large, national sample; controlled for many risk factors	Info on maternal smoking was not available	Parental occupational type	Risk of preterm delivery and/or LBW was more than 50% higher in the children of women who worked with electrical, metal, or leather goods than in the children of other female manual workers; Risk of SGA varied little with parental occupation.	Not described.	Preterm delivery and LBW
<b>The effects of standing, lifting and noise exposure on preterm birth, growth restriction, and perinatal death in healthy low-risk working military women</b>	Magann, E., Evans, S., Chauhan, S., et al. (2005).	814 active duty women attending a military antenatal clinic.	Prospective cohort	Data was collected at several different points; homogeneous sample of healthy women;	Results may not be generalizable b/c sample consisted of low-risk, healthy women.	Standing, lifting, and noise	There was an association between occupational standing and preterm labor and preterm birth.	Not described.	Preterm birth, growth restriction

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**Appendix A: Critique of the Literature**

Article Title	Authors	Study Population	Study Design	Strengths	Limitations	Exposures	Results	Biologic Mechanism	Outcomes
<b>Effects of physical activity on preterm birth</b>	Misra, D., Strobino, D., et al. (1998)	A US sample of low income black and white women (N=1,247).	Prospective cohort	Studied low income women and physical activity of minority women; both prenatal and postpartum interviews; women who came in late or received no care were also included in order to increase generalizability	Some potential for recall bias; less than 5% of women reported heavy lifting on job and so power was limited; standing and moving around were combined even though they may have different outcomes	Physical activity-both workplace and leisure-time activities; also examined various sedentary activities (TV watching)	After adjusting for confounders, the odds of preterm delivery were increased for women who climbed stairs ? 10 times per day and for women who engaged in purposive walking ? 4 days per week. Leisure-time exercise (? 60 days in the 1st and 2nd trimesters combined) had a protective effect. TV viewing had a U-shaped relation.	Strenuous activities could trigger contractions which could lead to preterm labor. (633)	Preterm birth
<b>Physical exertion at work and the risk of preterm delivery and small-for-gestational-age birth</b>	Pompeii, L., Savitz, D., et al (2005)	The Pregnancy, Infection and Nutrition study was conducted through clinic and hospital settings in Central North Carolina. A total of 1,908 women pregnant with a singleton gestation were recruited during prenatal visits from Jan. 1995 to April 2000.	Prospective cohort	Prospective cohort study with a nested case-control design; minimal recall bias and misclassification of exposure.	Relatively small sample size; limitations in the way that lifting and standing at work was quantified; rate of preterm delivery was higher for whites making this study less generalizable,	Standing, lifting, night work, or long work hours.	No significant elevations in preterm delivery were observed among women who lifted repeatedly or stood at least 30 hours per week. A 50% elevation in the risk of preterm delivery was observed among women who worked at night.	Circadian rhythm in uterine activity may be disrupted. Secretion of melatonin may be temporarily suppressed in women who work at night.	Preterm delivery and SGA birth.

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Article Title	Authors	Study Population	Study Design	Strengths	Limitations	Exposures	Results	Biologic Mechanism	Outcomes
<b>Maternal stress and preterm birth</b>	Dole, N., Savitz, D., et al. (2003).	1,962 pregnant women in central North Carolina btwn 1996 and 2000	Prospective cohort	Large sample; prospective study design	Some selection bias; possible misclassification of gestational ages; validity issues with instruments to measure psychosocial factors.	Various psychosocial factors	There was an increased risk of preterm birth among women with high counts of pregnancy-related anxiety, with life events to which the respondent assigned a negative impact weight, and with a perception of racial discrimination.		Preterm birth
<b>Racial and ethnic disparities in preterm birth: The role of stressful life events</b>	Lu, M., & Chen, B. (2004)	Data from the Pregnancy Risk Assessment Monitoring System; sample included 33,542 women from 19 states	Retrospective cohort study	Large population-based study; a variety of stressful life events were considered	Perhaps the questionnaire did not capture the full range of stressful life events experienced by women.	Stressful life events	Compared to non-Hispanic white women, black women were 24% more likely to report emotional stressors, 35% more likely to report financial stressors, 163% more likely to report partner-related stressors, and 83% more likely to report traumatic stressors; In this study, stress constructs were not significantly assoc with preterm birth.		Preterm birth

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Appendix A: Critique of the Literature

Article Title	Authors	Study Population	Study Design	Strengths	Limitations	Exposures	Results	Biologic Mechanism	Outcomes
Work activity in pregnancy, preventive measures, and the risk of delivering a small-for-gestational-age infant	Croteau, A., Marcoux, S., & Brisson, C. (2006)	Cases (n=1242) and controls (n=4,513) were selected from 43,898 women who had single livebirths btwn Jan. 1997 and March 1999 in Quebec, Canada. Women were interviewed by telephone after delivery.	Case-control study	Little selection bias since refusal rate was small; questions pertaining to pregnancy were asked after occupational questions; interviewers were unaware of mothers' status	Observed associations were weak possibly due to residual confounding; underestimation of the the true effect of occupational conditions on SGA risk	Various occupational factors: schedule, posture, physical effort, psychosocial factors. Also assessed whether preventive measures modified the risk	Risk of having an SGA infant increased with irregular or shiftwork schedule alone and with a cumulative index of several occupational conditions: night hours, irregular or shiftwork schedules, standing, lifting loads, noise, and high psychosocial demand.	Not described.	SGA
Physical work load, fetal development and course of pregnancy	Nurminen, T., Lusa, S., Ilmarinen, J. et al. (1989)	Data was obtained from the Finnish Register of Congenital Malformations; Cases =1475 and controls=1475.	Case-control study	Adjusted for confounders; looked at a range of pregnancy outcomes.	Used job titles;socio-economic status could be a confounder;heavier work loads and more chemical exposures are likely in manual labor jobs, biases in maternal recall.	Physical work load during pregnancy	The noncase mothers' experience revealed a relation between physical load and growth retardation that has also been suggested by other studies. No relation was found between an increase in mean physical load and the occurrence of threatened abortion;yet work involving standing had an increased risk. Mothers whose work included occasional high physical loads had more pregnancy-induced hypertension. The data showed unexpected assoc between physical load and structural malformations.	Not described.	SA, pregnancy-induced hypertension, length of gestation, and birthweight.

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## Appendix A: Critique of the Literature

Article Title	Authors	Study Population	Study Design	Strengths	Limitations	Exposures	Results	Biologic Mechanism	Outcomes
Heavy physical work during pregnancy-A risk factor for small-for-gestational-age babies in Poland	Hanke, W., Kalinka, J., et al. (1999)	1,064 working women from Lodz region of Poland (8% of population) were administered a questionnaire.	Cross-sectional	Large sample; controlled for many risk factors.	Questionnaire was administered after delivery, possible recall bias	Heavy physical work	Excessive risk of SGA among group reporting heavy physical effort at work.	Heavy work reduces blood volume/oxygen available to fetus.	SGA
Do standing, lifting, climbing, or long hours of work during pregnancy have an effect on fetal growth?	Hatch, M., Ji, B., et al. (1997)	Subjects (N=717) were pregnant women in two suburban-rural sites in Pennsylvania and NY from Jan. 1987 to June 1989.	Prospective cohort	Longitudinal study; subjects were contacted each trimester	Low-risk population was studied and so the effects of work activity may have been underestimated (healthy worker effect); potential selection bias (non-participants were of higher parity); numbers of subjects within strata is small and CI are wide	Length of work week and job activity	Among 575 women who worked during pregnancy, neither prolonged standing, frequent lifting, or climbing at work, nor a high composite activity score showed an assoc with fetal growth, as measured by birthweight for gestational age. Long hrs of work did reduce fetal growth.	Not described.	SGA
<b>The effect of maternal work on fetal growth and duration of pregnancy: A prospective study</b>	Launer, L., Villar, J. et al (1990)	Sample included all pregnant women (n=15,786) who had their first prenatal visit at the antenatal clinic at a hospital in Guatemala.	Prospective cohort	Large sample size, controlled for many potential confounders	Work experiences of Guatemalan women may be different from women in more developed countries.	Standing, physical activity (housework and formal employment)	Compared with office work, manual work increased the risk for an SGA and SGA/preterm birth. Work in a standing compared with sitting position significantly increased the risk for a preterm birth. There was a higher freq of SGA/preterm birth with increase in physical demands at work.	Issues involving energy balance and uteroplacental perfusion have been considered. Strenuous movement may divert blood from the fetoplacental unit to the active muscles, or standing may reduce venous return and blood volume.	SGA and preterm birth

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**Appendix A: Critique of the Literature**

Article Title	Authors	Study Population	Study Design	Strengths	Limitations	Exposures	Results	Biologic Mechanism	Outcomes
<b>The risk of prematurity and small-for-gestational-age birth in Mexico City: The effects of working conditions and antenatal leave</b>	Ceron-Mireles, P., Harlow, S., et al (1996)	Over a 3 month period, 2663 (96.2%) of 2767 women who gave birth at 3 major hospitals and worked at least 3 months during pregnancy were interviewed shortly after delivery (Mexico City).	Cross-sectional	Looked at effects of maternal employment in nonagricultural sector on birth outcomes in a developing country	Potential for recall bias since exposures were obtained retrospectively, only women who at least 3 months during pregnancy were included; possibility of type 1 error since 13 work exposure variables were evaluated for each outcome.	Long working hours	For SGA births, working more than 50 hours a week, standing more than 7 hours a day, and no antenatal leave were assoc with an increased risk. Women with no antenatal leave were much more likely to give birth prematurely.	Not described.	SGA and preterm
Influence of occupational physical activity on pregnancy duration and birthweight	Florack, E., Pellegrino, A, et al (1995)	The participants were part of a group of 260 cleaners, kitchen staff, and clerical workers enrolled from 39 Dutch hospitals btwn Aug. 1987 and Jan. 1989 before they became pregnant.	Prospective cohort	Prospective study design	Selection bias, information bias, confounding (didn't measure maternal height or leisure-time activities)	Occupational physical activity	Work with a high intensity score, and to a lesser extent work with a high fatigue score, had the most outstanding effect (up to 18d shorter) on pregnancy duration when the work speed was high. None of the studied aspects of occupational physical activity showed a relevant influence on birthweight when adjusted for pregnancy duration.	Not described.	Gestational age and birthweight

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**Appendix A: Critique of the Literature**

Article Title	Authors	Study Population	Study Design	Strengths	Limitations	Exposures	Results	Biologic Mechanism	Outcomes
Exposure to organic solvents and adverse pregnancy outcomes	Ahmed, P. & Jaakola, J. (2007)	Population-based study of 1670 singleton newborns of women who participated in the Finnish Prenatal Environment and Health Study after their delivery (response rate 94%) and who were working during pregnancy (65%).	Retrospective cohort study	High participation rate minimized risk of selection bias	Exposure assessment was based on a self-administered questionnaire-possible exposure misclassification	Exposure to occupational organic solvents	The risk of the baby being SGA was related to any exposure to solvents 3 months before or during pregnancy with an adjusted odds ratio. Also adjusted OR for LBW was elevated with exposure, although it didn't reach statistical significance. The population attributable fraction for SGA was 2.3% for all pregnant women.	Not described.	SGA, LBW, Preterm delivery
Paternal organic solvent exposure and adverse pregnancy outcomes: A meta-analysis	Logman, J., de Vries, L., et al (2005)	47 studies were examined and 14 were included in the meta-analysis	Meta-analysis	Meta-analysis-all included articles were assessed on their quality using strict criteria.	Not all the studies examined the same chemical class of organic solvents; studies with interviewing may have been subject to recall/response bias; difficult to quantify exposures; studies used different measurement techniques	Paternal exposure to organic solvents	Paternal exposure to organic solvents is associated with an increased risk for neural tube defects but not SA.	Organic solvents may have a direct effect on sperm DNA, producing mutations or chromosomal abnormalities. Also possible there are indirect effects by transmission of agents to the mother via seminal fluid (38)	Spontaneous abortions (SA) and Major Malformations (MM)

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Article Title	Authors	Study Population	Study Design	Strengths	Limitations	Exposures	Results	Biologic Mechanism	Outcomes
Laboratory work and pregnancy outcomes: A study within the national birth cohort in Denmark	Zhu, J., Knudsen, L. et al. (2006)	Data from the Danish National Birth Cohort (1997-2003). 1025 female lab techs and 8037 female teachers (as reference)	Prospective cohort study	Women were interviewed about work exposures before giving birth; pregnancy outcomes were collected from national registries	Exposed population (lab workers) was larger than in other studies but there was still a lack of power to detect small/moderate increased risks of rare outcomes; possible selection bias	laboratory work	There were no significant differences in pregnancy outcomes between laboratory techs and teachers. Lab techs working with radioimmunoassay or radiolabelling had an increased risk of preterm birth and major malformations.	Not described.	Late spontaneous abortion and stillbirth, preterm delivery, LBW, and congenital malformations.
<b>A prospective study of work-related physical exertion and spontaneous abortion</b>	Fenster, L., Hubbard, A., et al. (1996).	5,144 pregnant women were interviewed by a computer-assisted telephone interview system.	Prospective cohort study	Pregnancy outcome was determined in 99% of cases; many maternal and work-related factors were taken into account	The questionnaire may not have accurately reflected all physically demanding tasks undertaken by the study participants; some potential selection bias	Physical exertion at home and at work.	None of the exertion measures was appreciably associated with an increased risk of spontaneous abortion overall. Physical activity at work and at home combined was not related to increased risk. Women with an history of two or more SA, standing at work more than 7 hrs a day was assoc with a higher risk.		Spontaneous abortion

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Article Title	Authors	Study Population	Study Design	Strengths	Limitations	Exposures	Results	Biologic Mechanism	Outcomes
<b>Shift work, nitrous oxide exposure, and spontaneous abortion among Swedish midwives</b>	Axelsson, G., Ahlborg, G. et al. (1996).	Questionnaires were given to all 3985 female members of the Swedish Midwives Assoc to assess their exposure before and during their pregnancies. Analyses were made for 1717 of the pregnancies.	Cross-sectional	High response rate; excluded pregnancies that occurred before 1980 to minimize recall bias and to take into account the fact that nitrous oxide levels were different	Some spontaneous abortions may have been missed.	Irregular work hours, nitrous oxide exposure, other work conditions.	Night work and three shift schedules among midwives showed increased odds ratios; the OR's of late spontaneous abortions was increased for night work.		Spontaneous abortion
<b>Work schedule during pregnancy and spontaneous abortion</b>	Whelan, E., Lawson, C., Grajewski, B., et al (2007)	The Nurses' Health Study II was est. in 1989. 7688 pregnancies were analyzed in this study.	Prospective cohort study	Prospective study design; 76% response rate; large sample; controlled for multiple risk factors	Pregnancy-related exposures and outcomes may have been incorrectly recalled (recall bias); women who work nights may have more health problems.	Work schedule (including night work and shift work)	Compared with women who reported usually working days only during their 1st trimester, women who reported usually working nights only had a 60% increased risk of SA. Women who worked more than 40 hrs per week during the 1st trimester were also at increased risk of SA.	Hormonal disturbances due to sleep disturbance or circadian rhythm disruption may play a role. (353)	Spontaneous abortions (SA)

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## Appendix A: Critique of the Literature

Article Title	Authors	Study Population	Study Design	Strengths	Limitations	Exposures	Results	Biologic Mechanism	Outcomes
Shift work, fetal development and course of pregnancy	Nurminen, T. (1989)	The source info of the study was the Finnish Register of Congenital Malformations between June 1976 and Dec. 1982. Cases=1475 and controls=1475.	Case-control	Study looked at many different pregnancy outcomes.	Most women in shift work belong to a lower socio-economic class.	Shift work	The analyses produced no indication of a teratogenic risk in connection with shift work. In the study data, shift work alone was not related to the occurrence of threatened abortion, but in a noisy work environ. the mothers had an elevated risk of this outcome and hypertension.	Circadian rhythm may be disturbed leading to more irregularities in menstruation.	Teratogenic risk, threatened abortion, pregnancy-induced hypertension, length of gestation, and birthweight
<b>The effect of heavy maternal workload on fetal growth retardation and preterm delivery: A study among southern Thai women</b>	Tuntiseranee, P., Geater, A., et al. (1998)	Study included a fixed cohort of pregnant women (N=1,797) attending routine antenatal care at two hospitals in Thailand. The women were interviewed twice, at 17 and 32 gestational weeks.	Prospective cohort	Large sample; women were interviewed about exposures twice before giving birth; a wide range of exposures were assessed	Some of the studied exposures may not be applicable to women in the US (i.e squatting)	Standing, lifting, working hours, physically demanding work	The risk of SGA was elevated for wome working > 50 hours/week, squatting in work, commuting > 1 hour/day, and having high psychological job demands; the risk of preterm delivery was increased with obstetrical complications.	Not described.	LBW, SGA, Preterm birth

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**Appendix A: Critique of the Literature**

Article Title	Authors	Study Population	Study Design	Strengths	Limitations	Exposures	Results	Biologic Mechanism	Outcomes
Activity level of mother's usual occupation and low infant birth weight	Meyer, B., & Daling, J. (1985)	State of Washington birth certificate records (5,822 subjects); cases were women who had delivered infants weighing < 2500 g; controls were women who had delivered normal weight infants.	Case-control study	Large, population-based sample; Study controlled for many risk factors	Birth certificates listed only the mother's usual occupation instead of occupation during pregnancy; no info about duration of paid employment; no info on maternal smoking, alcohol use and prepregnancy weight available on birth certificate.	Activity level of a woman's occupation.	No assoc was detected between activity level of mother's usual occupation and delivery of a low-birth-weight infant.	Not described.	LBW
Strenuous working conditions and birthweight, Norway 1989	Wergeland, E. & Strand, K., et al (1998)	Women who gave birth in Norway during a 6 week period in 1989 (N=3321).	Cross-sectional	Large sample; homogeneous population	Women were interviewed after giving birth.	Occupational exposure to strenuous work	Strenuous work in pregnancy was assoc with increased risk of LBW in nullipara, in particular among non-smokers. Lack of influence on work pace was the strongest risk factors.	Not described.	LBW
Association of rotating shiftwork with preterm births and low birth weight among never smoking women textile workers in China	Xu, X., Ding, M., et al. (1994).	Married women workers (N=1035) who were employed in one of three modern textile mills in Anhui, China (1992)	Cross-sectional	Study population was homogeneous-confounding was minimized; all the participants were young and currently employed in the textile mills; info on rotating shiftwork and other potential occup risk factors were simultaneously collected.	Possible selection bias due to retrospective nature ; misclassification of exposure is possible since occupational history was self-reported.	Rotating shiftworks	When the analysis was restricted to first order live births or to production workers, the est. effects of rotating shiftwork on both gestational age and birth weight were signif.	Disruption in circadian rhythms (473)	LBW and Preterm birth

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Article Title	Authors	Study Population	Study Design	Strengths	Limitations	Exposures	Results	Biologic Mechanism	Outcomes
Characteristics of maternal employment during pregnancy: Effects on low birthweight	Peoples-Sheps, M., Siegel, E., et al. (1991)	The study population consisted of 2711 non-black, married mothers who participated in the 1980 National Natality Survey (NNS)	Cross-sectional	Little recall bias; results were consistent with other studies of American populations	Only looked at low-risk, non-black	Various work characteristics including: number of hrs per week, physical activities, environmental conditions.	Those who worked 40 or more hours per week were more likely than women who worked fewer hours to have a low birthweight delivery at ? 37 weeks. No physical or environmental characteristics of work were associated with low birthweight or preterm delivery.	Physical and environmental exposures at work may influence pregnancy by decreasing uterine blood flow by stimulating production of catecholamines or both. It's possible that these processes can be accelerated or decelerated by amount of exposure.	LBW and preterm delivery.
The association of shift work and nitrous oxide exposure in pregnancy with birth weight and gestational age	Bondin, L., Axelson, G., et al. (1999)	Questionnaires were mailed to midwives who were listed in the membership registry of the Swedish Midwives Assoc in 1989 and were born in 1940 or later. 1,685 pregnancies from 1,244 women were included in the analyses.	Cross-sectional	High response rate; homogeneous study population helped control for confounding of nonoccupational factors.	Data on exposures were obtained retrospectively and based on self-report; possible misclassification of exposures; lack of quantification of nitrous oxide exposure.	Shift work and occupational nitrous oxide exposure in second trimester of pregnancy	Night work was associated with preterm birth and to a lesser extent with LBW. Three-shift work schedule showed a possible association with preterm birth. Exposure to nitrous oxide use was assoc with reduced birth weight and an increase in the odds of infants being small for gestational age.	Not described.	LBW and SGA

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Article Title	Authors	Study Population	Study Design	Strengths	Limitations	Exposures	Results	Biologic Mechanism	Outcomes
Influence of rest during pregnancy on birth weight in working women	Sydsjo, A., Brynhildsen, J., et al (2006)	A total of 7,459 consecutively delivered women in 1978, 1986, 1992, and 1997 at 2 delivery wards in southeastern Sweden were studied.	Cross-sectional	Large sample size, multiple measurements over time	Other confounders such as changes over time in obstetric management of pregnancies (induced labor, C-sections) may have influenced results. Also more ART's.	Rest provided by a combination of time off from work and social benefits among working pregnant women.	Btwn 1978 and 1997, the avg birthweight among the children of the women studied increased. The increase was most evident among women who were employed. The use of social benefits and increased rest during pregnancy didn't signif influ birthweight even after adjusting for confounders.	Not described.	Birthweight
Work and pregnancy: The role of fatigue and the 'second shift' on antenatal morbidity	Luke, B., Avni, M., et al. (1999)	213 women who were recruited for the study when they first registered for prenatal care at the University of Michigan Health System between March 1997 and Nov. 1997. Women completed 3 antenatal interviews at about 16, 24, and 30 weeks gestation.	Prospective study	Prospective study design which included 3 antenatal interviews at 16, 24, and 30 weeks gestation. Minimized recall bias; inclusion of household responsibilities in study.	Healthy worker effect;relatively small sample size,particularly within strata; homogeneous population; distribution of job types was limited.	Household and employment factors.	The risk of antenatal morbidity, which was greatest during the 2nd trimester, was increased by stress, fatigue, work plus home score, and the interaction of fatigue and work plus home score.	Not described.	Antenatal morbidity (emergency department visits and hospitalizations)

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Article Title	Authors	Study Population	Study Design	Strengths	Limitations	Exposures	Results	Biologic Mechanism	Outcomes
<b>Postpartum health of employed mothers 5 weeks after childbirth</b>	McGovern, P., Dowd, B., Gjerdingen, D., et al. (2006).	817 Minnesota women were enrolled in the study while they were hospitalized for childbirth.	Prospective cohort	Prospective study design; controlled for many factors	Some loss-to-follow up; Minnesota sample may not be generalizable to other states	Employment, postpartum, personal factors	Findings showed that C-sections (vs. vaginal) deliveries were assoc with significantly worse physical function, role limitations, and vitality. On average, women mostly reported fatigue, breast discomfort, and decreased desire for sex.		Maternal postpartum health
<b>Does the length of maternity leave affect maternal health?</b>	Chatterji, P. & Markowitz, S. (2005)	Survey respondents were a national sample of women btwn 15-49 years old who had a pregnancy in 1988. Data from 1988 NMIHS (N=1,762).	Cross-sectional	Focus on maternal health instead of just child health; looked at data before FMLA and after.	Sample included mostly disadvantaged mothers; used a measure of health services utilization to proxy maternal health has limitations, variation in maternity leave in sample is small (38)	The length of maternity leave.	Returning to work later is assoc with a reduction in the number or frequency of depressive symptoms. There is suggestive but inconclusive evidence that longer maternity leave is assoc with a lower probability of being a likely case of clinical depression and a lower likelihood of having frequent outpatient visits during the first six months after childbirth.	Not described.	Maternal health using two measures of depression and a measure of outpatient health visits.
<b>Employment, exertion, and pregnancy outcome: Assessment by kilocalories expended each day</b>	Magann, E., Evans, S., & Newnham, J. (1996).	2743 pregnant women who delivered at a major perinatal center in Western Australia; extensive questionnaire	Prospective cohort	Controlled for many risk factors/confounders; measured daily kilocalorie expenditure	Women may have misreported activity levels in daily journals.	Employment related physical activity	The effects of daily energy expenditure on pregnancy outcome are not great.	Not described.	General pregnancy outcome

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Article Title	Authors	Study Population	Study Design	Strengths	Limitations	Exposures	Results	Biologic Mechanism	Outcomes
<b>On-the-job moms: Work and breastfeeding initiation and duration for a sample of low-income women</b>	Kimbro, R. (2006)	A sample of 4331 mostly low-income, unmarried US mothers from the Fragile Families and Child Wellbeing Study	Prospective cohort	Large sample; looked at a number of occupational variables; interviews occurred within 48 hours of birth and follow-up at one year; 90% response rate at one year; controlled for impt demographic factors.	Study sample may not be generalizable; didn't differentiate between exclusive breastfeeding and nonexclusive breastfeeding.	Women's work status	Expecting to work in the year after the baby's birth doesn't impact breastfeeding initiation. The timing of quitting breastfeeding and the return to work are closely and powerfully linked, and mothers in admin and manual positions quit earlier than other women. Women in service positions didn't differ from SAH mothers or professionals.	Not described	Breastfeeding initiation and duration.
<b>Women's decisions about breastfeeding and maternal employment</b>	Lindberg, L. (1996).	Data from the National Survey of Family Growth; Nationally representative sample of 2,431 (1,529 non-Black women and 902 Black women).	Cross-sectional	Controlled for many maternal factors	Direction of association is unclear between a woman's decision to start breastfeeding and returning to employment postpartum.	Various employment factors	More women who are employed part-time are likely to breastfeed and for longer durations than women employed full-time; women are more likely to stop breastfeeding in the month they enter employment.		Breastfeeding behavior

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## Appendix A: Critique of the Literature

Article Title	Authors	Study Population	Study Design	Strengths	Limitations	Exposures	Results	Biologic Mechanism	Outcomes
<b>The effect of work status on initiation and duration of breast-feeding</b>	Fein, S. & Roe, B. (1998)	1488 mothers from a mail panel (The Infant Feeding Practices Study) completed questionnaires during late pregnancy and 10 times in the infant's first year.	Prospective cohort	Compared study sample with a nationally representative population of mothers who responded to the National Maternal and Infant Health Survey; longitudinal collection of data reduced recall bias; controlled for many potential confounders	Study participants were more likely to be more educated, have higher SES, be white, older, and married compared to women in the comparison group; response rate was 69%	Various work variables.	Expecting to work part-time neither decreased nor increased the probability of breast-feeding relative to expecting not to work but expecting to work full-time decreased the probability of breast-feeding.	Not described	Breastfeeding initiation and duration.
<b>Does maternal employment affect breast-feeding?</b>	Kurini, N., Shiono, P., et al. (1989).	668 Black and 511 White women who delivered their first child in Washington, DC.	Prospective cohort	Controlled for socio-demographic and employment variables; breastfeeding data up to one year postpartum	Study design and procedures were described in a previous article; Black women may have a stronger socioeconomic need to return to work sooner than White women	Various employment variables	Black women who planned to return to work part time vs. full time were more likely to breastfeed rather than formula-feed; Black women who returned to work had a shorter duration of breastfeeding than those not returning to work; Black and white women returning to professional occupations had a longer duration of breastfeeding compared to women returning to sales or technical positions.		Breastfeeding initiation and duration.

 \* Articles in **bold** are included in the report

\*\* This chart contains direct quotations from the critiqued articles

Article Title	Authors	Study Population	Study Design	Strengths	Limitations	Exposures	Results	Biologic Mechanism	Outcomes
<b>Maternal employment and the initiation of breastfeeding</b>	Noble, S., & The ALSPAC study team (2001).	10,530 mothers of full-term singleton infants who completed questionnaires at 32 wks gestation and 4 wk postpartum; 3 Bristol, England-based health districts.	Prospective cohort	Longitudinal study design; large sample size; controlled for many maternal factors; results similar to those in past U.S. studies	Results may not be generalizable to all U.S. populations; full data sets were only available for 84% of the women.	Various employment characteristics	Mothers who planned to begin work before 6 wks were significantly less likely to initiate breastfeeding compared with mothers not intending to work postpartum.		Breastfeeding initiation
<b>Maternal employment and breastfeeding initiation: findings from the Millennium Cohort Study</b>	Hawkins, S., Griffiths, L., et al. (2007).	Analysis comprised 14,830 white mothers from Britain and Ireland (6917 employed) with singleton babies, born from 2000 to 2002.	Prospective cohort	Large sample; prospective study design; good response rate	Study participants were from UK and Ireland, perhaps not generalizable to U.S.; direction of association is unclear between a woman's decision to start breastfeeding and returning to employment postpartum.	Various employment characteristics	Among employed mothers, those who returned to work within 4 months postpartum were less likely to start breastfeeding than women who returned at 5 or 6 months, and women who returned within the first 6 weeks were much less likely to start breastfeeding.		Breastfeeding initiation
<b>Maternal employment and breastfeeding: Findings from the 1988 national maternal and infant health survey</b>	Visness, C.M. & Kennedy, K.I. (1997)	Nationally representative data from the 1988 National Maternal and Infant Health Survey. Analyzed 9087 cases.	Cross-sectional	Large, national sample was used; response rate was 74%	Data didn't contain info about the number of hours worked-unable to control for differences btwn women working part-time and full-time.	Different employment factors/ amount of maternal leave	53% of mothers ever breastfed in 1988, and the decision to breast-feed was not assoc with maternal employment. Among breastfeeders, returning to work within one year of delivery was assoc with a shorter duration of breastfeeding when other factors were controlled. Longer maternal leave was assoc with longer breastfeeding duration.	Not described.	Breastfeeding initiation and duration.

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Article Title	Authors	Study Population	Study Design	Strengths	Limitations	Exposures	Results	Biologic Mechanism	Outcomes
Mothers' time with infant and time in employment as predictors of mother-child relationships and children's early development	Huston, A.C. & Aronson, S. (2005)	The original sample included 1,364 families from the NICHD Study of Early Child Care. Participants were recruited from 10 sites around the US when infants were born. Study sample (1,053 participants) inclu 24% ethnic minority children, 11% mothers w/o HS educ, and 14% were single mothers.	Prospective cohort	Focused on amount of time mothers and infants spent together rather than apart; observations of mothers and infants were made at multiple points across time; controlled for many sociodemographic factors	No info about infants' time with fathers or other caregivers; maternal time may not adequately predict children's development if info about quality and content of mother/infant interactions is insufficient.	Maternal time with infant	Employment reduced time with infants, but mothers compensated for some work time by decreasing time in other activities. With family and maternal charac controlled, time with infants predicted high HOME scores and maternal sensitivity, but had little relation to children's engagement with mothers, secure attachment, social behavior, or cognitive performance from 15-36 mo.	Not described	Home environment quality, positive mother-infant relationships, children's cognitive and language development, behavior
Need for and use of family leave among parents of children with special health care needs	Chung, P., Garfield, C., Elliott, M. et al. (2007).	Children with special health care needs were selected from 2 large inpatient/outpatient syst in Chicago and L.A. 800 children were chosen from each site. Telephone interviews were conducted with 1105 parents (87% of eligible and successfully contacted parents)	Cross-sectional	Tried to achieve balance in terms of gender and employment status among those who were interviewed; Large sample	Used Medicaid enrollment as proxy for employment status which may have miscategorized some respondents; more nonrespondents at UCLA site; possible underestimation of work family conflict if some parents had already made employment adjustments; cross sectional design didn't allow for follow up on MHI-5 or PedsQL scores over time	Access to family leave or other work family benefits	In this study, children missed an avg of 20 school/child-care days, had 12 Dr./ER visits, and 1.7 hospitalizations. 81% of parents reported missing work when child needed them but 41% said they didn't always miss work when their child needed them.	Not described	Health of children with special needs; parental work family conflict

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**Appendix A: Critique of the Literature**

Article Title	Authors	Study Population	Study Design	Strengths	Limitations	Exposures	Results	Biologic Mechanism	Outcomes
Child health status and parental employment	Kuhlthau, K.A., & Perrin, J.M. (2001).	A nationally representative sample of children and their parents using 1994 data from the National Health Interview Survey on Disability data.	Cross-sectional	A nationally representative sample was used; controlled for many confounders; examined maternal and paternal employment outcomes separately	Use of cross-sectional data only allowed for measuring associations; reference time for employment time was only 2 weeks; there may be other confounding factors that weren't controlled for such as parental ill health.	Children having poor health status	Having a child with poor health status, as measured by general reported health, hospitalizations, activity limitations, and chronic condition or disability status, is associated with reduced employment of mothers and fathers.	Not described	Maternal and paternal employment
Maternity leave, early maternal employment and child health and development in the US	Berger, L.M., Hill, J., & Waldfogel, J. (2005)	Data from the 1987-2000 waves of the National Longitudinal Survey of Youth (NLSY)	Prospective cohort	Large, nationally representative sample; looked at a wide range of child health and developmental measures; controlled for many different variables.	Possible selection bias-mothers who take leave of a certain length may differ.	Mothers' returns to work within 12 weeks of giving birth	Associations were found btwn early return to work and reductions in breastfeeding and immunizations, and increases in externalizing behavior problems among children whose mothers worked prebirth.	Not described	Health and developmental outcomes of children (breastfeeding, regular medical checkups, immunizations, cognitive/behavioral assessment scores.
How children with special health care needs affect the employment decisions of low-income parents	Loprest, P., & Davidoff, A. (2004).	Data from the 1999 and 2000 National Health Interview Survey (NHIS)	Cross-sectional	Large sample; stratified by specific health care needs; controlled for many potential confounders.	cross-sectional data doesn't allow for an examination of parental labor supply before the child's diagnosis of a CSHCN; can't draw conclusions about causal relationships; some key questions were only asked for a sample child.	Low-income families with children with special health care needs	No signif assoc btwn having a CSHCN and the probability of work or number of hrs worked among low-income families. Parents of children with activity limitations are signif less likely to work and to work fewer hours.	Not described	Various employment decisions

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Article Title	Authors	Study Population	Study Design	Strengths	Limitations	Exposures	Results	Biologic Mechanism	Outcomes
Maternal employment and child development: A fresh look using newer methods	Hill, J.L., Waldfogel, J. Brooks-Gunn, J., et al. (2005).	Data from the NLSY; study sample included 6,114 children of the NLSY	Cross-sectional	Newer and more robust methodological approaches were taken to handle missing data and selection bias.	Couldn't control for all variables. Maternal depression was not controlled for.	Maternal employment	Maternal employment had more negative effects on children's cognitive outcomes if the mothers were employed full time in the first year as compared to mothers who postponed work until after their child's first year of life and also compared to mothers who worked part time in the first year.	Not described	Child development (cognitive and behavioral outcomes)
Cerebral palsy among children born after in vitro fertilization: The role of preterm delivery-A population-based, cohort study	Hvidtjorn, D., Grove, J., et al. (2006)	A population-based study including all live-born singletons and twins born in Denmark between Jan. 1995-Dec. 2000.	Prospective cohort study	Large, national sample; little selection bias; all data in the registers were collected prospectively	Some misclassification of CP is possible; findings didn't consider children born after in vivo fertilization	Compared children born with in vitro fertilization to children born without in vitro fertilization.	Children born after in vitro fertilization had an increased risk of CP; these results were largely unchanged after adjustment for maternal age, gender, parity, SGA, and educational level. When both multiplicity and preterm delivery were included in the multivariate models, preterm delivery remained associated strongly with the risk of CP.	Preterm delivery and SGA are associated with CP	Cerebral palsy

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\*\* This chart contains direct quotations from the critiqued articles

**Appendix A: Critique of the Literature**

Article Title	Authors	Study Population	Study Design	Strengths	Limitations	Exposures	Results	Biologic Mechanism	Outcomes
Perinatal outcome among singleton infants conceived through assisted reproductive technology in the United States	Schieve, L., Ferre, C., et al. (2004).	Subjects were 62,551 infants born after ART treatments performed in 1996-2000. Specific analyses were performed for 6,377 infants conceived in 2000.	Cross-sectional	Large sample, adjusted for many potential confounders, able to stratify data according to specific procedures	Registry doesn't include patients undergoing multiple procedures in a single year, some important data such as quality of embryo and maternal exposures assoc with preterm delivery is not collected.	Various ART procedures	The proportion of ART singletons born LBW, VLBW, and term LBW decreased from 1996 to 2000. The proportion delivered preterm and pre-term LBW remained stable. After adjustment for maternal age, parity, and race, singleton infants born after ART in 2000 had elevated risks for all outcomes compared to the general population of US singletons.	Ovarian hyperstimulation and admin of hCG and/or progesterone for luteal support may result in nonphysiological levels of estrogen, progesterone, and relaxin. Also characteristics of in vitro environ could impact outcomes.	Preterm delivery and low birthweight
Perinatal outcomes in singletons following in vitro fertilization: A meta-analysis	Jackson, R.A., Gibson, K.A., et al. (2004)	15 studies comprising 12,283 IVF and 1.9 million spontaneously conceived singletons were identified.	Meta-analysis	Studies were evaluated according to strict criteria; all included studies controlled for parity and maternal age	Any biases in individual studies are reflected in reviews; bias due to the fact that IVF pregnancies may be managed differently from non-IVF pregnancies; possible treatment bias (more C-sections, inductions)	Compared singletons born after in vitro fertilization with singletons born as a result of spontaneous conceptions.	Compared with spontaneous conceptions, IVF singleton pregnancies were assoc with signif higher odds of each of the perinatal outcomes examined: perinatal mortality, preterm delivery, LBW, VLBW, and SGA.	Causes are not fully understood. Could be due to IVF procedure itself, to components of the IVF procedure, or to infertility itself.	Perinatal mortality, preterm delivery, SGA, LBW

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\*\* This chart contains direct quotations from the critiqued articles

Article Title	Authors	Study Population	Study Design	Strengths	Limitations	Exposures	Results	Biologic Mechanism	Outcomes
Health of children born as a result of in vitro fertilization	Klemetti, R., Sevon, T., et al. (2006)	Children born after in vitro fertilization (N=4559) from 1996 to 1999 were monitored until 2003. Two control groups were selected from the Finnish Medical Birth Register as follows: all other children from the same period for the study of perinatal health and hospitalizations and a random sample of those children for study of health-related benefits.	Prospective cohort study	Large sample using nationwide registries, examined a wide-range of outcomes	Study may have missed children with less-serious diseases and complications who did not utilize health care; IVF children may have received more careful medical exams,	Children born after IVF compared to those born without IVF	Children born after in vitro fertilization had more health problems than other children. A total of 35.7% of in vitro fertilization children and 2.2% of control children were multiples. Children born after in vitro had more hospital episodes, increased risk for cerebral palsy and psychological/developmental disorders.	Infertility itself, infertility treatments, and varying health behavior during pregnancy	Mother's utilization of health care services during pregnancy and child birth (hospitalization, C-sections); Infant outcomes-VLBW, LBW, preterm, low apgar scores
Increased risk of preterm birth in singleton pregnancies resulting from in vitro fertilization-embryo transfer or gamete intrafallopian transfer: a meta-analysis	McGovern, P.G., Llorens, A.J. et al. (2004)	27 articles met inclusion/exclusion criteria	Meta-analysis	Inclusion/exclusion criteria used	Only 6 studies included infants born before 32 weeks; the analysis doesn't allow for determination of whether prematurity is related to gonadotropin stimulation or another aspect of IVF	Singleton pregnancies resulting from IVF-ET/GIFT	The risk of preterm birth in singleton pregnancies resulting from IVF-ET/GIFT is twice that of natural conceived pregnancies.	Elevated levels of relaxin, possible reproductive pathology among infertile couples compared to fertile couples; differences in medical interventions	Preterm birth

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**Appendix A: Critique of the Literature**

Article Title	Authors	Study Population	Study Design	Strengths	Limitations	Exposures	Results	Biologic Mechanism	Outcomes
Perinatal outcome of singletons and twins after assisted conception: A systematic review of controlled studies	Helmerhorst, F.M., Perquin, A.M., et al. (2004)	25 studies were included of which 17 had matched and 8 had non-matched controls	Systematic review of controlled studies published 1985-2002	Inclusion/exclusion criteria used	Not all confounders were controlled for in the studies (ie SES, smoking, and pre-existing disease); limitations exist in matched cohort approach to comparing outcomes	Comparing singleton to twin pregnancies conceived using ARTs and those not conceived without ARTs	Singleton pregnancies from assisted reproduction have a significantly worse perinatal outcome than non-assisted singleton pregnancies, but this is less so for twin pregnancies. In twin pregnancies, perinatal mortality is about 40% lower after assisted compared with natural conception.	Not described.	very preterm birth, preterm birth, VLBW, LBW, SGA, C-section, admission to NICU, and perinatal mortality.
Perinatal outcomes of in vitro fertilization twins: A systematic review and meta-analyses	McDonald, S., Murphy, K., et al. (2005)	11 case-control studies involving 2303 IVF twins and 2326 spontaneously conceived twins were included in this analysis.	Meta-analysis	Inclusion/exclusion criteria used; all studies were controlled for maternal age	Some potential confounders were unexplored in several studies	Various ART procedures	Compared with spontaneously conceived twins who were matched for maternal age, in vitro fertilization twins have an increased risk of preterm birth btwn 32 and 36 weeks of gestation and an elevated risk of preterm birth at < 37 weeks of gestation when parity is also matched. There was also an increased rate of C-section delivery among in vitro twins.	Not described.	Primary outcome: Perinatal death; secondary outcomes: preterm birth, LBW and VLBW

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 \*\* This chart contains direct quotations from the critiqued articles

Article Title	Authors	Study Population	Study Design	Strengths	Limitations	Exposures	Results	Biologic Mechanism	Outcomes
In vitro fertilization is associated with an increase in major birth defects	Olson, C.K., Kepler-Noreuil, K.M. (2005)	Children conceived by IVF or IUI at the Univ of Iowa from 1989 through 2002, compared with a matched cohort of naturally conceived children	Retrospective cohort study	Large number of infants studied, uniform way that birth defects were detected and reported, and inclusion of infants conceived by infertile patients treated by procedures other than IVF.	Only included controls from counties that had women delivering babies in the study institution's IVF center excluding women who received treatments at another center, more women with pregnancies involving congenital defects may have terminated the pregnancies.	Cohorts of children conceived through IVF or through IUI as compared with naturally conceived children.	90 of 1,462 IVF-conceived children (6.2%) and 17 of 343 IUI-conceived children (5.0%) had a major birth defect, compared with 369 of 8,422 naturally conceived children (4.4%).	Epigenetic errors such as defects in DNA methylation and imprinting might be caused by the embryo culture that follows IVF.	Major birth defects

## Appendix A: Critique of the Literature

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## Appendix B: Breastfeeding Data from 2006 NIS Survey

### Breastfeeding Rates Among Children Born in 2004 (Percent +/- half Confidence Interval)

	No.	Ever Breastfeeding	Breastfeeding at 6 months	Breastfeeding at 12 months	No.	Exclusive Breastfeeding at 3 months <sup>1</sup>	Exclusive Breastfeeding at 6 months <sup>1</sup>
<b>U.S. National</b>	21035	73.8 +/- 1.0	41.5 +/- 1.1	20.9 +/- 0.9	17654	30.5 +/- 1.1	11.3 +/- 0.8
<b>New York State</b>	533	73.8 +/- 4.9	50.0 +/- 5.4	26.9 +/- 4.8	462	26.0 +/- 5.0	11.4 +/- 3.6
<b>NYC-5 counties</b>	290	73.6 +/- 6.2	49.8 +/- 6.7	28.8 +/- 5.8	249	21.4 +/- 5.4	10.4 +/- 4.0

<sup>1</sup> Exclusive breastfeeding information is from 2006 NIS Survey data only and is defined as ONLY breast milk-No solids, no water, and no other liquids.

\* Source: Information from the CDC's 2004 Breastfeeding National Immunization Survey data.



## Appendix C: NYC Breastfeeding Data from 2006 PRAMS Survey

Number and percent of women who breastfed for 8 weeks or more by select sociodemographic characteristics: NYC PRAMS, 2006\*

Characteristic	Number	Percent	95% CI
<b>Overall</b>			
All NYC mothers, 2006	70,480	64.6	61.4 - 67.7
<b>Age</b>			
19 and under	2,498	34.5	23.0 - 48.3
20 to 24	15,476	65.4	58.1 - 72.0
25 to 34	37,872	65.9	61.6 - 70.1
35 and over	14,633	70.7	63.9 - 76.7
<b>Race/ethnicity</b>			
White non-Hispanic	24,435	72.4	66.5 - 77.6
Black non-Hispanic	15,388	60.7	53.9 - 67.1
Hispanic	23,298	61.7	56.4 - 66.8
Asian/Pacific Islander	7,328	60.8	50.6 - 70.1
<b>Education</b>			
Less than high school	12,702	58.7	50.7 - 66.2
High school	21,371	62.9	57.0 - 68.4
More than high school	36,390	68.5	64.2 - 72.5
<b>Insurance before pregnancy</b>			
No insurance	22,428	72.8	66.9 - 78.0
Medicaid	16,156	54.9	48.3 - 61.3
Other insurance	31,494	65.1	60.4 - 69.5
<b>Nativity</b>			
Foreign born	44,728	73.0	69.0 - 76.7
US born (Includes Puerto Rico & U.S. Virgin Islands)	25,752	54.0	49.0 - 58.9
<b>Borough of residence</b>			
Bronx	11,606	56.0	48.5 - 63.2
Brooklyn	25,589	71.0	65.7 - 75.8
Manhattan	13,718	71.1	63.7 - 77.5
Queens	17,240	61.5	54.6 - 67.8
Staten Island	2,327	47.3	32.8 - 62.3

\* Notes.

1. PRAMS Question #52: How many weeks or months did you breastfeed or pump breast milk to feed your baby?
2. Totals for each category may not equal overall total due to missing data or rounding.
3. Data are weighted and are based on responses of 1,525 NYC women giving birth in 2006.



Sources: City of San Francisco Office of Labor Standards Enforcement website  
 & Employment Justice Center website

Location (Date Effective)	Purpose	Administration of Paid Sick Days Benefit	Benefit	Covered employers	Eligibility	Restrictions & Limitations
<b>San Francisco (February 2007)</b>  <b><i>Paid Sick Leave Ordinance</i></b>	<ul style="list-style-type: none"> <li>• Paid sick days:</li> <li>• To recover from a personal illness, injury, or to receive medical care, treatment or diagnosis</li> <li>• To care for a family member under the same conditions.</li> </ul>	<ul style="list-style-type: none"> <li>• Employer-paid benefit</li> </ul>	<ul style="list-style-type: none"> <li>• Every 30 hours worked accrues one hour of paid sick leave</li> </ul>	<ul style="list-style-type: none"> <li>• Organizations of 10 or more employees: 72 hour cap of accrued paid leave per employee</li> <li>• Organizations with fewer than 10 employees: 40 hour cap of accrued paid leave</li> </ul>	Eligible: <ul style="list-style-type: none"> <li>• Full-time, part-time, and temporary employees.</li> </ul>	
<b>Washington, DC</b>  <b><i>Accrued Paid Sick and Safe Days Act</i></b>	Paid sick days: <ul style="list-style-type: none"> <li>• To recover from a personal illness</li> <li>• To care for a sick family member</li> <li>• To attend a routine or preventative medical appointment</li> </ul> “Safe days”: <ul style="list-style-type: none"> <li>• To tend to domestic violence, sexual assault, or stalking situation (Includes court appearances, accessing services, counseling, medical care, shelter, etc.)</li> </ul>	<ul style="list-style-type: none"> <li>• Employer-paid benefit</li> </ul>	<ul style="list-style-type: none"> <li>• 7 paid sick days</li> <li>• 5 paid sick days</li> <li>• 3 paid sick days</li> </ul>	<ul style="list-style-type: none"> <li>• Firms with 100 employees or more</li> <li>• Firms with 25-99 employees</li> <li>• Firms with 24 or fewer employees</li> </ul>	Eligible: <ul style="list-style-type: none"> <li>• Full-time employees, part-time employees (prorated)</li> </ul> Non-eligible: <ul style="list-style-type: none"> <li>• Students employed by their school for less than 25 hours/week</li> <li>• Most health-care workers who participate in premium pay programs</li> <li>• Waiters and bartenders who work for a combination of wages and tips</li> </ul>	Employees: <ul style="list-style-type: none"> <li>• 12 month minimum employment at a job for eligibility</li> </ul> Employer exemptions: <ul style="list-style-type: none"> <li>• Businesses that can prove hardship</li> <li>• Independent contractors</li> </ul>



## Appendix E: The Healthy Families Act-Proposed National Legislation for Paid Sick Days

	Purpose	Administration of the Benefit	Benefit	Eligible Employees	Covered Employers
<p><b>The Healthy Families Act</b></p> <p><u>Sponsors:</u> Senator Kennedy (D-Massachusetts)/ Rep. Rosa DeLauro (D-Connecticut)</p>	<ul style="list-style-type: none"> <li>To care for your own illness or physical or mental condition; to obtain a medical diagnosis or related treatment or to obtain preventive care;</li> <li>To care for a family member for any of the above reasons</li> </ul>	<ul style="list-style-type: none"> <li>Employers pay employees for their sick days; Employers are not reimbursed by the federal government</li> </ul>	<ul style="list-style-type: none"> <li>7 days of paid sick leave a year for full-time employees and prorated for part-time employees; Employees who request at least 3 consecutive days of leave may be required to obtain doctor certification</li> </ul>	<ul style="list-style-type: none"> <li>Employees who work at least 20 hours per week or 1000 hours annually</li> </ul>	<ul style="list-style-type: none"> <li>All employers (public and private) with at least 15 employees</li> </ul>

<sup>1</sup> Source: The National Partnership for Women & Families website



## Appendix F: Flexible Work Arrangements: A Definition & Examples

### WORKPLACE FLEXIBILITY 2010

Georgetown University Law Center

### Flexible Work Arrangements: A Definition And Examples

Workplace Flexibility 2010 defines a “flexible work arrangement” (FWA) as any one of a spectrum of work structures that alters the time and/or place that work gets done on a regular basis.

A flexible work arrangement includes:

1. flexibility in the *scheduling* of hours worked, such as alternative work schedules (e.g., flex time and compressed workweeks), and arrangements regarding shift and break schedules;
2. flexibility in the *amount* of hours worked, such as part time work and job shares; and
3. flexibility in the *place* of work, such as working at home or at a satellite location.

Our research indicates that workplaces today offer a wide range of flexible work arrangements. What arrangements are provided, and how they are defined, can vary widely.

For purposes of discussing *policy approaches* for advancing FWAs, therefore, we have attempted to impose some coherence on the range of such arrangements by categorizing them along the lines of our definition above – i.e., flexibility in work scheduling; flexibility in number of hours worked; and flexibility in place.

The goal of this document is thus primarily to give you a sense of what the “it” is when we talk about FWAs. To achieve that goal, we have provided definitions and examples of the most commonly provided FWAs within each category. This document should be used as a glossary reference for our other FWA overview memos.

We believe the level of specificity we have provided you in this document is sufficient to discuss policy approaches for increasing and enhancing FWAs in the workplace. Obviously, to implement any particular FWA in a workplace, a much greater level of specificity about the FWA would be required. When reading this document, please remember that the effective implementation of any FWA will necessarily be very work-place-specific, and will offer different levels of control and flexibility to both the employer and the employee.



### I. Removing Legal Obstacles

Category	Statute	Description
CWS	Ariz. Rev. Stat. Ann. § 23-391	The state or a political subdivision may offer compressed work schedules for certain classes of employees notwithstanding the general rule that employees are to be compensated at the rate of one and one-half times the regular rate for overtime work (i.e., any work in excess of eight hours per day).
AWS	Ark. Code Ann. § 17-92-403	The Arkansas State Board of Pharmacy can issue hospital pharmaceutical permits to pharmacists employed in hospitals under which the pharmacists-in-charge may have a flexible schedule of attendance. This is an exception to the general rule requiring the pharmacist-in-charge to work a 40-hour workweek.
AWS	Cal. Labor Code § 511	The employees of a private employer may, upon the proposal of an employer, adopt an AWS that allows up to 10 hour days within a 40-hour workweek without the payment of overtime. This is an exception to the general rule that “any work in excess of eight hours in one day... shall be compensated at the rate of no less than one and one-half times the regular rate of pay for an employee” (Cal. Labor Code § 510). A proposal to adopt an AWS shall be deemed adopted only if it receives approval in a secret ballot election by at least two-thirds of affected employees. An employer shall make a reasonable effort to find a work schedule not to exceed eight hours in a workday, in order to accommodate any affected employee who was eligible to vote in an election authorized by this section and who is unable to work the alternative schedule hours established as the result of that election.
AWS	Okl. St. Ann § 3	Public employees may be allowed to work in excess of eight hour per day without being paid overtime when such hours are assigned as part of an alternative work schedule.



## II. Providing a Right to Ask

Category	Statute	Description/Notes/Last checked
Job Share	Haw. Rev. Stat. § 302A-610	School employees who respond to a required notice issued by the Superintendent regarding a job-sharing program, shall receive a full description of the terms of the program and these employees may apply for the program.
Job Share	Mont. Code Ann. § 2-18-107	On request of a current employee, his position may be considered for job sharing.
Telework	Or. Rev. Stat. § 240.855	Each state agency is to adopt a written policy that “Requires the agency, in exercising its discretion, to consider an employee request to telecommute in relation to the agency’s operating and customer needs.”

## III. Positive Incentives

Category	Statute	Description
AWS	Cal. Unemp. Ins. Code § 16005	New approaches to the use of AWS that expand private sector employment opportunities for older workers will be considered eligible for participation in the federal Job Training Partnership Act of 1982.
Leisure Sharing	Cal. Unemp. Ins. Code § 12100	<p>Leisure Sharing is a “job-creation concept in which some full-time workers voluntarily reduce worktime under such circumstances that additional employment opportunities result from the employer’s desire to maintain a given level of production.” Cal. Unemp. Ins. Code § 12100. Grants and technical assistance are to be provided to employers in the private sector in order to encourage voluntary participation. The grants offset increases in employers’ labor costs which are directly attributable to participation in the leisure sharing program such as increased employee benefits and payroll taxes. The legislative goal is to promote experimentation with ways to create employment opportunities through voluntary redistribution of hours of work, permitting more time away from work for those who desire additional leisure while providing employment for those who have no work. This program only becomes operative when federal or other funds are made available for the program. Cal. Stats.1979, c. 751, § 2.</p> <p>It appears that funds have never been made available for the program since it became codified in 1979. A letter from the Legislative Counsel, dated Feb.26, 1986, notes that as of that date the funds had not yet become available. West’s Ann. Cal. Un. Ins. Code D. 5, Refs &amp; Annos. See also 11 Pac. L. J. 503 (1979).</p>



Appendix G: Examples of State Flexible Work Arrangement (FWA) Laws

Category	Statute	Description
Telework	N.D. Cent. Code § 54-06-24.1 (expired on June 30, 2005)	Established a process for allowing a state agency to receive 10% of any cost savings due to implementation of a telecommuting program, up to a maximum of \$2,000. Note that this program expired on June 30, 2005.
Telework	N.J. Stat. Ann. § 27:26A-15 <b>Cal. Unemp. Ins. Code § 12100</b>	Provides for an employer tax credit of up to 5% for accounting or privilege periods beginning January 1, 1994 and ending not later than January 1, 1995, and 10% for accounting or privilege periods beginning January 1, 1995 and ending not later than December 31 2007 of the cost of commuter transportation benefits provided by an employer. Commuter transportation benefits include employer provided alternative means of transportation such as, among others, telecommuting which may be used in conjunction with such strategies as flextime, staggered work hours, compressed work weeks and like measures. Acts as an incentive for compliance with the “New Jersey Traffic Congestion and Air Pollution Control Act.”
Telework	Wash. Rev. Code Ann. § 70.94.996	Department of Transportation shall administer a performance-based grant program for private employers, public agencies, non-profit corporations, etc. who offer financial incentives for ride-sharing or telecommuting programs. Units of government can count each commute trip eliminated as part of a telecommuting or AWS program as more than a single trip eliminated for purposes of meeting trip reduction goals. Instead of counting these trips as a single trip, units of government can count them as being worth 1.2 trips. Program expires on January 1, 2014.
Part time	Ark. Code Ann. § 26-51-505	There shall be allowed a credit against the tax imposed by the Arkansas Income Tax Act for any taxpayer who establishes or expands a manufacturing enterprise in the State of Arkansas which results in the creation of new additional full-time or part-time jobs within the state. Part time defined as 20 hours per week for at least 6 months during the taxable year.
Part time	Colo. Rev. Stat. Ann. § 39-22-508.2 – 508.3	Any taxpayer who establishes a new business facility shall be allowed a credit against the tax imposed by part 3 of this article for the taxable year during which commencement of commercial operations occurs at such new business facility and for each of the nine succeeding taxable years. No credit shall be allowed under this section unless the number of new business facility employees engaged or maintained in employment at the new business facility for the taxable year for which the credit is claimed equals or exceeds two persons. “New business facility employee” defined, in part, as a part-time employee working 20 hours a week through the taxable year.
Part time	Kan. Stat. Ann. § 74-50,114 – 50,115	A manufacturing business may be eligible for a sales tax exemption if the manufacturing business provides documented evidence of job expansion involving the employment of at least two additional full-time employees. A nonmanufacturing business may be eligible for a sales tax exemption if the nonmanufacturing business provides documented evidence of job expansion involving the employment of at least five additional full-time employees. A retail business may qualify for the sales tax exemption if the retail business provides documented evidence of job expansion involving the employment of at least two additional full-time employees. “Full-time employee” defined, in part, as a person working on a part-time basis (20 hours a week).



### IV. Norm Setting Mandates

Appendix G: Examples of State Flexible Work Arrangement (FWA) Laws

Category	Statute	Description
AWS	Mass. Gen. Laws ch. 7, § 6F	Requires a Coordinator of Flexible Hours Employment within the human resources division whose responsibility is the “development, implementation and oversight of plans for the utilization, within all executive agencies, of persons who choose to be employed for a reduced number of hours per week and for the recruitment of such persons for civil service and non-civil service employment.”
AWS	Me. Rev. Stat. Ann. Tit. 5, §§ 901-903	The Director of Human Resources shall adopt rules to implement alternative work schedules for employees who are not in collective bargaining units. AWS is defined as flexible hours, job-sharing, or part-time employment. Requires the director to report on the state’s progress in establishing alternative work schedules.
AWS	Okla. St. Ann § 840-2.26	Appointing authorities are encouraged to adopt flextime and AWS in order to increase service to the public, to assist state employees with meeting needs of their families, and to improve employee morale and productivity. Administrator of the Office of Personnel Management shall provide technical assistance to agencies in developing flextime policies and alternative work schedules and shall promulgate rules as necessary for such policies.
AWS	R.I. Gen. Laws §§ 36-3.1-4 – 3.1-6	It is the policy of the state to offer AWS to state employees as a method to reduce consumer congestion, conserve energy, increase employee morale, increase productivity, and reduce tardiness and absenteeism. By January 1, 1989, all units of state agencies (with some exemptions) shall offer alternative work schedules to their employees. Defines alternative work schedules as including flexitime, compressed workweeks, job sharing, permanent part-time, etc.
AWS	Fla. Stat. Ann. § 110.1522	The Department of Management Services is to create a model rule establishing personnel polices that support families in all state agencies, including “policies on flexible hour work schedules, compressed time, job sharing, [and] part-time employment”
AWS	N.C. Gen. Stat. Ann. § 126-74, et. seq.	The State Personnel Commission shall develop a “Work Options Program” to expand the use of work options such as flexible work hours, job sharing, and part-time positions. This program shall include training sessions for agency personnel to instruct them in the use of work options, technical assistance to agency personnel in developing work options, and identifying positions that would be good candidates for various forms of AWS. The State Personnel Director is to assign a State Work Options Coordinator to direct these efforts. The Commission or any participating agency is responsible for promulgating any necessary rules. The State Personnel Commission shall require a biennial report of each State agency on the status of the Work Options Program and subsequently make such a report to the legislature.



Appendix G: Examples of State Flexible Work Arrangement (FWA) Laws

Category	Statute	Description
AWS	Wash. Rev. Code Ann. § 70.94.531	No more than six months after a jurisdiction adopts a trip reduction plan, each major employer in the jurisdiction shall develop a trip reduction plan which may include a program of alternative work schedules and telecommuting programs which reduce commuting. The plan shall consist of, in part, a set of measures designed to achieve the applicable commute trip reduction goals adopted by the jurisdiction.
AWS /Telework	Va. Code Ann. § 2.2-203.1	The secretary shall establish a comprehensive statewide telecommuting and alternative work schedule policy under which eligible employees may telecommute or participate in alternative work schedules. The policy shall include model guidelines, rules, and procedures, and may include an incentive program to encourage employees to participate in these programs and to encourage management personnel to promote telecommuting and AWS for eligible employees.
Telework	Ariz. Rev. Stat. Ann. § 41-786	The Director of the Department of Administration shall provide for the reimbursement of up to 100% of the costs of telecommuting connectivity or public transportation for state employees.
Telework	Cal. Gov. Code § 14200, et. seq.	Every state agency shall determine where in its organization telecommuting can be of practical benefit and each agency shall develop and implement a telecommuting plan as part of its telecommuting program where telecommuting is identified as being both practical and beneficial to the organization. The Department of General Services is to establish a unit to oversee the telecommuting programs developed pursuant to this chapter. This unit will facilitate interagency communication around the telecommuting program and develop guidelines to assist agencies in implementation.
Telework	Conn. Gen. Stat. Ann. § 5-248i	The Commissioner of Administrative Services may develop and implement guidelines authorizing telecommuting and work at home programs for state employees. State employees may be authorized to participate in a telecommuting assignment if it is deemed cost effective. The assignment is temporary for a period of no more than six months and may be extended as necessary. The commissioner shall report annually to the legislature as to the extent of use of telecommuting programs.
Telework	Fla. Stat. Ann. § 110.171	The Department of Management Services shall “establish and coordinate the state employee telecommuting program and appoint a statewide telecommuting coordinator to provide technical assistance to state agencies and to promote telecommuting in state government.” The Department shall also identify state employees who are participating in a telecommuting program and “maintain a current listing of job classifications and positions the agency considers appropriate for telecommuting.” Agencies that develop telecommuting policies should also give equal consideration to career and exempt positions in selecting employees to participate in a telecommuting program.



Appendix G: Examples of State Flexible Work Arrangement (FWA) Laws

Category	Statute	Description
Telework	625 Ill. Comp. Stat. § 33/5; 33/15	Employers in an ozone pollution area, which includes Chicago, Illinois, who operate a structure that emits air pollution may implement voluntary programs that encourage the use of telecommuting, compressed workweeks, etc. if the programs reduce the number of commuting trips by employees or reduce emissions for purposes of creating emission reduction credits under the Clean Air Act.
Telework	Mont. Code Ann. § 2-18-120	An agency may authorize telework for specified employees when it is in the state’s best interest as determined and documented by the agency. The department shall adopt policies to encourage agencies to authorize telework and to provide for the uniform implementation of this section by agencies.
Telework	N.C. Gen. Stat. Ann. § 143-215.107C	The Office of State Personnel shall implement a policy that promotes telecommuting options for State employees as recommended by a report of the State Auditor. The goal of the State is to reduce State employee vehicle miles traveled by 20% without reducing productivity or total work hours.
Telework	N.J. Stat. Ann. § 27:1B-21.18	The Chief Executive Officer and Secretary of the Commerce and Economic Growth Commission shall submit a report to the legislature containing a program to identify specific occupations or sectors of the economy appropriate for telecommuting.
Telework	Or. Rev. Stat. § 240.855	Each state agency is to adopt a written policy that defines specific procedures for telecommuting that is applied consistently throughout the agency and each Agency is to consider employee requests to telecommute in relation to the agency’s customer and operating needs.
Telework	S.C. Code Ann. § 8-11-17	Notwithstanding the required office hours for the departments of state government as provided in [another provision of the state code], state agencies may use flexible scheduling, including hours before 8:30 or after 5:30, so long as implementation of flextime does not impair the ability of the agency to meet its needs and service delivery requirements.
Telework	Va. Code Ann. § 2.2-2817.1	“In accordance with the statewide telecommuting and alternative work schedule policy. . . the head of each state agency shall establish a telecommuting and alternative work policy under which eligible employees of such agency may telecommute, participate in alternative work schedules, or both, to the maximum extent possible without diminished employee performance or service delivery...The head of each agency shall set annual percentage targets for the number of positions eligible for AWS. By July 1, 2009, each state agency shall have a goal of not less than 25% of its eligible work force participating in AWS. Each agency shall report on the status and efficiency of its programs, [including related budget requests].”



Appendix G: Examples of State Flexible Work Arrangement (FWA) Laws

Category	Statute	Description
Telework	Va. Code Ann. §15.2-1512.3	Local units of government in Virginia are authorized and encouraged to establish and implement a telecommuting policy.
Telework	Wash. Rev. Code Ann. § 28B.130.030	Directs that transportation fees of higher education institutions are only to be spent on strategies adopted to reduce the number of single-occupant vehicles traveling to college campuses, explicitly including telecommuting programs.
CWS	Cal Govt. Code § 19996.19 – .22	Under the Reduced Worktime Act, it is the policy of California that to the extent feasible, reduced worktime be made available to state employees who are unable or do not want to work standard working hours on a full-time basis. “Reduced worktime” is defined as employment of less than 40 hours of work per week and include job sharing, four-, five-, or six-hour workdays, jobs which provide eight hours of employment or less for one, two, three, four or five days per week, and other arrangements. The purpose of this legislation includes: to provide for maximum employment opportunities, to increase the numbers and kinds of public and private sector voluntary reduced worktime options, to support the creation of a healthy balance between work and family needs, and to strengthen the family and promote domestic tranquility and to benefit the family and society by promoting a balance between work and home. Any employee who believes she is being coerced into taking a reduced hours schedule may file a grievance with the Department of Personnel Administration.
Job Share	Haw. Rev. Stat. § 302A-610	The school superintendent shall implement a job-sharing program according to the specific terms of the statute and must announce the program to most department personnel. A person hired for a job-sharing position shall meet the minimum requirements of the full-time position. Benefits that can be cut in half (e.g. sick days) will be. Note that Haw. Rev. Stat. § 312-7 establishes a similar statutory scheme for library staff.
Job Share	Mo. Rev. Stat. § 168.303	“The state board of education shall adopt rules to facilitate job-sharing positions for classroom teachers.”
Job Share	Mont. Code Ann. § 2-18-102	The Department of Administration shall foster, develop, and promote job sharing in agencies.
Job Share	N.C. Gen. Stat. Ann. § 115C-326.5	“The State Board of Education shall adopt rules to facilitate job-sharing by public school employees.”



Category	Statute	Description
Job Share	Or. Rev. Stat. § 240.012 – .013	The state finds that job sharing is an effective and efficient technique which should be used to improve management of state agencies and that job sharing offers employment opportunities to those who otherwise may be unable to participate in state employment. Insofar as reasonably possible, individuals who hold job-sharing positions shall be entitled to benefits and privileges in proportion to their seniority as adjusted in the proportion that their monthly time employed bears to the monthly time employed by individuals holding full-time positions.
Job Share	W. Va. Code Ann. § 18B-7-9	Each higher education governing board shall establish a policy that includes requiring “institutions to consider feasible and innovative ways to most efficiently utilize the institution’s classified employees, such innovations to include flexibility in employee scheduling, job-sharing and four-day work weeks.”
Job Share	Wash. Rev. Code Ann. § 28A.405.070	“[S]chool and educational service districts shall have a policy on the sharing of jobs by district employees.”

**V. Outcome Mandates**

Category	Statute	Description
AWS	Ariz. Rev. Stat. Ann. § 49-588	Arizona, as part of its air quality laws, requires major private employers to develop and implement traffic reduction programs that may include the establishment of telecommuting or adjusted work hour programs. The statute requires employers to reduce the proportion of employees commuting by single occupancy vehicles by 5% per year over a period of 5 years (10% in certain localities) unless the percentage of commuters in single occupancy vehicles is 60% or less. It also requires employers who fall below regional targets for travel reduction to commit to implementing at least two specific travel reduction measures in the first year of the regional program and at least three measures in the second year. Exemptions exist for employers who can demonstrate that effective strategies are in place. Civil money penalties apply to employers who fail to implement an approved plan within the time schedule provided unless good faith efforts to do so are shown.
Telework	Tex. Health & Safety Code Ann. § 382.05193	Qualifying emission reduction programs, required to be produced by certain facilities that pollute within the state, must include, in part, a telecommuting program for employees. These programs must reduce net emissions in an amount and type sufficient to prevent air pollution to a degree comparable to the amount of the reduction in the facility’s emissions that would be necessary to meet the permit requirement.



**VI. Traditional Mandates**

Category	Statute	Description
Job Share	Cal Govt. Code § 19996.26	All persons employed in reduced worktime positions shall receive most benefits customarily available to full-time employees of state agencies in similar classes or positions on a pro rata basis.
Job Share	Haw. Rev. Stat. § 302A-610	For employees that are job sharing, benefits that cannot be divided (e.g. eligibility for membership to health plan) shall be given to both employees without division. The State’s contribution to the job-sharing employee’s health, dental, and life insurance plans shall be the same as for full-time employees.
Job Share	5 Ill. Comp. Stat. § 380/1	Statute allows for two individuals to share one employee position (and share the salary and benefits) in any state agency. Seniority must be accorded to employees in shared positions under the same terms as all other employees.
Job Share	Me. Rev. Stat. Ann. Tit. 5, §§ 901-903	Benefits, including retirement benefits, shall be prorated for persons who job share or who are part-time employees.
Job Share	Mo. Rev. Stat. § 168.303	Teachers in job sharing positions shall receive paid legal holidays, annual vacation leave, sick leave, and personal leave on a pro rata basis.
Job Share	Mont. Code Ann. § 2-18-107	State employees in a job-sharing status are entitled to employee benefits on the same basis as part-time employees.
Job Share	N.C. Gen. Stat. Ann. § 115C-326.5	Employees in a job-sharing position shall receive paid legal holidays, annual vacation leave, sick leave, and personal leave on a pro rata basis.
Job Share	N.H. Rev. Stat. § 100-A:4	Any teacher in service who equally shares a job-sharing position with another teacher shall be eligible for the retirement system. “Any such teacher shall accrue full creditable service for the entire period of job-sharing.”
Job Share	Or. Rev. Stat. § 243.170	When two public employees are in a job-sharing position, the state shall contribute an amount no greater than what would be spent to obtain benefits coverage for one individual in the same position, for both of the employees in the job-sharing position to split. Each of these employees can then make further contributions that are necessary in order to obtain coverage.



Appendix G: Examples of State Flexible Work Arrangement (FWA) Laws

Category	Statute	Description
Job Share	R.I. Gen. Laws § 16-16-5	Any teacher that is employed at least half time, including job share teachers, shall remain a contributing member and receive credit toward retirement for their time of service.
Job Share	Tenn. Code Ann. § 8-30-320	Prior to the initiation of an action involving a reduction in the labor force within an agency, former career service employees who are currently in job-sharing positions shall, if possible, be given an opportunity to return to full-time employment.



## Appendix H: Survey of Flexible Schedule Bills Introduced Into State Legislatures

PROVIDING RESOURCES    BUILDING KNOWLEDGE    SHARING INFORMATION



**SLOAN WORK AND FAMILY RESEARCH NETWORK**  
BOSTON COLLEGE

### 2005–2006 Legislative Summary Sheet

#### Survey of Flexible Schedule Bills Introduced into State Legislatures

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This legislative summary sheet was developed to give an overview of the policy and legislation on flexible schedules. Statutes and bills can be reviewed individually, but often it is useful to view them in “themes” or “clusters” to:

- ▶ Highlight legislative activity in one particular state
- ▶ Make it easier to compare legislation between states
- ▶ Illustrate varying legislation language and content

**Contents in this Summary Sheet:**

**State agencies/employees.....p.1**

**Employer tax incentives.....p.2**

**Environmental factors.....p.2**

**Establishing groups for flexible schedules...p.3**

**Recruitment.....p.3**

**Employee protection.....p.3**

**Miscellaneous.....p.3**

 **State agencies/employees:**

**Mississippi**

- ▶ MS SB 2154  
Provides for the implementation of flexible work hours at some state agencies.

**Montana**

- ▶ MT AB 484  
Establishes frameworks for collective bargaining for some state employees.

**New Jersey**

- ▶ NJ AB 2123  
Provides for flexible work hours to be available to state employees.
- ▶ NJ AR 115  
Encourages the use of flexible work hours by state agencies to reduce congestion.

**New York**

- ▶ NY AB 1682  
Requires reports from state agencies about feasibility of establishing flexible work schedules.

**Oklahoma**

- ▶ OK SB 473

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Encourages state agencies' adoption of flexible work arrangements to meet 3 goals: enhance services offered to the public; meeting family needs of employees; improving productivity and morale.

Virginia

- ▶ VA HB 1094  
Requires state agencies to create plans for alternative work options and telecommuting.
- ▶ VA HB 468  
Requires state agencies to create plans for alternative work options and telecommuting.
- ▶ VA HB 2612  
Amends existing codes related to telework and alternative work options for state employees.

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**Employer tax incentives:**

Hawaii

- ▶ HI SB 1019  
As part of the Commute Trip Reduction plan, offers a tax credit to employers for the amount paid to employees for taking alternative transportation to work, including the use of flexible schedules.

Missouri

- ▶ MO HB 428  
Offers a tax credit for employers to implement flexible work policies to employees who are victims of domestic violence.

New York

- ▶ NY AB 3398  
Establishes tax credits for employers who offer alternative or flexible work schedules.

Washington

- ▶ WA SB 5024  
Establishes tax incentives to encourage telework.

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**Environmental factors:**

Hawaii

- ▶ HI SB 33  
Allows state employees to use flexible schedules to reduce traffic and meet the employee's family needs.

New Jersey

- ▶ NJ SB 729  
Authorizes conformity with traffic objectives, including use of flexible work hours as a method of traffic reduction.

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▶ NJ AR 115  
Encourages the use of flexible work hours by state agencies to reduce congestion.

New York

▶ NY AB 6852  
Encourages organizations to use scheduling options that achieve pollution prevention.

▶ NY SB 2828  
Encourages organizations to use scheduling options that achieve pollution prevention.

Virginia

▶ VA HB 1258  
Suggests flexible work schedules as a means to reduce commuting and to meet requirements for commuting trip reduction plan.

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 **Establishing groups for flexible schedules:**

New Jersey

▶ NJ AB 154  
Creates a Commission on work and Family and a State Agency Work Family program.

Virginia

▶ VA HB 2893  
Establishes a Telework Council that will provide advice to the Governor on telework and alternative work schedules.

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 **Recruitment:**

Hawaii

▶ HI HR 196  
Requires the determination of options for enhancing the recruitment and retention of social workers including flexible work schedules.

▶ HI HCR 265  
Requires the determination of options for enhancing the recruitment and retention of social workers including flexible work schedules.

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 **Employee protection:**

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Hawaii

- ▶ HI HB 538  
Protects nurses who work an alternative work schedule from mandatory overtime.

Montana

- ▶ MT HB 570  
Offers protections to employees working flexible schedules with regard to compensation for holidays.

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 **Miscellaneous:**

California

- ▶ CA AB 244  
Provides that parties may agree as to the number of hours that constitute a day's work.

Illinois

- ▶ IL HB 915  
Provides that a project labor agreement must permit flexibility in work scheduling.

Washington

- ▶ WA SB 5600  
Encourages employers to be infant friendly by offering flexible schedules to breastfeeding mothers.

The Network has additional resources related to this topic.

1. The Network has a Topic Page on flexible work schedules. To view:
  - a) go back to our home page [www.bc.edu/wfnetwork/](http://www.bc.edu/wfnetwork/)
  - b) click on the appropriate user group (**Research/Teaching, Workplace Practice, or State Policy**)
  - c) and choose 'flexible work schedules' from the Topics List
2. The Sloan Work and Family Research Network has created a publication, the Policy Leadership Series: Flexible Work Schedules at [http://wfnetwork.bc.edu/pdfs/policy\\_makers1.pdf](http://wfnetwork.bc.edu/pdfs/policy_makers1.pdf). This publication was mailed to over 1,700 U.S. legislators.
3. Our database of academic literature contains the citations and annotations of literature related to the issue of flexible work schedules. You can connect to this database at: [http://library.bc.edu/F?func=find-b-0&local\\_base=BCL\\_WF](http://library.bc.edu/F?func=find-b-0&local_base=BCL_WF)

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## Appendix I: The Family and Medical Leave Act (FMLA)

### The Family and Medical Leave Act (FMLA) of 1993

	Purpose	Benefit	Covered Employers	Eligibility
<b>FMLA</b>	<ul style="list-style-type: none"> <li>Care for a newborn or newly adopted child</li> <li>Care for an immediate family member (spouse, child, or parent) with a serious health condition</li> <li>To take medical leave when an employee has his/her own serious health condition.</li> </ul>	<ul style="list-style-type: none"> <li>12 weeks of <i>unpaid</i>, job-protected leave during any 12-month period</li> <li>An employer must maintain an employee's preexisting health benefits</li> </ul>	<ul style="list-style-type: none"> <li>Private employers with 50 or more employees; public agencies including state, local, and federal employers</li> </ul>	<ul style="list-style-type: none"> <li>Work for an FMLA-covered employer</li> <li>Have worked for the employer for a total of 12 months</li> <li>Have worked at least 1,250 hours over the previous 12 months</li> </ul>

\* Source: U.S. Department of Labor website



## Appendix J: Parental Leave Policies in the E.U.

OECD Family Database [www.oecd.org/els/social/family/database](http://www.oecd.org/els/social/family/database)  
OECD - Social Policy Division - Directorate of Employment, Labour and Social Affairs

### PF7: Key characteristics of parental leave systems

#### *Definitions and methodology*

**Maternity Leave (or pregnancy leave):** Employment-protected leave of absence for employed women at around the time of childbirth, or adoption in some countries. The ILO convention on maternity leave stipulates the period of leave to be at least 14 weeks. In most countries beneficiaries may combine pre- with post-birth leave; in some countries a short period of pre-birth leave is compulsory as is a 6 to 10 week leave period following birth. Almost all OECD countries provide for specific public income support payments that are tied to the maternity leave period.

**Paternity Leave:** Employment-protected leave of absence for employed fathers at the time of childbirth. Paternity leave is not stipulated by international convention. Periods of paternity leave are much shorter than for maternity leave, and are 3 weeks at maximum. Because of the short period of absence, workers on paternity leave often continue to receive full wage payments.

**Parental Leave:** Employment-protected leave of absence for employed parents, which is often supplementary to specific maternity and paternity leave periods (as above), and usually, but not in all countries, follow the period of maternity leave. Entitlement to the parental leave period is individual, while entitlement to public income support is often family-based, so that only one parent claims such support at any one time.

In most countries it is up to parents to decide amongst each other as to who takes leave and claims income support. In practice this means that mothers rather than fathers use leave entitlements. To pursue gender equity objectives some countries (Norway, Iceland and Sweden) have introduced father quota in parental leave systems: a period of leave that is reserved for the exclusive use by fathers on a "use it or lose it" basis. This period can be as long as 3 months in Iceland.

Chart PF7.1, Panels A, B and C show the duration (in weeks) of employment protected leave maternity, paternity and parental leave periods, respectively, (regardless of payment status). To get a better view of cross-national comparisons of systems with different payment rates and durations of paid leave periods, the entitlement to paid leave is also presented as the full-time equivalent of the proportion of the duration of paid leave if it were paid at 100% of last earnings. This full-time equivalent (FTE) has been calculated as

$$\text{FTE} = \text{Duration of leave in weeks} * \text{payment (as per cent of APW earnings) received by the claimant}$$

Table PF7.1 shows these calculations for each country. Tables PF7.2, PF7.3, PF7.4, and PF7.5 below present key characteristics of national maternity, maternity allowance, paternity and parental leave benefits.

Please note that the information shown in tables below refer to entitlements, benefits and payment rates applicable as of January 1<sup>st</sup> 2006.

Other relevant indicators: Family-friendly workplace practices (LMF14); Public spending on family benefits (PF1); Typology of family benefits (PF3); Take-up of leave benefits (PF8); Additional leave entitlements of working parents (PF9); Public spending on childcare and early education (PF10) and; Enrolment in day-care and pre-schools (PF11).

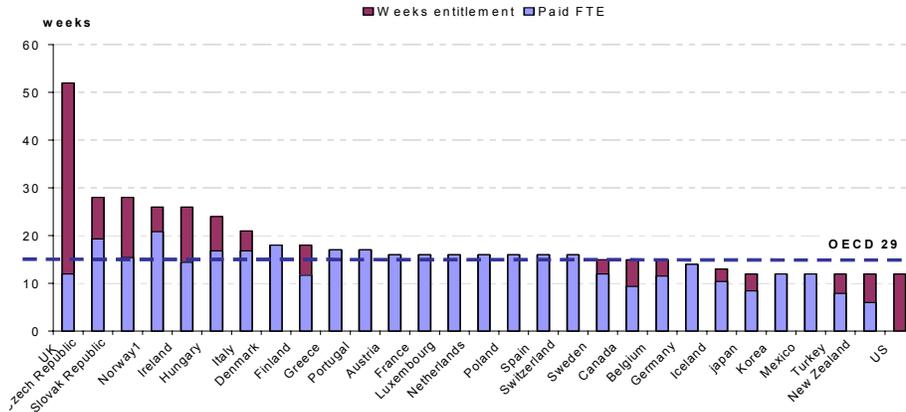
Last updated 18/01/2007



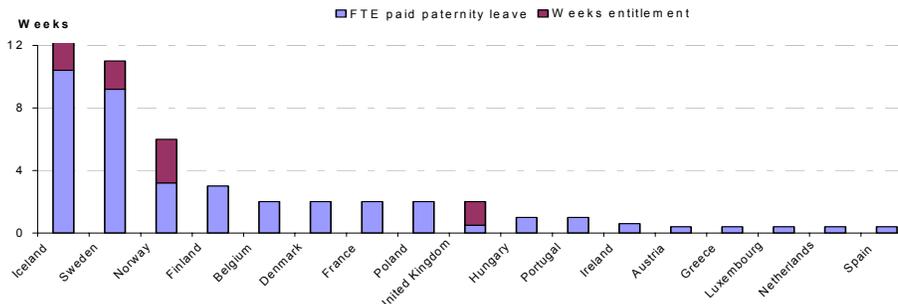
# Appendix J: Parental Leave Policies in the E.U.

OECD Family Database [www.oecd.org/els/social/family/database](http://www.oecd.org/els/social/family/database)  
OECD - Social Policy Division - Directorate of Employment, Labour and Social Affairs

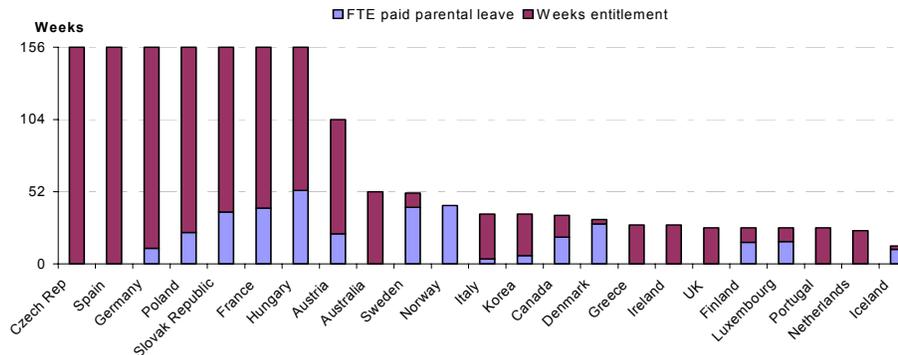
**Chart PF7.1: Child-related leave periods by duration of unpaid leave and the duration of the full-time equivalent of the leave period if paid at 100% of last earnings, 2005/2006.**  
*Panel A: Maternity Leave*



*Panel B: Paternity Leave*



*Panel C: Parental Leave*



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## Appendix J: Parental Leave Policies in the E.U.

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OECD - Social Policy Division - Directorate of Employment, Labour and Social Affairs

**Table PF.1: Calculating full-time equivalent of paid maternity, paternity and parental leave, 2005/2006.**

	Maternity Leave	% rate of allowance*	FTE paid maternity leave	Paternity leave	% rate of allowance*	FTE paid paternity leave	Parental leave	% rate of allowance*	FTE paid parental leave	Parental leave (unpaid)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Australia	x(6)	..	..	x(6)	..	..	..	..	..	52
Austria	16	100	16	0.4	100	0.4	104	21	21.84	..
Belgium	15	82/75 <sup>1</sup>	11.53	2	100	2	12	20	2.4	..
Canada	17	55	9.35	..	..	..	35	55	19.25	..
Czech Republic	28	69	19.32	..	..	..	156	10	15.6	..
Denmark	18	100	18	2	100	2	32	90	28.8	..
Finland	18	65	11.7	3	100	3	26	60	15.6	..
France	16	100	16	2	100	2	156	25.8	40.2	..
Germany	14	100	14	..	..	..	104	11	11.4	52
Greece	17	100	17	0.4	100	0.4	..	..	..	28
Hungary	24	70	16.8	1	100	1	80	70	56	52
Iceland	13	80	10.4	13	80	10.4	13	80	10.4	..
Ireland	18 (8)	80 <sup>2</sup>	14.4	0.4	100	0.4	..	..	..	28
Italy	21	80	16.8	..	..	..	12	30	3.6	24
Japan	14	60	8.4	..	..	..	..	..	..	..
Korea	12	100	12	..	..	..	36	17	6.12	..
Luxembourg	16	100	16	0.4	100	0.4	26	62	16.12	..
Mexico	12	100	12	..	..	..	..	..	..	..
Netherlands	16	100	16	0.4	100	0.4	..	..	..	24
New Zealand	12	50	6	..	..	..	..	..	..	..
Norway	9	80	7.2	6	80 <sup>3</sup>	3.2	42	100	42	..
Poland	16	100	16	2	100	2	156	14.6	22.7	..
Portugal	17	100	17	1	100	1	..	..	..	24
Slovak Republic	28	55	15.4	..	..	..	156	24	37.44	..
Spain	16	100	16	0.4	100	0.4	..	..	..	156
Sweden	15	80	12	11	100/80 <sup>4</sup>	9.2	51	80	40.8	..
Switzerland	16	100	16	..	..	..	..	..	..	..
Turkey	12	66	7.92	..	..	..	..	..	..	..
United Kingdom	26 (26)	90 <sup>5</sup>	12	2	25	0.5	..	..	..	26
United States	12	0	0	..	..	..	..	..	..	..

1. Paid at 82% for first 4 weeks and 75% for the remaining 11.

2. Paid at 80% for first 18 weeks + 8 weeks unpaid.

3. 2 weeks unpaid + 4 weeks paid at 80%.

4. Calculated at 100% for the first 2 weeks and then at 80%.

5. Calculated at 90% for initial 6 weeks and then flat rate (approx 33% of average wage) for 20 weeks, 26 weeks is unpaid.

### Comparability and data issues

Another way of assessing generosity of leave systems in international comparisons is to consider the amount of leave-related family payments and relate these to the number of children being born. In this manner, a more comprehensive picture is obtained of the different roles of lump-sum payments on birth and the number of parents (and children) that are actually entitled to paid parental leave benefits across countries.

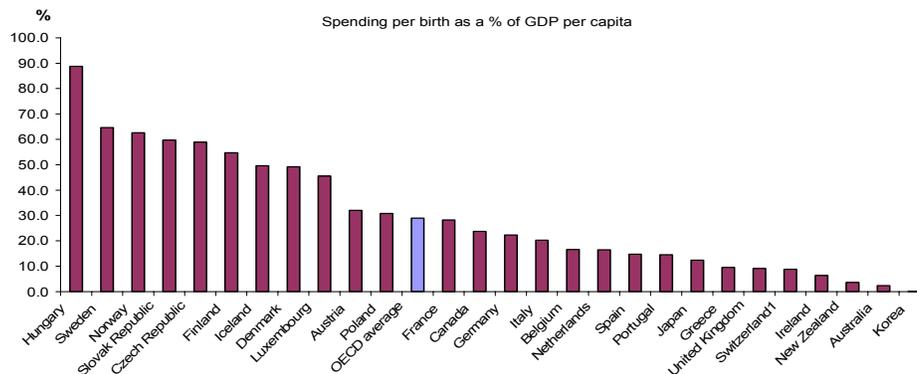
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## Appendix J: Parental Leave Policies in the E.U.

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OECD - Social Policy Division - Directorate of Employment, Labour and Social Affairs

**Chart PF7.2: Spending on maternity and parental leave payments per child born, 2003**



1. Year of reference 2001

Spending on maternity and parental leave payments is taken from the *OECD Social Expenditure database* and considered in view of the number of children aged 0 to 12 months.

There are differences in other national child-related policies that affect international comparisons of leave systems.

- The role of other child payments. For example, Australia is one of two OECD countries without paid maternity leave. However, apart from the increasingly significant lump-sum payments on childbirth (Charts PF7.2). The Australian system also pays income-tested family tax benefit payments to families with one-earner, and such payments are not included here (PF3).
- Some countries have additional high child benefits to families with very young children or “home-care payments” to families with very young children (about age 3) who do not use public childcare facilities (see, for example, the case of Austria, Finland and Norway table PF7.5).
- Local governments can provide additional financial support for parents on leave, as for example, in the States of California and New York in the US, while some jurisdictions in Germany make leave payments for a third year (over and above the payments during the first two years of leave as provided for at federal level). Such payments are not included here, nor are municipally financed home-care payments that are additional to national home-care payments (see above).
- Employer-provided top-up payments (over and above the statutory minimum) for those on maternity parental leave are not accounted for. Practices differ across firms, sectors and countries, but in many OECD countries these payments are significant, so that the indicators above often underestimate what parents on leave receive in terms of gross benefit income.

Sources and further reading: Especially for tables PF7.2 PF7.3, PF7.4 and PF7.5 EIRO national centres answers to study questionnaire on “Family and parental leave provision and collective bargaining” (November 2003); ISSA (2006), *Social Security Worldwide, 2006- Edition 1*, International Social Security Association (CD-Rom), Geneva. MISSOC (2006); Mutual Information System on Social Protection in the EU and EEA, Table IV – Maternity; Moss, P. and M. O’Brien (2006), *International Review of leave Policies and related research 2006*, DTI Employment Relations Research Series, No. 57; OECD Babies and Bosses (various issues)

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**Table PF7.2: Employment-protected statutory maternity leave arrangements (1), 2005/06**

Country	Maximum duration (weeks)	Eligibility criteria for payments	Paid	Payment	Financing
Austria	16 (can be 20 for medical reasons)	No qualifying conditions	Yes	100%	State/SI
Belgium	15 (17 multiple births)	All insured women	Yes	30 days : 82% after : 75%	SI
Canada	15 (varies across provinces)	600 contributable hours in the year pre-leave period.	Yes	55% of avg. insured earnings with a maximum of CAD 413 per week	SI
Czech rep.	28 (37 multiple births)	All women residents	Yes	69% (up to EUR 25 daily)	
Denmark	18	6 weeks of residence	Yes	100 % up to (DKR 3115 p/w)	Employer
Finland	105 days = around 17,5 weeks	All parents are eligible	Yes	100 – 60 % (4) Decreases with earnings; daily minimum EUR 11,45	SI
France	1 <sup>st</sup> /2 <sup>nd</sup> child : 16; 3 <sup>rd</sup> : 26, (+3 multiple births)	10 months insurance contributions	Yes	100 % up to maximum (EUR 2432 per month)	SI
Germany	14 (18 multiple births)	All insured women	Yes	100%	SI(<13€ ) + employer
Greece	17	200 days work in last 2 years	Yes	100% (max. EUR 42 per day)	SI/employer
Hungary	24	All insured women	Yes	Pre-natal (min. 4 weeks) : 70 % Next : allowance (see table)	SI
Iceland	13	> 6 months in workforce	Yes	80%	SI
Ireland	26	39 ins. contributions paid in the 12 months pre- leave	18 weeks	70% with minimum and maximum	State
Italy	21 (5 months)	All women residents	Yes	80%	SI
Japan	12	Currently in covered employment	yes	60%	Health Insurance
Korea	13 (90 days)	All employed women	Yes	100%	
Luxembourg	16 (20 if multiple birth)	All insured women	Yes	100 % (with minimum and maximum payments)	SI
Netherlands	16	All insured women	Yes	100% up to maximum	SI
Mexico	12	Currently in covered employment	Yes	100%	SI
New Zealand	12	Currently in covered employment	Yes	50%	State
Norway	9 weeks (embedded in parental leave, see below)	6 out of preceding 10 months in work (either parent)	Yes	Varies if period is 42weeks : pay is 100%; for 52 weeks pay is 80%, max EUR 590	State
Poland	1st child : 16; 2nd child or more : 18; multiple births : 24	No qualifying conditions	Yes	100 %	SI / employer
Portugal	17	6 months insurance contributions	Yes	100% with a minimum	State
Slovakia	28 (37 if multiple birth)	All women residents	Yes	55% net wage up to a low maximum (350 SKK / day – 7500 SKK /month)	SI
Spain	16 (18 if 3 or more)	180 days ins contributions paid in last 5 years	Yes	100%	State
Sweden	7 weeks pregnancy leave + 60 days allocation of parental leave	All parents are eligible	Yes	80% (min. EUR 19 per day).	State
Switzerland	16	Currently in covered employment	Yes	100%	Employer
Turkey	12	All insured women	Yes	66%	
UK	52	Employment for a continuous period of 26 weeks ending 15 weeks before the expected week of childbirth.	26 weeks	First 6 weeks : 90% then final 20 weeks : EUR 154 per week or 90% av. weekly earnings if lower + 26 weeks unpaid	Employer (refunded for at least 92%).
US, California	12 weeks 6 weeks	In employment for 12 months and at least 1250 hours Covered by Temporary Disability Insurance	No Yes	See family leave provision in Table PF6.5 60% (max USD 728 per week	State

SSC: A certain amount of Social Security contributions must have been paid for the claimant; WT: working time has to be over a lower limit. SI: Social, Health or unemployment insurance. (1) Private sector employees. In many countries civil servants have access to more generous entitlements. Self-employed often have less favourable statutory schemes.



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**Table PF7.3: Maternity allowance (\*) and maternity grants (\*\*) in place of or in supplement to statutory maternity pay, 2005/06**

Country	Allowance (*)			Grant (**)		
	Allowance	Eligibility	Details	Grant	Eligibility	Details
Australia	No				Birth grant	USD 3040 (conditions apply re. vaccinations)
Austria	Yes	Women not covered by statutory maternity (1) Self employed in agriculture, trade and industry. (2) others (part time, contract workers)	(1) EUR 23 per day for 16 weeks leave in order to hire a substitute (2) EUR 6,91 per day for 16 weeks	No		
Belgium	Yes	Self employed maternity leave	EUR 889 p/m for three months	Yes	Birth grant	EUR 945 for first child EUR 711 for subsequent children
Finland	No	-	-	Yes	All residents (pregnancy over 154 days)	Choice between a generous maternity pack or lump sum payment (EUR 140)
France	Yes, No in 2004	means tested (around 80 % of families are eligible)	During 9 months from the 5 <sup>th</sup> month of pregnancy; EUR 168 per month	No, Yes in 2004	New scheme in 2004, means-tested, such as to include 90 % of families	EUR 840 once at birth
Germany	Yes	To women not entitled to statutory maternity allowance	EUR 210 per month	Yes	'Entbindungsgeld' for mothers in statutory maternity leave	
Greece	Yes	Not entitled to social insurance. Means tested State aid	500 euros in two parts (half for a period of 42 days before birth, half for the 42 days after birth)	Yes	Insured mothers having worked at least 50 days in the year before birth	30 days minimum wage (but amounts vary highly in other social security regimes)
Hungary	Nos			yes		
Italy	Yes	No employment records and not entitled to statutory maternity leave Means tested at household level	283 euros per month during 5 months for each child born or adopted (EUR 1419 in total). Paid by State through municipality	Yes	To unemployed and atypical workers not entitled to statutory maternity leave (also to a certain extent to those entitled)	EUR 1747 per child paid by health insurance
Luxembourg	Yes	Not entitled to insured maternity benefit.	allowance paid for 16 weeks, Non-cumulative with similar benefits (EUR 185 per week)	Yes	mother and child have medical examination	EUR 1740 divided into three: EUR 512 lump sums: prenatal, birth and postnatal (child's 2 <sup>nd</sup> birthday)
Norway	No	-	-	Yes	Women not entitled to statutory parental leave <sup>1</sup>	NOK 33584 (around 4077 euros)
Poland	Yes	Social assistance recipients	Four first months of child's life Minimum : PLN 50 per month	Yes	Social assistance recipients (in the past : all mothers)	EUR 129 (one time childbirth benefit)
Slovakia	Yes	Women not entitled to paid statutory maternity leave.	Paid leave (lower amount)	Yes	For each child born.	Lump sum EUR 118
Spain	No	-	-	Yes	Birth of third or more children and multiple births. income-related child benefit EUR 450	
Sweden	Yes	Pregnancy leave	80% pay up to maximum(see tables on maternity and parental leave)	No	-	-
UK	Yes	Employed or self employed for a certain period and not entitled to statutory maternity pay or under min. earnings requirements	26 weeks: 90% of av. weekly earnings up to a max. of £100/week	Yes	Either partner getting income support, income based jobseeker's allowance, Child Tax Credit, Working Tax Credit.	Lump sum payment: EUR 728. Can claim from 30 <sup>th</sup> week of pregnancy until 3 months after.

(\*) Maternity allowance: amount of money paid at interval for a certain period after a child is born.(\*\*) Maternity grant: lump sump amount paid once at or around the childbirth.

(1) In this situation parental leave for father is reduced to 29 weeks fully paid or to 39 weeks paid 80%.



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**Table PF7.4: Statutory paternity leave arrangements (1) – 2005/06**

Country	Statutory	Criteria	No of days	Paid for whole period	Level of payment	Job guarantee
Austria	No statutory paternity arrangements (but collective agreements generally providing for one or two days) (5)					
Belgium	Statutory	EMP	10 days to be taken with 30 days after birth (or adoption).	Yes	3 days: 100% (employer); Next: 82 % up to max. (health insurance)	Yes
Denmark	Statutory	EMP	2 weeks to be taken within 14 weeks after birth	Yes	90 % up to maximum	Yes
Finland	Statutory	EMP	18 week days; extended up to 1-12 days conditional on taking as many days parental leave	Yes	100 - 60% (same rules as maternity leave); may be fragmented (day)	Yes
France	Statutory	EMP	2 weeks (3 weeks if multiple births)	Yes	3 first days : 100% (up to maximum afterwards)	Yes
Greece	Statutory	EMP	2 days	Yes	100%	Yes
Hungary	Statutory	EMP	5 days	Yes	? (social security )	Yes
Ireland	No statutory paternity arrangements (but 3 paid days leave are used to be granted by employers at birth)					
Italy	Limited cases	EMP + Only if lone father or if mother ill. Income related	total leave or the part which mother is ill for	Yes	80% by health insurance also in case of adoption	Yes
Luxembourg	Statutory	EMP	2 days at child's birth	Yes	100 % (employer)	Yes
Netherlands	Statutory	EMP	2 days (within a month after birth)	Yes	100%	Yes
Norway	No specific paternity leave. Statutory parental leave provision	EMP/QP for both parents  4 week father's quota depends on mother's employment prior to birth. No father's quota if mother has worked less than 50 % full-time.	Minimum : 4 weeks father's quota reserved to father (out of 52 weeks parental leave) (+ 2 weeks unpaid leave after birth) Maximum paid leave = 43 weeks (2) (33 weeks 100 % pay) (3) If the mother not in employment, the father is allowed only 38 weeks (28 weeks 100% pay)	Yes	- 100% if both parents take up to 42 weeks (up to maximum 341000 NOK) (28 weeks if mother not employed) - 80 % if 52 weeks (38 if mother not employed) - reduced compensation of father quota if mother between 50 and 75 % FT-work	Yes
Poland	Limited cases	EMP: Part of maternity leave over 14 weeks may be used by father	1st child : 2 weeks maximum (16 - 14) 2 and more : 4 weeks maximum (18 - 14)	Yes	100%	Yes
Portugal	Statutory	EMP	5 days in first month after birth	Yes	100%	Yes
Spain	Statutory	EMP	2 days (+ 2 days if another town) (10 weeks maternity leave may be transferred to the father if both parents fulfil conditions)	Yes	100% (employer)	Yes
Sweden	Statutory	EMP	10 days after the child's birth to be used during the first 60 days and simultaneously with the mother	Yes	80% up to maximum	Yes
UK	Statutory	EMP/QF (26 weeks)	2 weeks to be taken by blocks of one week within 8 weeks of birth	Yes	GBP 100/week or 90% of earnings if this is less	Yes

(1) Details on paternity leave provision are for private sector employees. Self employed are often excluded from paternity leave provision.  
 (2) 52 weeks parental leave of which 9 reserved to the mother (4 are reserved to the mother and the rest may be shared).  
 (3) 42 weeks parental 100% paid leave of which 9 reserved to the mother.  
 (4) Social contributions are paid by the State on the basis of minimum wage.  
 EMP: has to be working/employed to be eligible  
 QP: qualifying period: employed have to be in work for a certain amount of time within a certain reference period to be eligible.



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**Table PF7.5: Statutory parental leave arrangements, 2005/06**

Country	Statutory type	Duration	Age limit	Payment	Other	Paid father quota
Australia	Parental leave	52	1	-	-	-
Austria	Parental leave	2 years taken each by parents by periods of 3 months (except 1 month taken together). 2 years also if simultaneous part time 4 years if lone parent PT or both parents work part time alternatively	2 years, can postpone 3 months up to 7 years old.	Separate benefit of EUR 14,53 p/d for a period > than the parental leave : 30 months (36 if parents take leave alternatively) Earnings disregard of EUR 14600 per year.	Part time work possible. Independent right for father to a minimum of 3 continuous months. Priority to the mother for the remaining rights. 6 months leave for adoptive parents (child's age limit is 30 months if adopted between 18 and 24 months, 7 years if adopted after 2).	
Belgium	Parental leave	3 months per parent per child (6 months if half time work) (15 months if 80 % part time work)	4; 8 if child is disabled	Separate flat rate leave benefit not specific to parental leave: EUR 537 pm (FT leave); EUR 268 PT	FT leave may be taken in three blocks of one month. 80% part time work may be split in blocks of at least 3 months.	
Canada	Parental	35 weeks		55% of APW (max CAD 330 pw.		
Czech R.	Parental	156 weeks	3	10% of APW (or EUR 121 pm)		
Denmark	Parental leave	32 weeks per child to be shared (in continuation of maternity, paternity or even other's parent parental leave) + individual right of 8 unpaid weeks (can spread 32 weeks payment over total 40 weeks leave)	9	Total of 32 weeks 90 % up to maximum (DKR 3115 per week) to be shared.	Possibility to work part time with reduced payment accordingly	
Finland	1) Parental leave 2) Homecare leave (child not in municipal childcare) 3) Part time	1) 158 days (approx 26 weeks) after mat. Leave, shared among parents) 2) up to 3 <sup>rd</sup> birthday of younger child taken after paid parental leave 3) Right to PT work to care for child > second school year	1) Under 1 2) 3 years old 3) 8 years	1) Around 60% (same rules as maternity allowance) 2) basic allowance : EUR 252,3 p/m for first child + subsequent EUR 84,1 p/m (if under 3 years) or EUR 50,5 p/m (if over 3 years), possible supplements. 3) allowance of EUR 70 per month	1) extended in case of multiple births by 60 days per additional child Part time possible for both parents Also for adoptive parents 3) Salary is reduced proportionally	No, but there is a paternity leave bonus if father takes part of leave
France	1) Parental leave 2) Part time	1) 3 years per parent per child ((one year renewable twice); 1 year if adoption 2) Right to part time	1) 3 2) None	1) Separate benefit per household: if 2+children, and worked certain numbers of years.	1) EUR 521 p/m 2) Cannot be refused by employer unless strong reasons	
Germany	Parental leave	3 years per parent per child; the 2 first years of the child, and the third year before the child is 8 Couple parents working part-time (15-30 hours) can take leave simultaneously.	3	Separate benefit during first 2 years (means tested and income related) Max: EUR 300 per child and month during first 24 months or EUR 450 during 12 first months	.Lone parent working up to of 30 hours maximum is entitled parental leave Also for adoptive parents	
Greece	Parental leave	3,5 months per parent	3.5	Unpaid	Part-time only upon employer's approval. Also for adoptive parents	
Hungary	Parental leave (GYED)	Up to a child's 2 <sup>nd</sup> birthday	2	70% of previous salary (up to a ceiling of 70% of double the minimum wage).		



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Table PF7.5: Statutory parental leave arrangements, 2005/06 (Contd.)

Country	Statutory type	Duration	Age limit	Payment	Other	Paid father quota
Iceland	Parental	13 weeks per parent, non transferable		80%		13 weeks
Ireland	Parental leave	14 weeks per parent (in one block unless employer's agreement)	5	Unpaid	Also in case of adoption No part time	
Italy	Parental leave	11 months per child to be shared: 6 months maximum for the mother and 6 for the father, extended to 7 if the father claims at least 3 months. 10 months for lone parent	8 (6 if adoption)	Child under 3: 30% for 6 months maximum. 30% over 6 months only if incomes below a maximum. Child aged 3-8 : unpaid	Also for adoption Duration of paid leave up to 3 year for severely handicapped child. Also 3 months 30% paid leave for self employed during first child year	
Korea	Parental	9 months	5	Flat rate of USD 500 per month		
Luxembourg	Parental leave	6 months per parent per child (12 months if work under 50 % full time), to be taken after mat. leave, and before 5 <sup>th</sup> child's birthday for the other parent	After mat. leave	EUR 1840 per month during 6 months if full time; 920 euros per month during 12 months if part time	To be taken in one block Part time only on employer's approval 2 supplementary full time months if multiple birth	
Netherlands	1) Parental leave 2) PT work	1) 3 months per parent per child (6 months if half part time work) One parent at a time (mother has priority) 2) Right to change working time	1) 8 2) no	1) Unpaid, except civil servant (75%) or favourable collective agreements 2) Wage reduced accordingly.	1) Flexibility: leave to be taken in blocks of at least one month. Also 4 months adoption unpaid leave (for child up to 12) 2) also right to increase working time	
Norway (see also maternity and paternity leaves)	1) Paid parental leave 2) additional unpaid leave 3) part time	1) 42 or 52 paid weeks per child can be shared (9: mother; 4: father). 2) 1 year per parent per child to be taken after paid leave (2 yrs for lone parent or parent if not in employment). 3) Cash benefit if day care is not used.	1) 3 2) 2 3) 1 - 3	1) 42 weeks 100% or 52 weeks at 80% (max .limit is annual income of NOK 341 000) 2) Unpaid 3) NOK 3 657 per month.	The sharable period (39 or 29 weeks) may be taken simultaneously by parents working part time.	4 weeks, if the mother works at least 50% of FT week.
Poland	Parental Leave	3 years per parent	4 (18 if Disability)	EUR 103 per month; Means-tested benefit at household level for 3 years at maximum.	to be taken in no more than four blocks	
Portugal	1) Parental leave 2) Special leave 3) Part time	1) 3 months per parent (6 months if part time) 2) 2 years (3 years for 3+ children, 4 years if handicapped child) 3) one more child under 12	1) 6 2) 6; 12 if PT 3) 12	1) Unpaid 2) Unpaid	1) part time possible 2) possibility to work part time 3) also right to flexible hours	15 days
Slovakia	Parental leave	Up to child's 3 <sup>rd</sup> birthday; Individual right to be taken after maternity leave	3;	SKK 3790 pm; (SKK 1200 if the parent is working or on sick-pay)	22 weeks leave for adoptive parents	
Spain	Parental Part time	3 years per parent per child Reduction daily work time of 30-50%	3; (6 if PT)	Unpaid No		
Sweden	Parental leave 60 days for fathers	(480 days to be shared between the parents, 60 days reserved each parent)	8	First 390 days: 80% (>max SEK 294 750 p/m. Next 90 days : SEK 60 a day	Parental leave is fully flexible: may be divided in full days, half, 1/4, 1/8 (one hour). Same leave for adoptive parents	60 days for fathers
UK	Parental leave	13 weeks per child (18 if disabled and both working parents); max 4 weeks per year by blocks of at least one week	5	Unpaid	Adoptive parents have right to paid statutory maternity leave and unpaid parental leave	
US	Family leave	12 weeks unpaid for each parent			Covers maternity, adoption, care for spouse, child, parents with serious health condition	



Appendix K: Comparison of Temporary Disability Insurance Laws

COMPARISON OF TEMPORARY DISABILITY INSURANCE LAWS IN OTHER STATES

	California (Temporary Disability Insurance)	California (Paid Family Leave)	Hawaii (Temporary Disability Insurance)	New Jersey (Temporary Disability Insurance)	New York (Disability Benefits)	Rhode Island (Temporary Disability Insurance)
<b>Relevant Statutes</b>	Unemp. Ins. Code §§ 2601 et seq. Enacted in 1946	Unemp. Ins. Code §§ 3300 et seq. Enacted in 2002	Haw. Rev. Stat. § 392-1 et seq. Enacted in 1969	N.J. Stat. Ann. § 43:21-25 et seq. Enacted in 1948	N.Y. Work. Comp. Law § 200 et seq. Enacted in 1949	R.I. Gen. Laws Ch. 28-39 through 28-41 Enacted in 1942
<b>Responsible Agency</b>	California Employment Development Department, Disability Insurance Office.	California Employment Development Department, Paid Family Leave Office.	Department of Labor and Industrial Relations, Disability Compensation Division.	Department of Labor and Workforce Development, Temporary Disability Insurance Division.	Workers' Compensation Board, Disability Benefits Bureau.	Department of Employment and Training, Temporary Disability Insurance.
<b>Purposes</b>	Individual's own non-work-related disability.	Birth, adoption, or foster care placement.  Sickness or injury of child, spouse, parent or domestic partner. (SB 727, which is awaiting action by the Governor, would add the following: grandparents, grandchildren, parents-in-law, and siblings.)	Individual's own non-work-related disability.	Individual's own non-work-related disability.	Individual's own non-work-related disability.	Individual's own non-work-related disability.



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	California (Temporary Disability Insurance)	California (Paid Family Leave)	Hawaii (Temporary Disability Insurance)	New Jersey (Temporary Disability Insurance)	New York (Disability Benefits)	Rhode Island (Temporary Disability Insurance)
<b>Eligible Employees</b>	<p>Employees of covered employers who earned at least \$300 in the base period.</p> <p>Examples of excluded employees include: railroad employees; some employees of non-profit agencies; employees who claim religious exemptions; and most government employees.</p>		<p>Employees who have been employed for at least 14 weeks, who have been paid for at least 20 hours or more in each of those weeks, and who have earned not less than \$400 in the 52 weeks preceding the first day of disability.</p> <p>Examples of excluded employees include: federal employees; certain domestic workers; and certain family employees.</p>	<p>Employees who have established at least 20 base weeks, which means they earned at least 20 times the minimum wage rounded up to the nearest \$1 (\$143 in 2007) in each of those weeks.</p> <p>Alternatively, employees who have earned at least 1,000 times the minimum wage, rounded up to the nearest \$100 (\$7,200 in 2007) in the 52 weeks before the week in which the disability commenced.</p>	<p>Employees with 4 or more consecutive weeks of employment.</p> <p>Examples of excluded employees include: railroad, maritime, and farm laborers; part-time domestic workers; one or two corporate officers of corporations with no other employees; and certain employees of religious, charitable, or educational institutions.</p>	<p>Employees who earned at least 200 times the minimum hourly wage (currently \$1,480) in one quarter in the base period and at least 400 times that wage (currently \$2,960) in the base period, and whose base period wages are at least 1.5 times high quarter wages.</p> <p>Alternatively, employees who earned at least 3 times the total minimum amount above (currently \$8,880) in the base period.</p>
<b>Covered Employers</b>	Employers with payrolls in excess of \$100 per calendar quarter.		Most employers.	Employers subject to unemployment compensation coverage, including the state, but excluding certain other government entities.	Employers with 1 or more employees on each of at least 30 days in a calendar year, but not government employers. (Note that the employer becomes covered four weeks after the 30 <sup>th</sup> day.)	Employers subject to unemployment compensation coverage, but not governmental entities.
<b>Coverage Options</b>	<p>Options are:</p> <ul style="list-style-type: none"> <li>State insurance plan</li> <li>Voluntary plan</li> </ul>	<p>Options are:</p> <ul style="list-style-type: none"> <li>State insurance plan</li> <li>Voluntary plan</li> </ul>	<p>Options are:</p> <ul style="list-style-type: none"> <li>Private insurance plan</li> <li>Self-insurance plan</li> <li>Collective bargaining agreement that contains benefits at least as favorable as required by state law</li> </ul>	<p>Options are:</p> <ul style="list-style-type: none"> <li>State insurance plan</li> <li>Private insurance plan</li> <li>Self-insurance plan</li> <li>Union welfare fund</li> </ul>	<p>Options are:</p> <ul style="list-style-type: none"> <li>Private insurance plan</li> <li>Self-insurance plan</li> </ul>	<p>Option is:</p> <ul style="list-style-type: none"> <li>State insurance plan</li> </ul>



Disability Insurance Laws In Other States  
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	California (Temporary Disability Insurance)	California (Paid Family Leave)	Hawaii (Temporary Disability Insurance)	New Jersey (Temporary Disability Insurance)	New York (Disability Benefits)	Rhode Island (Temporary Disability Insurance)
<b>Financing</b>	Employees only.		Employers may finance the entire cost or employers and employees may share the cost.	Employees and employers.	Employers are allowed, but not required to collect contributions from employees to offset the cost of providing benefits.	Employees only.  Employers must withhold contributions from wages and transmit contributions to the TDI fund.
<b>Amount of Premium</b>	The combined employee contribution rate for temporary disability insurance and paid family leave is set according to formula, and is capped at 1.5%.  In 2007: <ul style="list-style-type: none"><li>The combined contribution rate is 0.6%.</li><li>The taxable wage base is \$83,389.</li><li>The maximum combined contribution per employee is \$500.33.</li></ul>		If employer and employees share the cost, employer may deduct from wages one-half the premium cost but not more than 0.5% of the employees' weekly wages up to the maximum set by the Department.	Employee contribution is 0.5% of wages up to the taxable wage base (\$26,600 in 2007).  Employer contribution varies from 0.10% to 0.75% of wages up to the taxable wage base (\$26,600 in 2007). Contribution rates vary based on the employer's experience rating.	If an employer collects contributions from employees, the amount collected may be up to 0.5% of wages, but generally not more than 60 cents per week.	Employee contribution is the contribution rate (1.3% in 2007) times wages up to the taxable wage base (\$52,100 in 2007).
<b>Amount of Benefits</b>	Weekly benefit is 55% of employee's average weekly wage up to an annually adjusted maximum amount (currently \$882).		Weekly benefit is 58% of employee's average weekly wage, but not more than the maximum benefit payable (\$476 per week in 2007).	Weekly benefit is 2/3 of employee's average weekly wage up to a maximum of 53% of the state average weekly wage (\$502 in 2007).	Weekly benefit is 1/2 of employee's average weekly wage, but not more than statutory maximum of \$170 or less than statutory minimum of \$20 per week.	Weekly benefit is 4.62% of employee's highest calendar quarter wages in the base year, not to exceed 85% of the state average weekly wage for the preceding year (\$652 as of 7/1/2007), plus dependent allowance of \$10 or 7% of weekly benefit, whichever is greater, for up to 5 qualifying dependents.



Disability Insurance Laws In Other States  
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	California (Temporary Disability Insurance)	California (Paid Family Leave)	Hawaii (Temporary Disability Insurance)	New Jersey (Temporary Disability Insurance)	New York (Disability Benefits)	Rhode Island (Temporary Disability Insurance)
<b>Duration of Benefits</b>	Up to 52 weeks.	Up to 6 weeks.	Up to 26 weeks.	Up to 26 weeks.  Maximum total benefit payable is 1/3 of total wages in base year.	Up to 26 weeks.	Up to 30 weeks.  Total benefits may not exceed 36% of base period wages in any benefit year, not including dependent allowance.
<b>Waiting Period</b>	7 days.		7 consecutive days.	7 days.  If benefits are paid for 3 consecutive weeks, benefits are also payable for the first 7 days.	7 consecutive days.	7 consecutive days.  If the disability continues for an additional 21 days, the employee is may receive benefits for the 7-day waiting period.

*Prepared For:* Joint Legislative Task Force on Family Leave Insurance  
Work Session on October 17, 2007

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Appendix L: Paid Family Leave Legislation

	Purpose	Administration of Paid Leave Benefit	Amount of Leave	Benefit	Eligibility
<b>California</b>  <u>Effective date:</u> July 2004	<ul style="list-style-type: none"> <li>Parents to bond with a newborn, adopted or foster child</li> <li>Workers to care for a family member with a serious health condition</li> </ul>	<ul style="list-style-type: none"> <li>Expansion of the state disability insurance program (SDI)</li> <li>Funded by employee payroll deductions</li> </ul>	<ul style="list-style-type: none"> <li>6 weeks</li> </ul>	<ul style="list-style-type: none"> <li>55% of pay up to a maximum of approximately \$900/week</li> </ul>	<ul style="list-style-type: none"> <li>Employees must have earned at least \$300 over 12 months.</li> <li>No employer size restriction.</li> </ul>
<b>Washington State</b>  <u>Effective date:</u> October 2009	<ul style="list-style-type: none"> <li>Parents to care for a newborn or newly adopted child</li> </ul>	<ul style="list-style-type: none"> <li>Undecided</li> </ul>	<ul style="list-style-type: none"> <li>5 weeks</li> </ul>	<ul style="list-style-type: none"> <li>\$250/week</li> </ul>	<ul style="list-style-type: none"> <li>Full-time employees who have worked at least 680 hours</li> <li>Businesses of 25 workers or more</li> <li>Prorated for part-time employees.</li> </ul>
<b>New Jersey</b>  <u>Effective date:</u> January 2009	<ul style="list-style-type: none"> <li>Parents to bond with a newborn, adopted or foster child</li> <li>Workers to care for an ill child, parent, spouse, or domestic partner.</li> </ul>	<ul style="list-style-type: none"> <li>Expansion of temporary disability insurance program (TDI)</li> <li>Funded by employee payroll deductions</li> </ul>	<ul style="list-style-type: none"> <li>6 weeks</li> </ul>	<ul style="list-style-type: none"> <li>2/3 of an employee's wage up to a maximum of \$525/week</li> </ul>	<ul style="list-style-type: none"> <li>Employees covered by the TDI program (worked for a NJ employer for at least 20 weeks and earned at least \$143 in a base week)</li> </ul>
<b>New York State (Proposed)</b>  <u>Status:</u> Passed NYS Assembly in June 2007; Currently stalled in NYS Senate	<ul style="list-style-type: none"> <li>Parents to care with a newborn, adopted or foster child</li> <li>Workers to care for a family member (children, spouses, domestic partners, and parents) with a serious health condition</li> </ul>	<ul style="list-style-type: none"> <li>Expansion of the temporary disability insurance (TDI) program; funded by employee payroll deductions</li> </ul>	<ul style="list-style-type: none"> <li>12 weeks</li> </ul>	<ul style="list-style-type: none"> <li>Half of an employee's average weekly wage up to a maximum of \$170/week*</li> </ul>	<ul style="list-style-type: none"> <li>Employees who are already covered by the TDI program; to be used for care of a newborn, newly adopted child or a seriously ill family member</li> </ul>

\* New York State's TDI benefit levels have not been adjusted since 1989.

\*\*Source: www.paidfamilyleave.org National Partnership for Women & Families website



### The Family Leave Insurance Act-Proposed National Legislation for Paid Leave

	Purpose	Administration of the Benefit	Benefit	Eligible Employees	Covered Employers
<p><b>The Family Leave Insurance Act</b></p> <p><u>Sponsors</u> Senators Chris Dodd (D-CT) and Ted Stevens (R-AK)</p>	<ul style="list-style-type: none"> <li>• Birth of a child, placement of adopted or foster child.</li> <li>• Care for a child, parent, or spouse who has a serious medical condition</li> <li>• An employee who has a serious medical condition</li> </ul>	<ul style="list-style-type: none"> <li>• Costs will be shared by employees, employers, and the federal government.</li> <li>• Both employees and employers must pay a small premium for the insurance, equivalent to 0.2 % of each employee's earnings.</li> </ul>	<ul style="list-style-type: none"> <li>• 8 weeks of paid leave over a 12-month period</li> <li>• Benefits will be tiered based on wages</li> </ul>	<ul style="list-style-type: none"> <li>• Employees must pay insurance premiums for 12 months and have worked for the same employer for 12 months to receive benefits-consistent with FMLA requirements.</li> </ul>	<ul style="list-style-type: none"> <li>• Participation is mandatory for all businesses with more than 50 employees</li> <li>• Companies with better benefits can choose to self-insure rather than participate in the federal program</li> </ul>

\* Source: The National Partnership for Women & Families website



## Appendix N: Proposed Paid Leave Law for New York State

	Purpose	Administration of Paid Sick Days Benefit	Amount of Leave	Benefit	Eligibility
New York State  <u>Status:</u> Passed NYS Assembly in June 2007; Currently stalled in NYS Senate	<ul style="list-style-type: none"> <li>To be used by either parent to care for a newborn or newly adopted child; to care for a seriously ill family member.</li> </ul>	<ul style="list-style-type: none"> <li>Expansion of the temporary disability insurance (TDI) program</li> </ul>	<ul style="list-style-type: none"> <li>12 weeks</li> </ul>	<ul style="list-style-type: none"> <li>50% of an employee's average weekly wage up to a maximum of \$170/week</li> </ul>	<ul style="list-style-type: none"> <li>Employees who are already covered by the TDI program</li> </ul>

\*Source: [www.timetocareny.org](http://www.timetocareny.org)



## Appendix O: 50-State Summary of Breastfeeding Laws

### 50 State Summary of Breastfeeding Laws

Updated June 2008

#### [Resources](#)

Health professionals and public health officials promote breastfeeding to improve infant health. Both mothers and children benefit from breast milk. Breast milk contains antibodies that protect infants from bacteria and viruses. Breastfed children have fewer ear infections, respiratory infections, urinary tract infections and have diarrhea less often. Infants who are exclusively breastfed tend to need fewer health care visits, prescriptions and hospitalizations resulting in a lower total medical care cost compared to never-breastfed infants. It also provides long-term preventative effects for the mother, including an earlier return to pre-pregnancy weight, reduced risk of pre-menopausal breast cancer and osteoporosis. According to the *New York Times*, approximately 70 percent of mothers start breastfeeding immediately after birth, but less than 20 percent of those moms are breastfeeding exclusively six months later. It is a national goal to increase the proportion of mothers who breastfeed their babies in the early postpartum period to 75 percent by the year 2010.

- Thirty-nine states, the **District of Columbia** and the **Virgin Islands** have laws with language specifically allowing women to breastfeed in any public or private location (**Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, Hawaii, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Minnesota, Mississippi, Missouri, Montana, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, Ohio, Oklahoma, Oregon, Pennsylvania, South Carolina, Tennessee, Texas, Utah, Vermont and Wyoming**).
- **Twenty-five states and the Virgin Islands** exempt breastfeeding from public indecency laws (**Alaska, Arizona, Arkansas, Florida, Illinois, Kentucky, Louisiana, Michigan, Minnesota, Mississippi, Montana, Nevada, New Hampshire, New York, North Carolina, Oklahoma, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Utah, Virginia, Washington, Wisconsin and Wyoming**).
- **Twenty one states, the District of Columbia and Puerto Rico** have laws related to breastfeeding in the workplace (**California, Colorado, Connecticut, Georgia, Hawaii, Illinois, Indiana, Minnesota, Mississippi, Montana, New Mexico, New York, Oklahoma, Oregon, Rhode Island, Tennessee, Texas, Vermont, Virginia, Washington and Wyoming**).
- **Ten states and Puerto Rico** exempt breastfeeding mothers from jury duty (**California, Illinois, Iowa, Kansas, Kentucky, Mississippi, Nebraska, Oklahoma, Oregon and Virginia**).
- **Five states and Puerto Rico** have implemented or encouraged the development of a breastfeeding awareness education campaign (**California, Illinois, Minnesota, Missouri and Vermont**).
- **Virginia** allows women to breastfeed on any land or property owned by the state.

Several states have unique laws related to breastfeeding. For instance,



## Appendix O: 50-State Summary of Breastfeeding Laws

- The state of **Virginia** allows women to breastfeed on any land or property owned by the state. **Puerto Rico** requires shopping malls, airports, public service government centers and other select locations to have accessible areas designed for breastfeeding and diaper changing that are not bathrooms.
- At least two states have laws related to child care facilities and breastfeeding. **Louisiana** prohibits any child care facility from discriminating against breastfed babies. **Mississippi** requires licensed child care facilities to provide breast-feeding mothers with a sanitary place that is not a toilet stall to breast-feed their children or express milk, to provide a refrigerator to store expressed milk, to train staff in the safe and proper storage and handling of human milk, and to display breast-feeding promotion information to the clients of the facility.
- **California** requires the Department of Public Health to develop a training course of hospital policies and recommendations that promote exclusive breastfeeding and specify staff for whom this model training is appropriate. The recommendation is targeted at hospitals with exclusive patient breastfeeding rates ranked in the lowest twenty-five percent of the state.
- **Maryland** exempts from the sales and use tax the sale of tangible personal property that is manufactured for the purpose of initiating, supporting or sustaining breastfeeding.
- **California, New York** and **Texas** have laws related to the procurement, processing, distribution or use of human milk.

First Letter of State [A](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [K](#) [L](#) [M](#) [N](#) [O](#) [R](#) [T](#) [U](#) [V](#) [W](#)

State	Summary of Statutes
Alabama	<a href="#">Ala. Code § 21-1-13 (2006)</a> allows a mother to breastfeed her child in any public or private location.
American Samoa	
Alaska	<a href="#">Alaska Stat. § 29.25.080 (1998)</a> and <a href="#">§ 01.10.060</a> prohibits a municipality from enacting an ordinance that prohibits or restricts a woman breastfeeding a child in a public or private location where the woman and child are otherwise authorized to be. The law clarifies that lewd conduct, lewd touching, immoral conduct, indecent conduct, and similar terms do not include the act of a woman breastfeeding a child in a public or private location where the woman and child are otherwise authorized to be. (SB 297)
Arizona	<a href="#">Ariz. Rev. Stat. Ann § 41-1443 (2006)</a> provides that indecent exposure does not include an act of breast-feeding by a mother and entitles a mother to breast-feed in any public place where the mother is otherwise lawfully present.
Arkansas	<a href="#">Ark. Stat. Ann. § 5-14-112 and § 20-27-2001 (2007)</a> allow a woman to breastfeed in any public or private location where other individuals are present. The law also exempts breastfeeding women from indecent exposure laws.
California	<a href="#">Cal. Civil Code § 43.3 (1997)</a> allows a mother to breastfeed her child in any location, public or private, except the private home or residence of another, where the mother and the child are otherwise



## Appendix O: 50-State Summary of Breastfeeding Laws

	<p>authorized to be present. (AB 157)</p> <p><a href="#">Cal. Health and Safety Code § 123360 and § 1257.9</a> provide that the Department of Public Health shall include in its public service campaign the promotion of mothers breastfeeding their infants. The department shall also develop a training course of hospital policies and recommendations that promote exclusive breastfeeding and specify staff for whom this model training is appropriate. The recommendation is targeted at hospitals with exclusive patient breastfeeding rates ranked in the lowest twenty-five percent of the state.</p> <p><a href="#">Cal. Lab. Code § 1030 et seq. (2001)</a> provides that employers need to allow a break and provide a room for a mother who desires to express milk in private.</p> <p><a href="#">Cal. Assembly Concurrent Resolution 155 (1998)</a> encourages the state and employers to support and encourage the practice of breastfeeding by striving to accommodate the needs of employees, and by ensuring that employees are provided with adequate facilities for breastfeeding and expressing milk for their children. The resolution memorializes the governor to declare by executive order that all state employees be provided with adequate facilities for breast feeding and expressing milk.</p> <p><a href="#">Cal. Civil Code § 210.5 (2000)</a> allows the mother of a breastfed child to postpone jury duty for one year and specifically eliminates the need for the mother to appear in court to request the postponement. The law also provides that the one-year period may be extended upon written request of the mother. [Chap. 266; AB 1814]</p> <p><a href="#">Cal. Health and Safety Code § 1647 (1999)</a> declares that the procurement, processing, distribution or use of human milk for the purpose of human consumption is considered to be a rendition of service rather than a sale of human milk. [Chap. 87; AB 532]</p>
Colorado	<p><a href="#">Colo. Rev. Stat. § 25-6-301 and § 25-6-302 (2004)</a> recognizes the benefits of breastfeeding and encourages mothers to breastfeed. The law also allows a mother to breastfeed in any place she has a right to be. <a href="#">(SB 88)</a></p> <p><a href="#">2008 Colo., Sess. Laws, Chap. 106</a> requires that an employer shall provide reasonable break time for an employee to express breast milk for her nursing child for up to two years after the child's birth. The employer shall make reasonable efforts to provide a place, other than a toilet stall, for the employee to express breast milk in</p>



## Appendix O: 50-State Summary of Breastfeeding Laws

	<p>privacy. The law also requires the Department of Labor and Employment to provide, on its Web site, information and links to other Web sites where employers can access information regarding methods to accommodate nursing mothers in the workplace. (<a href="#">HB 1276</a>)</p>
Connecticut	<p><a href="#">Conn. Gen. Stat. § 31-40w (2001)</a> requires employers to provide a reasonable amount of time each day to an employee who needs to express breast milk for her infant child and to provide accommodations where an employee can express her milk in private. [HF 5656]</p> <p><a href="#">Conn. Gen. Stat. § 46a-64 (1997)</a> prohibits places of public accommodation, resort or amusement from restricting or limiting the right of a mother to breastfeed her child. [P.A. 97-210]</p> <p><a href="#">Conn. Gen. Stat. Ann. § 53-34b</a> provides that no person may restrict or limit the right of a mother to breast-feed her child.</p>
Delaware	<p><a href="#">Del. Code Ann. tit. 31 § 310 (1997)</a> entitles a mother to breastfeed her child in any location of a place of public accommodation wherein the mother is otherwise permitted. [71 Del. Laws, c. 10, § 1]</p>
District of Columbia	<p><a href="#">D.C. Code Ann. § 2-1402.81 et seq.</a> provides that a woman shall have the right to breastfeed her child in any location, public or private, where she has the right to be with her child. The law also specifies that an employer shall provide reasonable daily unpaid break periods, as required by the employee, so that the employee may express breast milk for her child. These break periods shall run concurrently with any break periods that may already be provided to the employee. Requires that an employer make reasonable efforts to provide a sanitary room or other location, other than a bathroom or toilet stall, where an employee can express her breast milk in privacy and security. The location may include a childcare facility in close proximity to the employee's work location.</p>
Florida	<p><a href="#">Fla. Stat. § 383.016 (1994)</a> <b>authorizes a facility lawfully providing maternity services or newborn infant care to use the designation "baby-friendly" on its promotional materials. The facility must be in compliance with at least eighty percent of the requirements developed by the Department of Health in accordance with UNICEF and World Health Organization baby-friendly hospital initiatives. (SB 1668)</b></p> <p><a href="#">Fla. Stat. § 383.015 (1993)</a> allows a mother to breastfeed in any public or private location. (HB 231)</p> <p><a href="#">Fla. Stat. § 800.02 et seq.</a> and <a href="#">§ 827.071</a> exclude breastfeeding from various sexual offenses, such as lewdness, indecent</p>



## Appendix O: 50-State Summary of Breastfeeding Laws

	<p>exposure and sexual conduct.</p>
Georgia	<p><a href="#">Ga. Code § 31-1-9 (1999, 2002)</a> allows a mother to breastfeed in any location where she is otherwise authorized to be, provided that she acts in a discreet and modest way. [Act 304; SB 29] The statute was amended in 2002 to add that the breastfeeding of a baby should be encouraged in the interests of maternal and child health. (S.B. 221)</p> <p><a href="#">Ga. Code § 34-1-6 (1999)</a> allows employers to provide daily unpaid break time for a mother to express breast milk for her infant child. Employers are also required to make a reasonable effort to provide a private location, other than a toilet stall, in close proximity to the work place for this activity. The employer is not required to provide break time if to do so would unduly disrupt the workplace operations.</p>
Guam	
Hawaii	<p><a href="#">Hawaii Rev. Stat. § 367-3 (1999)</a> requires the Hawaii Civil Rights Commission to collect, assemble, and publish data concerning instances of discrimination involving breastfeeding or expressing breast milk in the workplace. Prohibits employers to forbid an employee from expressing breast milk during any meal period or other break period. (HB 266)</p> <p><a href="#">Hawaii Rev. Stat. § 378-2 (1999)</a> provides that it is unlawful discriminatory practice for any employer or labor organization to refuse to hire or employ, or to bar or discharge from employment, or withhold pay, demote, or penalize a lactating employee because an employee breastfeeds or expresses milk at the workplace. (HB 2774)</p> <p><a href="#">Hawaii Rev. Stat. § 489.21 and 489-22</a> provides that it is a discriminatory practice to deny, or attempt to deny, the full and equal enjoyment of the goods, services, facilities, privilege, advantages, and accommodations of a place of public accommodations to a woman because she is breast feeding a child.</p>
Idaho	<p><a href="#">Idaho Code § 2-212</a> provides that a person who is not disqualified for jury service under § 2-209 may have jury service postponed by the court or the jury commissioner only upon a showing of undue hardship, extreme inconvenience, or public necessity, or upon a showing that the juror is a mother breastfeeding her child.</p>
Illinois	<p><a href="#">Ill. Rev. Stat. ch. 705 § 305/10.3 (2005)</a> amends the Jury Act. Provides that any mother nursing her child shall, upon her request, be excused from jury duty.</p> <p><a href="#">Ill. Rev. Stat. ch. 740 § 137 (2004)</a> creates the Right to Breastfeed Act. Provides that a mother may breastfeed her</p>



## Appendix O: 50-State Summary of Breastfeeding Laws

	<p>baby in any location, public or private, where the mother is otherwise authorized to be; a mother who breastfeeds in a place of worship shall follow the appropriate norms within that place of worship. (SB 3211)</p> <p><a href="#">Ill. Rev. Stat. ch. 820 § 260 (2001)</a> creates the Nursing Mothers in the Workplace Act. Requires that employers provide reasonable unpaid break time each day to employees who need to express breast milk. The law also requires employers to make reasonable efforts to provide a room or other location, other than a toilet stall, where an employee can express her milk in privacy. (SB 542).</p> <p><a href="#">Ill. Rev. Stat. ch. 20 § 2310/55.84 (1997)</a> allows the Department of Public Health to conduct an information campaign for the general public to promote breastfeeding of infants by their mothers. The law allows the department to include the information in a brochure for free distribution to the general public. [P.A. 90-244]</p> <p><a href="#">Ill. Rev. Stat. ch. 720 § 5/11-9 (1995)</a> clarifies that breastfeeding of infants is not an act of public indecency. (SB 190)</p>
Indiana	<p><a href="#">Ind. Code § 16-35-6</a> allows a woman to breastfeed her infant anywhere that the law allows her to be. (<a href="#">HB 1510</a>)</p> <p><a href="#">2008 Ind. Acts, P.L. 13</a> provides that state and political subdivisions shall provide for reasonable paid breaks for an employee to express breast milk for her infant, make reasonable efforts to provide a room or other location, other than a toilet stall, where the employee can express breast milk in private and make reasonable efforts to provide for a refrigerator to keep breast milk that has been expressed. The law also provides that employers with more than 25 employees must provide a private location, other than a toilet stall, where an employee can express the employee's breast milk in private and if possible to provide a refrigerator for storing breast milk that has been expressed. (2008 SB 219)</p>
Iowa	<p><a href="#">Iowa Code § 607A.5 (1994)</a> allows a woman to be excused from jury service if she submits written documentation verifying, to the court's satisfaction, that she is the mother of a breastfed child and is responsible for the daily care of the child.</p> <p><a href="#">Iowa Code § 135.30A (2002)</a> a woman may breast-feed the woman's own child in any public place where the woman's presence is otherwise authorized.</p>
Kansas	<p><a href="#">Kan. Stat. Ann. § 43-158 (2005, 2006)</a> and § 65-1,248 provide that it is the public policy of Kansas that a mother's choice to breastfeed</p>



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	should be supported and encouraged to the greatest extent possible and that a mother may breastfeed in any place she has a right to be. Amended in 2006 to excuse nursing mothers from jury duty. (H.B. 2284)
Kentucky	<p><a href="#">Ky. Rev. Stat. § 211-755 (2006)</a> permits a mother to breastfeed her baby or express breast milk in any public or private location. Requires that breastfeeding may not be considered an act of public indecency, indecent exposure, sexual conduct, lewd touching or obscenity. Prohibits a municipality from enacting an ordinance that prohibits or restricts breastfeeding in a public or private place. (SB 106)</p> <p><a href="#">Ky. Rev. Stat. § 29A.100 (2007)</a> directs judges at all levels of the court to excuse women who are breastfeeding or expressing breast milk from jury service until the child is no longer nursing. (S.B. 111)</p>
Louisiana	<p><a href="#">La. House Concurrent Resolution 35 (2002)</a> establishes a joint study of requiring insurance coverage for outpatient lactation support for new mothers.</p> <p><a href="#">La. Rev. Stat. Ann. § 51. 2247.1 (2001)</a> states that a mother may breastfeed her baby in any place of public accommodation, resort, or amusement, and clarifies that breastfeeding is not a violation of law. (HB 377)</p> <p><a href="#">La. Rev. Stat. Ann. § 46. 1409 B 5</a> prohibits any child care facility from discriminating against breastfed babies. (HB 233)</p>
Maine	<a href="#">Me. Rev. Stat. Ann. tit. 5, § 4634 (2001)</a> amends the Maine Human Rights Act to declare that a mother has the right to breastfeed her baby in any location, whether public or private, as long as she is otherwise authorized to be in that location. [Public Law No. 206; LD 1396]
Maryland	<p><a href="#">Md. Health-General Code Ann. § 20-801 (2003)</a> permits a woman to breastfeed her infant in any public or private place and prohibits anyone from restricting or limiting this right. (SB223)</p> <p><a href="#">Md. Tax-General Code Ann. § 11-211</a> exempts the sale of tangible personal property that is manufactured for the purpose of initiating, supporting or sustaining breastfeeding from the sales and use tax.</p>
Massachusetts	
Michigan	<a href="#">Mich. Comp. Laws § 41.181,67.1aa and § 117.4i et seq. (1994)</a> states that public nudity laws do not apply to a woman breastfeeding a child.
Minnesota	<a href="#">Minn. Stat. § 181.939 (1998)</a> requires employers to provide daily unpaid break time for a mother to express breast milk for her



## Appendix O: 50-State Summary of Breastfeeding Laws

	<p><b>infant child. Employers are also required to make a reasonable effort to provide a private location, other than a toilet stall, in close proximity to the work place for this activity. (SB 2751)</b></p> <p><a href="#">Minn. Stat. § 145.905</a> provides that a mother may breastfeed in any location, public or private, where the mother and child are authorized to be, irrespective of whether the nipple of the mother's breast is uncovered during or incidental to the breastfeeding.</p> <p><a href="#">Minn. Stat. Ann. § 145.894</a> directs the state commissioner of health to develop and implement a public education program promoting the provisions of the Maternal and Child Nutrition Act. The education programs must include a campaign to promote breast feeding.</p> <p><a href="#">Minn. Stat. Ann. § 617.23</a> specifies that breast-feeding does not constitute indecent exposure.</p>
Mississippi	<p><a href="#">Miss. Code Ann. Ch. 5 § 13-5-23 (2006)</a> provides that breast-feeding mothers may be excused from serving as jurors.</p> <p><a href="#">Miss. Code Ann. § 17-25-7/9 (2006)</a> prohibits any ordinance restricting a woman's right to breastfeed and provides that a mother may breastfeed her child in any location she is otherwise authorized to be. (<a href="#">S.B. 2419</a>)</p> <p><a href="#">Miss. Code Ann. § 43-20-31 (2006)</a> requires licensed child care facilities to provide breast-feeding mothers with a sanitary place that is not a toilet stall to breast-feed their children or express milk, to provide a refrigerator to store expressed milk, to train staff in the safe and proper storage and handling of human milk, and to display breast-feeding promotion information to the clients of the facility.</p> <p><a href="#">Miss. Code Ann. Ch. 1 § 71-1-55 (2006)</a> prohibits against discrimination towards breast-feeding mothers who use lawful break-time to express milk.</p> <p><a href="#">Miss. Code Ann. Ch. 29 § 97-29-31 (2006)</a> and <a href="#">Ch. 35 § 97-35-7et seq. (2006)</a> specifies that a woman breastfeeding may not be considered an act of indecent exposure, disorderly conduct, or disturbance of the public space.</p>
Missouri	<p><a href="#">Mo. Rev. Stat. § 191.915 (1999)</a> <b>requires hospitals and ambulatory surgical centers to provide new mothers with a breastfeeding consultation or information on breastfeeding, the benefits to the child and information on local breastfeeding support groups. The law requires physicians who provide</b></p>



## Appendix O: 50-State Summary of Breastfeeding Laws

	<p>obstetrical or gynecological consultation to inform patients about the postnatal benefits of breastfeeding. The law requires the Department of Health to provide and distribute written information on breastfeeding and the health benefits to the child. (SB 8)</p> <p><a href="#">Mo. Rev. Stat. § 191.918 (1999)</a> allows a mother, with as much discretion as possible, to breastfeed her child in any public or private location.</p>
Montana	<p><a href="#">Mont. Code Ann. § 50-19-501 (1999)</a> states that the breastfeeding of a child in any location, public or private, where the mother otherwise has a right to be is legal and cannot be considered a nuisance, indecent exposure, sexual conduct, or obscenity. (SB 398)</p> <p><a href="#">Mont. Code Ann. § 39-2-215 et seq.</a> specifies that employers must not discriminate against breastfeeding mothers and must encourage and accommodate breastfeeding. Requires employers to provide daily unpaid break time for a mother to express breast milk for her infant child. Employers are also required to make a reasonable effort to provide a private location, other than a toilet stall, in close proximity to the work place for this activity.</p>
Nebraska	<p><a href="#">Neb. Rev. Stat. §25-1601-4 (2004)</a> states that a nursing mother is excused from jury duty until she is no longer breastfeeding and that the nursing mother must file a qualification form supported by a certificate from her physician requesting exemption.</p>
Nevada	<p><a href="#">Nev. Rev. Stat. § 201.232, § 201.210, and § 201.220 (1995)</a> state that the breastfeeding of a child in any location, public or private, is not considered a violation of indecent exposure laws. (SB 317)</p>
New Hampshire	<p><a href="#">N.H. Rev. Stat. Ann. § 132:10-d and § 121:1 et seq. (1999)</a> state that breastfeeding does not constitute indecent exposure and that limiting or restricting a mother's right to breastfeed is discriminatory. [HB 441]</p>
New Jersey	<p><a href="#">N.J. Rev. Stat. § 26:4B-4/ 5 (1997)</a> entitles a mother to breastfeed her baby in any location, including public accommodations, resorts or amusement parks. Failure to comply with the law may result in a fine.</p>
New Mexico	<p><a href="#">N.M. Stat. Ann. § 28-20-1 (1999)</a> permits a mother to breastfeed her child in any public or private location where she is otherwise authorized to be. (SB 545)</p> <p><a href="#">N.M. Stat. Ann. § 28-20-2 (2007)</a> requires employers to provide a clean, private place, not a bathroom, for employees who are breastfeeding to pump. Also requires that the employee be given breaks to express milk, but does not require that she be paid for this time.</p>



## Appendix O: 50-State Summary of Breastfeeding Laws

New York	<p><a href="#"><u>N.Y. Labor Law § 206-c (2007)</u></a> states that employers must allow breastfeeding mothers reasonable, unpaid break times to express milk and make a reasonable attempt to provide a private location for her to do so. Prohibits discrimination against breastfeeding mothers.</p> <p><a href="#"><u>N.Y. Civil Rights Law § 79-e (1994)</u></a> permits a mother to breastfeed her child in any public or private location. (SB 3999)</p> <p><a href="#"><u>N.Y. Penal Law § 245.01 et seq.</u></a> excludes breastfeeding of infants from exposure offenses.</p> <p><a href="#"><u>N.Y. Public Health Law § 2505</u></a> provides that the Maternal and Child Health commissioner has the power to adopt regulations and guidelines including, but not limited to donor standards, methods of collection, and standards for storage and distribution of human breast milk.</p>
North Carolina	<p><a href="#"><u>N.C. Gen. Stat. § 14-190.9 (1993)</u></a> states that a woman is allowed to breastfeed in any public or private location, and that she is not in violation of indecent exposure laws. (HB 1143)</p>
North Dakota	
Ohio	<p><a href="#"><u>Ohio Rev. Code Ann. § 3781.55 (2005)</u></a> provides that a mother is entitled to breastfeed her baby in any location of a place of public accommodation wherein the mother otherwise is permitted. (SB 41)</p>
Oklahoma	<p><a href="#"><u>Okla. Sess. Laws, Chap. 339 (2008)</u></a> exempts mothers who are breast-feeding a baby from jury duty, upon their request. (SB 74)</p> <p><a href="#"><u>Okla. Stat. tit. 40 § 435 (2006)</u></a> requires that an employer provide reasonable unpaid break time each day to an employee who needs to breastfeed or express breast milk for her child. Requires the Department of Health to issue periodic reports on breastfeeding rates, complaints received and benefits reported by both working breastfeeding mothers and employers. (HB 2358)</p> <p><a href="#"><u>Okla. Stat. tit. 38, § 28 and tit. 63, § 1-234 (2004)</u></a> allow a mother to breastfeed her child in any location that she is authorized to be and exempts her from the crimes and punishments listed in the penal code of the state of Oklahoma. (HB 2102)</p>
Oregon	<p><a href="#"><u>Or. Rev. Stat. § 109.001 (1999)</u></a> allows a woman to breastfeed in a public place. (SB 744)</p> <p><a href="#"><u>Or. Rev. Stat. § 10.050 (1999)</u></a> excuses a woman from acting as a juror if the woman is breastfeeding a child. A request from the woman must be made in writing. (SB 1304)</p> <p><a href="#"><u>Or. Rev. Stat. § 653.075, § 653.077 and § 653.256 (2007)</u></a> allow</p>



## Appendix O: 50-State Summary of Breastfeeding Laws

	women to have unpaid 30 minute breaks during each four hour shift to breastfeed or pump. Allows certain exemptions for employers. (H.B. 2372)
Pennsylvania	<a href="#">Pa. Cons. Stat. tit. 35 § 636.1 et seq. (2007)</a> allows mothers to breastfeed in public without penalty. Breastfeeding may not be considered a nuisance, obscenity or indecent exposure under this law. ( <a href="#">SB34</a> )
Puerto Rico	<a href="#">1 L.P.R.A. § 5165</a> declares August as "Breastfeeding Awareness Month" and the first week of August as "World Breastfeeding Week" in Puerto Rico.  <a href="#">3 L.P.R.A. § 1466 and 29 L.P.R.A. § 478a et seq.</a> provide that breastfeeding mothers have the opportunity to breastfeed their babies for half an hour within the full-time working day for a maximum duration of 12 months.  <a href="#">23 L.P.R.A. § 43-1</a> directs the Regulations and Permits Administration to adopt regulations, which shall provide that in shopping malls, airports, ports and public service government centers there shall be accessible areas designed for breastfeeding and diaper changing that are not bathrooms.  <a href="#">34 L.P.R.A. § 1735h</a> states that any woman breastfeeding her child under 24 months old and who presents a medical attestation to such fact is exempt from serving as a juror.
Rhode Island	<a href="#">R.I. Gen. Laws § 23-13.2-1 (2003)</a> requires employers to provide a safe private place for an employee to breastfeed her child and express breast milk. ( <a href="#">HB 5507/SB 151</a> )  <a href="#">R.I. Gen. Laws § 11-45-1 (1998)</a> excludes mothers engaged in breastfeeding from disorderly conduct laws. ( <a href="#">HB 8103, SB 2319</a> )
South Carolina	<a href="#">S.C. Code Ann. § 20-7-97 (2005)</a> provides that a woman may breastfeed her child in any location where the mother is authorized and that the act of breastfeeding is not considered indecent exposure.
South Dakota	<a href="#">S.D. Codified Laws Ann. § 22-22-24.1 (2002)</a> and <a href="#">22-24A-2 (2002)</a> exempt mothers who are breastfeeding from indecency laws.
Tennessee	<a href="#">Tenn. Code Ann. § 68-58-101 et seq. (2006)</a> permits a mother to breastfeed an infant 12 months or younger in any location, public or private, that the mother is authorized to be, and prohibits local governments from criminalizing or restricting breastfeeding. Specifies that the act of breastfeeding shall not be considered public indecency as defined by § 39-13-511; or nudity, obscene, or sexual conduct as defined in § 39-17-901. (H.B. 3582)



## Appendix O: 50-State Summary of Breastfeeding Laws

	<p><a href="#">Tenn. Code Ann. § 50-1-305 (1999)</a> requires employers to provide daily unpaid break time for a mother to express breast milk for her infant child. Employers are also required to make a reasonable effort to provide a private location, other than a toilet stall, in close proximity to the work place for this activity. (SB 1856)</p>
Texas	<p><a href="#">Tex. Health Code Ann. § 161.071 (2001)</a> requires the Department of Health to establish minimum guidelines for the procurement, processing, distribution, or use of human milk by donor milk banks. (HB 391)</p> <p><a href="#">Tex. Health Code Ann. § 165.001 et seq. and § 165.031 et seq. (1995)</a> authorize a woman to breastfeed her child in any location and provides for the use of a "mother-friendly" designation for employers who have policies supporting work site breastfeeding. (HB 340, HB 359)</p>
U.S. Virgin Islands	<p><a href="#">14 V.I.C. § 1022</a> specifies that a woman's breastfeeding a child in any public or private location where the woman's presence is otherwise authorized does not under any circumstance constitute obscene or indecent conduct.</p>
Utah	<p><a href="#">Utah Code Ann. § 17-15-25 (1995)</a> states that city and county governing bodies may not inhibit a woman's right to breastfeed in public.</p> <p><a href="#">Utah Code Ann. § 76-10-1229.5 (1995)</a> states that a breastfeeding woman is not in violation of any obscene or indecent exposure laws. (H.B. 262)</p>
Vermont	<p><a href="#">Vt. Acts, Act 144 (2008)</a> requires employers to provide reasonable time throughout the day for nursing mothers to express breast milk for three years after the birth of a child. Also requires employers to make a reasonable accommodation to provide appropriate private space that is not a bathroom stall, and prohibits discrimination against an employee who exercises rights provided under this act. (HB 641)</p> <p><a href="#">Vt. Stat. Ann. tit. 9 § 4502 (2002)</a> and <a href="#">Vt. Acts, Act 117 (2002)</a> state that breastfeeding should be encouraged in the interest of enhancing maternal, child and family health. The law provides that a mother may breastfeed her child in any place of public accommodation in which the mother and child would otherwise have a legal right to be. The law directs the human rights commission to develop and distribute materials that provide information regarding a woman's legal right to breastfeed her child in a place of public accommodation. (S.B. 156)</p>
Virginia	<p><a href="#">Va. Code § 2.2-1147.1 (2002)</a> guarantees a woman the right to breastfeed her child on any property owned, leased or controlled by</p>



## Appendix O: 50-State Summary of Breastfeeding Laws

	<p>the state. The bill also stipulates that childbirth and related medical conditions specified in the Virginia Human Rights Act include activities of lactation, including breastfeeding and expression of milk by a mother for her child. (H.B. 1264)</p> <p><a href="#">Va. House Joint Resolution 145 (2002)</a> encourages employers to recognize the benefits of breastfeeding and to provide unpaid break time and appropriate space for employees to breastfeed or express milk.</p> <p><a href="#">Va. Code Ann. § 18.2-387 (1994)</a> exempts mothers engaged in breastfeeding from indecent exposure laws.</p> <p><a href="#">Va. Code Ann. § 8.01-341.1 (2005)</a> provides that a mother who is breastfeeding a child may be exempted from jury duty upon her request. The mother need not be "necessarily and personally responsible for a child or children 16 years of age or younger requiring continuous care during normal court hours" as the existing statute provides.</p>
Washington	<p><a href="#">Wash. Rev. Code § 9A.88.010 (2001)</a> states that the act of breastfeeding or expressing breast milk is not indecent exposure. (HB 1590)</p> <p><a href="#">Wash. Rev. Code § 43.70.640 (2001)</a> allows any employer, governmental and private, to use the designation of "infant-friendly" on its promotional materials if the employer follows certain requirements. [Chap. 88]</p>
West Virginia	
Wisconsin	<p><a href="#">Wis. Stat. § 944.17(3), § 944.20(2) and § 948.10(2) (1995)</a> provides that breastfeeding mothers are not in violation of criminal statutes of indecent or obscene exposure. (AB 154)</p>
Wyoming	<p><a href="#">Wyo. House Joint Resolution 5 (2003)</a> encourages breastfeeding and recognizes the importance of breastfeeding to maternal and child health. The resolution also commends employers, both in the public and private sectors, who provide accommodations for breastfeeding mothers.</p> <p><a href="#">Wyo. Stat. § 6-4-201 (2007)</a> exempts breastfeeding mothers from public indecency laws and gives breastfeeding women the right to nurse anyplace that they otherwise have a right to be. (H.B. 105)</p>

*Sources: National Conference of State Legislatures and StateNet 2008.*  
*Note: List may not be comprehensive, but is representative of state laws that exist. NCSL appreciates additions and corrections.*



## Appendix P: Typology of Child Care in the E.U.

OECD Family Database [www.oecd.org/els/social/family/database](http://www.oecd.org/els/social/family/database)  
OECD - Social Policy Division - Directorate of Employment, Labour and Social Affairs

### PF13: Typology of childcare and early education services

#### *Definitions and methodology*

Childcare and early-education services for children not yet of schooling age can be categorized in three broad groups.

**Centre-based day-care:** encompasses all childcare that is provided outside the home in licensed centres. The services provided can be full or part time and are most commonly referred to as nurseries, day care centres, crèches, playschools and parent-run groups. In general, these services are provided to children not yet 4 years of age provide care to children before commencing pre-school (please see country notes below for exceptions).

The type of childcare provision is mixed, depending upon the country. In many European countries provision is mainly public topped up by parental fees which are off-set by tax credits, child allowances and so on (please refer to indicator on cost of childcare). The ministry responsible for day-care childcare alternates between the ministry for education in some countries (Mexico, New Zealand, Portugal, and Sweden), but in most countries such services are provided under the aegis of the ministry of welfare (social policies). Private provision of early childcare is prominent in some countries e.g. Australia, Canada, Ireland, New Zealand, the Netherlands, Switzerland, the UK, and the United States. Within the category of centre-based services a small proportion is group family childcare, mini-crèches and parental run childcare centres (see country notes for details). These have been developed by groups of parents (sometimes with informal beginnings) but have moved onto acquire accreditation and subsidies from the state.

**Family day care (FDC)** is traditionally provided in a home setting. This can be at the child-minder's home, or at the child's own home where a qualified or registered child minder looks after the child. The maximum number of very young children who can be cared for in this way is usually 3 or 4. This type of care is most common for children prior to pre-school i.e. those aged up to 3, and is sought either because the availability of places in crèche/nurseries is too limited or parents prefer a homely environment (particularly for very young children).

**Pre-school early education programmes:** this category includes centre-based (or often school-based) programmes designed to meet the needs of children preparing to enter primary (compulsory) education. In most countries, these programmes include at least a 50% educational content and are supervised by qualified staff. In some countries, these programmes are run on a full-time basis and offer out-of-school hours provision on the same premises (see forthcoming indicator on out-of-school-hours services). Some countries however have traditionally provided kindergarten programmes as part-time and are now looking to reform these programmes (see below for country notes). Others have effectively extended the primary school programmes by bringing in one or two years pre-school into primary schools, for example the 'Prep' year in Queensland, Australia, 'infant classes' in Ireland, group 1 (the first year in the former 'kleuterschool') in the Netherlands, the "Education infantile in Spain", and 'Reception classes' in the UK.

Table PF13.1 presents these three categories and also illustrates whether they are publicly or privately provided

Other relevant indicators: Public spending on childcare and early education (PF9); and, Childcare support (PF11).



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Table PF13.1: Typology of Childcare

	Centre-based care		Family day care		Pre-school		Compulsory school	
Public*								
Private**								
Age	0	1	2	3	4	5	6	7
Australia	Accredited centres and family day care available part-time (20hrs) or full-time (up to 50hrs)				Reception/ pre-school classes, with primary school (full-time, out-of-school-hours care also provided).		Compulsory schooling	
Austria	Tagesmutter (FDC) and Krippen (centre-based), Part-time (25hrs)		Kindergarten, (part-time, 25hrs). Out of school care provision under development.				Compulsory schooling	
Belgium	Kinderdagverblijf (centre-based crèches) and FDC; Crèche (centre-based) and gardiennes encadrées (FDC)		Kleuterschool, part-time or full-time, with out-of-school-hours care; École maternelle, part-time or full-time, with out-of-school-hours care				Compulsory schooling	
Canada	Centre-based and family day care				Junior Kindergarten Ontario	Kindergarten/ Maternelles in Québec	Compulsory schooling	
Czech rep.	Crèche (centre-based care), FT		Materska skola (state kindergarten)				Compulsory schooling	
Denmark	Dagpleje (FDC) and Vuggestuer (creche) full-time (>32hrs)		Børnehaver (kindergarten) full-time (>32hrs)				Compulsory schooling	
	Adlersintegrer (age-integrated facility) full-time (>32hrs)				Børne-haver (>32hrs)			
Finland	Perhepaivahoito (FDC) and Paivakoti (municipal early development centres), full-time (<50hrs)				Esiopetus pre-school		Compulsory schooling	
France	Crèche (centre-based care) and Assistant maternelles (FDC), FT		Ecole maternelle (pre-school)				Compulsory schooling	
Germany	Krippen (centre-based creche)		Kindergarten (pre-school)				Compulsory schooling	
Greece	Vrefonipiaki stahmi (crèche for children <2.5 and nursery school for >2.5)		Nipiagogeia (kindergarten)				Compulsory schooling	
Hungary	Bolcsode (creches), full-time (40hrs)		Ovoda (kindergarten)				Compulsory schooling	
Iceland	Day-care centres and “day mothers”(FDC)		Pre-school				Compulsory schooling	
Ireland	Regulated FDC and nurseries (centre-based)		Early Start and Infant school (pre-school), with primary school				Compulsory schooling	
			Pre-school playgroups					
Italy	Asili nidi (creches) part-time (20hrs) and full-time (<50hrs)		Scuola dell'infanzia (pre-school)				Compulsory schooling	
Japan	Centre-based care		Kindergartens				Compulsory schooling	
	Family day care							
Korea	Childcare centres		Kindergartens				Compulsory schooling	
			Hakwon (pre-school)					
Luxembourg	Crèche (centre-based care) and Tagesmutter (FDC)		Enseignement pre-scolaire (pre-school)				Compulsory schooling	
Mexico	Educación inicial (centre-based creche)		Compulsory educación prescolar (pre-school)				Compulsory schooling	
Netherlands	Gastouderopvang (FDC), Kinderopvang (child care centres) and Playgroups		Group 1, with primary school				Compulsory schooling (group 2 onwards)	
New Zealand	Child care centres and some home-based services (FDC)		Community-based Kindergarten, Playcentres				Compulsory schooling	



## Appendix P: Typology of Child Care in the E.U.

OECD Family Database [www.oecd.org/els/social/family/database](http://www.oecd.org/els/social/family/database)  
OECD - Social Policy Division - Directorate of Employment, Labour and Social Affairs

**Table PF13.1: Typology of Childcare (continued)**

	Centre-based care		Family day care		Pre-school		Compulsory school	
	0	1	2	3	4	5	6	7
Norway	<i>Barnehage</i> , including rural familiebarnehager, full-time (40 hrs)						Compulsory schooling	
Poland	Nurseries		Pre-school/ Nursery schools			Compulsory schooling		
Portugal	<i>Creche familiar</i> (FDC) and centre-based creches		<i>Jardins de infancia</i> (pre-school)			Compulsory schooling		
Slovakia	Nursery schools		Kindergarten			Compulsory schooling		
Spain	Educación Pre-scolar (Centre-based)		Education infantil (Pre-school), with primary school			Compulsory schooling		
Sweden	<i>Forskola</i> (pre-school) full-time, 30 hours, some <i>Familiedaghem</i> (FDC) particularly in rural areas.		<i>Forskoleklass</i> (pre-school, PT)			Compulsory schooling		
Switzerland	Crèche. Krippen, varies across cantons (centre-based)		Pre-school, mandatory in some cantons.			Compulsory schooling		
Turkey	Crèche		<i>Ana Okullari</i> (kindergartens)			Compulsory schooling		
UK	Nurseries, child minders and playgroups		Playgroups and nurseries, PT:	Reception class, with primary school	Compulsory schooling			
US	Child care centres and FDC		Educational programmes, incl. pre-K, private kindergartens, Head Start (State Kindertartens)			Compulsory schooling		

\*Provision is largely publicly funded and managed (more than 50% of enrolments are in publicly operated facilities).

\*\* Provision is largely managed by private stakeholders (both for-profit and not-for-profit providers) and is publicly and privately financed.

Sources and further reading; *OECD Babies and Bosses* (various issues); *OECD Starting Strong* (2 issues and various country notes); and, *OECD Education database*.



## Appendix Q: 2008 Child Care in the State of New York

2008 Child Care in the State of:  
New York**The People<sup>1</sup>**

	<b>NY</b>	<b>U.S.</b>
Number of residents	19,306,183	299,398,485
Number of children ages 0 through 4 <sup>2</sup>	1,220,468	20,417,636
Number of children ages 0 through 4 living below poverty level	311,382	4,211,345
Number of children ages 5 through 11 <sup>2</sup>	1,450,047	23,705,472
Number of families	4,573,941	74,564,066
Number of single-parent headed families	705,588	10,816,345
Number of families below poverty level	496,913	7,282,926
Number of families below 200% of poverty level <sup>3</sup>	1,383,000	20,127,000
Number of children under 18 below 200% of poverty level <sup>3</sup>	1,797,000	28,757,000

**Children Under 6 with Parents in the Labor Force<sup>1</sup>**

	<b>NY</b>	<b>U.S.</b>
In two-parent families, both parents in labor force	490,192	8,677,275
In single-parent families, parent in the labor force	331,674	5,615,003
Total children under 6 needing child care, as parents work	821,866	14,292,278

**Women in the Labor Force<sup>1</sup>**

	<b>NY</b>	<b>U.S.</b>
With children under 6	502,258	8,798,303
Married with children under 18	947,189	16,429,799
Single with children under 18	440,283	6,720,483
Who had a birth in the past 12 months	142,016	2,397,953

**Child Care Costs, Family Incomes**

	<b>NY</b>	<b>U.S.</b>
Average, annual fees paid for full-time center care for an infant <sup>4</sup>	\$13,437	\$4,542-\$14,591
Average, annual fees paid for full-time center care for 4-year-old <sup>4</sup>	\$10,473	\$3,380-\$10,787
Average, annual fees paid for full-time care for an infant in a family child-care home <sup>4</sup>	\$9,521	\$3,900-\$9,630
Average, annual fees paid for full-time care for a 4-year-old in a family child-care home <sup>4</sup>	\$8,949	\$3,380-\$9,164
Average, annual fees paid for before and after school care for a school-age child in a center <sup>4</sup>	\$7,436	\$2,500-\$8,600
Average, annual fees paid for before and after school care for a school-age child in a family child care home <sup>4</sup>	\$6,448	\$2,080-\$7,648
Average, annual tuition and fees paid for 4-year state college <sup>5</sup>	\$5,090	\$6,185
Ratio of full-time infant care in a center: state college tuition and fees	2.6:1	0.7:1 – 2.8:1
Median annual family income of married-couple families with children under 18 <sup>6</sup>	\$79,894	\$72,948
Cost of full-time care for an infant in a center, as percent of median income for married-couple families with children under 18	17%	7.5%-16.9%
Median annual family income of single parent (female headed) families with children under 18 <sup>6</sup>	\$24,155	\$23,008
Cost of full-time care for an infant in a center, as percent of median income for single parent (female headed) families with children under 18	56%	25%-57%

<sup>1</sup> Unless otherwise noted, statistics in these sections are from the 2006 American Community Survey conducted by the U.S. Census Bureau ([www.census.gov](http://www.census.gov)).

<sup>2</sup> Based on the U.S. Census Bureau's population estimates for 2006 ([www.census.gov/popest/datasets.html](http://www.census.gov/popest/datasets.html))

<sup>3</sup> Families and children below 200% of poverty level are estimates provided by the U.S. Census Bureau, CPS 2006 Annual Social and Economic Supplement, available at [http://pubdb3.census.gov/macro/032006/pov/new46\\_001\\_185200.htm](http://pubdb3.census.gov/macro/032006/pov/new46_001_185200.htm).

<sup>4</sup> Data are provided by the State CCR&R Network and are derived from CCR&R data. Prices are actually the 75<sup>th</sup> percentile price and not averages.

<sup>5</sup> Average price of 2007-2008 tuition and fees for public four-year colleges by state, from the College Board, [Trends in College Pricing, 2007](http://www.collegeboard.com/prod_downloads/about/news_info/trends/trends_pricing_07.pdf). ([http://www.collegeboard.com/prod\\_downloads/about/news\\_info/trends/trends\\_pricing\\_07.pdf](http://www.collegeboard.com/prod_downloads/about/news_info/trends/trends_pricing_07.pdf))

<sup>6</sup> From the 2006 American Community Survey conducted by the U.S. Census Bureau ([www.census.gov](http://www.census.gov)).



## Appendix Q: 2008 Child Care in the State of New York

**Child Care Fee Assistance<sup>7</sup>**

	<b>NY</b>	<b>U.S.</b>
Number of families served	73,200	1,040,700
Number of children served	123,700	1,799,300
Number of child care providers participating	73,934	699,413
Percent of subsidized children cared for in licensed centers/homes	46%	73%
Percent of subsidized children cared for by relatives	21%	15%
Percent of subsidized children cared for in other non-regulated care	33%	13%

**Child Care Supply<sup>8</sup>**

	<b>NY</b>	<b>U.S.</b>
Number of centers	3,592	118,947
Number of nationally accredited child care centers <sup>9</sup>	358	10,876
Percent of child care centers that are accredited	10.0%	9%
Number of family child care homes	13,591	232,923
Number of nationally accredited family child care homes <sup>10</sup>	37	2,007
Percent of family child care homes that are accredited	0.27%	0.86%
Total number of child care spaces	595,261	≈ 10,780,000
Percent of slots that are in child care centers	41%	≈ 71%
Percent of slots that are in family child care homes	23%	≈ 19%

**Child Care Demand<sup>11</sup>**

	<b>NY</b>	<b>U.S.</b>
Percent requests for infant and toddler care	54%	45%
Percent requests for pre-school age care	25%	30%
Percent requests for school-age care	22%	25%
Percent requests for full-time care	81%	82%
Percent requests for part-time care	19%	18%
Percent requests for before and after-school care	7%	10%
Percent requests for non-traditional hour care	3%	14%

**Workforce and Training<sup>12</sup>**

	<b>NY</b>	<b>U.S.</b>
Number of child care workers (excludes self-employed providers)	63,130	572,950
Average income for full-time, year-round child care provider	\$22,050	\$18,820
Number of training sessions held by CCR&R agencies for providers	6,149	≈ 75,500
Average number of providers attending per training session	Not available	6 to 70
Total number of providers trained by CCR&R agencies	13,034	≈ 650,000
Number of on-site technical assistances provided by CCR&R agencies to child care programs	3,171	≈ 181,165
Number of child care programs receiving on-site technical assistance from CCR&R agencies	867	≈ 65,500

**Child Care Resource and Referral (CCR&R) Agencies**

	<b>NY</b>	<b>U.S.</b>
Number of CCR&R agencies	45	847
Type of State Network <sup>13</sup>		Coordinating Network

<sup>7</sup> These statistics are provided by the Child Care Bureau ([http://www.acf.hhs.gov/programs/ccb/data/ccdf\\_data/06acf800\\_preliminary/list.htm](http://www.acf.hhs.gov/programs/ccb/data/ccdf_data/06acf800_preliminary/list.htm)), from the 2006 Child Care Development Fund preliminary data, and are derived from monthly averages. Total number of child care providers includes paid relatives and other non-regulated caregivers.

<sup>8</sup> Data are provided by the State CCR&R Network and are derived from CCR&R data.

<sup>9</sup> Data obtained from the various national accrediting bodies that accredit child care centers. Number of accredited programs are based on data available as of February 2008. Number of accredited programs include Early Head Start/Head Start programs and those serving Department of Defense personnel exclusively.

<sup>10</sup> The number of accredited programs as of February 2008, provided by the National Association for Family Child Care Centers (NAFCC). Number of accredited family child care homes includes those serving Department of Defense personnel exclusively.

<sup>11</sup> Data are provided by the State CCR&R Network and are derived from CCR&R data.

<sup>12</sup> Workforce data are derived from the 2006 Occupational Employment Statistics survey by the Bureau of Labor Statistics, U.S. Department of Labor (<http://www.bls.gov/news.release/ocwage.t01.htm>); Training and on-site technical assistance data are provided by the State CCR&R Network and are derived from available CCR&R data. National on-site technical assistance data are based on a survey of local CCR&Rs conducted in 2006 by NACCRRRA.

<sup>13</sup> Coordinating and Managing networks have staff and are funded to coordinate the work of local CCR&Rs. Single Entity CCR&Rs cover an entire state. Voluntary networks rely on volunteers, and operate with little or no public funding.



### At-Home Infant Care (AHIC): A Side-by-Side Comparison of Federal and State Initiatives (10-05)

	FEDERAL	MINNESOTA	MONTANA*	NEW MEXICO
<b>History &amp; Status</b>	<p>There is no federal AHIC law, but legislation has repeatedly been introduced to establish federal support for state programs. Recent bills are listed below.</p> <p>In 2004, Congresswoman Rosa DeLauro (D-CT) introduced legislation (HR 3595) authorizing the creation of a program to assist states wanting to establish AHIC programs.</p> <p>In 2004 and 2005, a provision to fund at least 5 AHIC demonstration programs was included in the Temporary Assistance for Needy Families (TANF) reauthorization legislation.</p>	<p>In 1997, legislation passed authorizing the creation of an AHIC program. In July 1998, the program was implemented.</p> <p>In 2003, the law was repealed due to decreases in child care funding.</p> <p>In 2004, a bill reestablishing the program was introduced, and in Spring 2004 the Governor signed it into law. The law became effective July 1, 2004.</p> <p><i>See Minnesota Statutes 119B.035; Minnesota Rules 3400.0235</i></p>	<p><i>Pilot:</i> In 2002, an AHIC pilot program was established. The program was created by its administering agency, not by law. The agency ended the pilot program in March 2003.</p> <p><i>Law:</i> In June 2003, legislation (HB 569) authorizing the creation of an AHIC program was signed into law. Note: The program is unfunded as of September 2005. Legislation was introduced in the House in 2005 to secure state funding for the program, but the bill died in a tie vote.</p>	<p><i>Pilot:</i> In the summer of 2004, the Children, Youth and Families Department (CYFD) created a pilot At-Home Infant Care (AHIC) program. This pilot program provides subsidies for new parents in one county, Dona Ana County, to stay home and take care of an infant child.</p> <p><i>See SB 553 (2004) and SB 333 (2005).</i></p>
<b>Purpose</b>	Authorizes financial assistance to states seeking to create programs allowing eligible parents to receive partial wage replacement while on leave to take care of their infants.	Allows eligible parents to receive a subsidy to care for their infants.	Allows eligible parents to receive a subsidy to care for their infants.	Allows eligible parents to receive a subsidy to care for their infants.

\* Information on Montana applies to both the pilot program and the law unless otherwise noted.



AHIC: A Side-by-Side Comparison of Federal and State Initiatives

	FEDERAL	MINNESOTA	MONTANA*	NEW MEXICO
<b>Funding Source</b>	New federal funding stream through federal child care funds (known as the Child Care Development Block Grant (CCDBG)).	Funding is set aside from the annual appropriation for the Basic Sliding Fee program (3 percent of BSF). Funding is pooled at the state level and administered at the county level (counties submit requests for each family).	<i>Pilot:</i> TANF maintenance of effort funds.  <i>Law:</i> Unfunded. The law calls for use of federal AHIC funding should it become available.	Children, Youth and Families Department (CYFD) general funds.
<b>Costs</b>	Unknown, program not yet law.	For the state fiscal year (SFY) 2005, \$513,130 was allocated from the BSF for AHIC. However, only \$156,000 was exhausted. For the SFY 2006, \$176,572 will be allocated to the AHIC program.	Unfunded.	In July 2005, \$90,000 was appropriated to continue the program. See S.B. 190 and H.B 2
<b>Income Requirements</b>	Family income must be at or below 85 percent of state median income.	The family must be participating in or eligible for the Basic Sliding Fee (BSF) program or is participating in an “authorized activity” at the time of application.  The family must earn 175 percent of the federal poverty level (\$27,423 for a family of three) or less are eligible for the BSF, and therefore, AHIC. For SFY 2005, the monthly average of participants was 32.	Family income must be at or below 150 percent of the federal poverty line.  <i>Pilot only:</i> Family must meet requirements for the state’s child care assistance program.	Family income must be at or below 100 percent of the federal poverty line.  Family must meet income eligibility requirements to receive TANF.
<b>Age of Child</b>	Child must be under 2 years old.	Child must be under 1 year old.	Child must be under 2 years old.	Child must be under 2 years old.



### AHIC: A Side-by-Side Comparison of Federal and State Initiatives

	FEDERAL	MINNESOTA	MONTANA*	NEW MEXICO
<b>Participation in Other Programs</b>	Family may not access other child care assistance while enrolled in the AHIC program.	The family may not be participating in the state’s assistance programs - the Diversionary Work Program (DWP) or the Minnesota Family Investment Program (MFIP) - and cannot access any other child care or cash assistance.	Family may not access TANF cash assistance while enrolled in the AHIC program.	The family may receive TANF and cash assistance, if eligible. With exception to child care subsidies, the family may receive food stamps, Medicaid and other state or federal assistance while participating in the program.
<b>Work and/or Education Requirements</b>	<p>Prior to enrolling in the program, in single-parent families, the parent must have worked or attended education or training for not less than 60 hours in the last 3 months. In two-parent families, parents must have worked or attended education or training for 120 aggregate hours in the last 3 months.</p> <p>In two-parent families, the non-caretaking parent must work for compensation.</p>	<p>Prior to enrolling in the program, the caretaking parent must have been involved in an “eligible activity” (work, approved education or training, or job search) within 9 months prior to application. The parent does not need to return or plan to return to the authorized activity after receiving AHIC.</p> <p>The caretaking parent cannot be working or pursuing education or training while caring for the enrolled child.</p>	<p>Prior to enrolling in the program, in single-parent families, parent must have worked at least 60 hours, or worked 40 hours while attending post-secondary education or training, for one of three months prior to participation in the program. In two-parent families, parents must have worked 120 aggregate hours for one of three months prior to participation in the program. (<i>Pilot:</i> Both parents must have contributed to the hours required.)</p>	<p>The pilot program does not have any eligibility requirements prior to enrolling in the program. The bill would require parents to be at least 18 years of age and have received a general educational development certificate or completed high school. Adult members of the family must participate in parenting and early childhood education training approved by the department.</p> <p>The caretaking parent must be unemployed and cannot participate in other training or educational programs.</p>



AHIC: A Side-by-Side Comparison of Federal and State Initiatives

	FEDERAL	MINNESOTA	MONTANA*	NEW MEXICO
<b>Caretaking Requirements</b>	One parent must provide full-time care for child.	The parent must provide full-time care for the infant in the infant’s home. The parent must be 18 years of age or older. Only 1 parent is eligible to receive assistance. The requirements for caring for the child full-time can be met by 1 or both parents. Non-family members may care for the child(ren) but are limited to a maximum of 10 hours of care per week.  The parent must care for any other children in the family who are eligible for child care assistance. Extra assistance is not provided.	In two-parent families, care can come from either one or both parents, but parent(s) must provide full-time care for child.	One parent must be enrolled in the parenting and early childhood education training program and provide full-time care for the infant.
<b>Other Requirements</b>	Other requirements specified in the federal Child Care Development Block Grant (CCDBG).		Parents are required to complete a child development education plan outlining their development initiatives for the child.	The caretaking parent must be enrolled in the education training program administered at New Mexico State University.



**AHIC: A Side-by-Side Comparison of Federal and State Initiatives**

	<b>FEDERAL</b>	<b>MINNESOTA</b>	<b>MONTANA*</b>	<b>NEW MEXICO</b>
<b>Definitions</b>	Parent, Child and Family: As defined in the federal Child Care Development Block Grant (CCDBG).	Parent: birth parent, adoptive parent or stepparent.  Eligible Parent: Only 1 parent, in a 2-parent family, is eligible for assistance.  Child: a child from birth to 12 months of age, including adopted infants.	Parent: birth parent, stepparent, foster parent or guardian acting in loco parentis.  Child: a person 12 years old or younger, or a person age 13 or 14 that is handicapped.  Family: as defined in the state’s Best Beginnings Child Care Scholarship program.	Parent: adult caretaker with ongoing physical custody of an infant.  Infant: a child who is 23 months of age or less.  Department: Children, Youth and Families Department
<b>Subsidy</b>		The maximum rate of assistance is equal to 90 percent of the state’s maximum rate paid to a licensed family child care provider for full-time care of an infant in the applicant’s county of residence. (In 2001, it was 75 percent.)	100 percent of the state’s family child care rate established through the bi-annual market rate survey.	The average monthly subsidy is \$250. The bill, if passed, would provide a rate based on the average of child care reimbursement rates for toddler and preschool child care provided in registered homes and licensed family homes in the community where AHIC is provided.
<b>Limit on Length of Usage</b>	A caretaking parent can be enrolled in the program for up to 24 months (in the aggregate) during their lifetime. This time can be broken up and used for more than one child.	A family can be enrolled in the program for up to 12 months (in the aggregate) during the lifetime of the caretaking parent. This time can be broken up and used for more than one child.	A family can be enrolled in the program for up to 24 payments (in the aggregate) during the lifetime of the caretaking parent. A family can receive more than one payment per month for multiple children assuming they comply with the eligibility requirements.	A parent can only participate in the program for 1 year or until the child is 2 years of age.
<b>Lead Agency</b>		The Minnesota Child Care Assistance Program at the Minnesota Department of Human Services (formerly the Minnesota Department of Children, Families and Learning).	<i>Pilot:</i> The Department of Health and Human Services, Early Childhood Services Bureau (ECSB).  <i>Law:</i> Not specified.	The Children, Youth and Families Department (CYFD).



### AHIC: A Side-by-Side Comparison of Federal and State Initiatives

	FEDERAL	MINNESOTA	MONTANA*	NEW MEXICO
<b>Implementation and Administration</b>		The program is administered by county social services agencies.	<i>Pilot:</i> Program administered at the local level by Child Care Resource and Referral Agencies (CCR&RA)  <i>Law:</i> Not specified.	Child Care Services Bureau. Families take classes at New Mexico State University (NMSU).
<b>Application for Benefits</b>		The family applies for benefits to county social services agencies.	<i>Pilot:</i> Families apply for benefits to a Child Care Resource and Referral Agency (CCR&RA).  <i>Law:</i> Not specified.	Child Care Services Bureau
<b>Taxes</b>		Benefits are considered public assistance and are not taxable.	Benefits are considered income and are taxable.	Benefits are considered income and are taxable.



## Appendix S: NYC Females by Occupation

Bischoff & Chavkin (2008)

**NYC Female Workers by Occupation for the Civilian Employed Population 16 Years and Over**

Occupation	Estimated Number	Percentage (%) of all female workers in NYC	Median Earnings in the past 12 months (in 2006 dollars)
<b>Management, Professional, and Related occupations</b>	<b>717,482</b>	<b>40.28</b>	<b>\$49,269</b>
Management, Business, and Financial occupations	229,475	12.88	\$56,264
Professional and related Occupations	488,007	27.40	\$45,347
<b>Service Occupations</b>	<b>439,236</b>	<b>24.66</b>	<b>\$18,746</b>
Healthcare support Occupations	141,848	7.96	\$21,801
Protective service Occupations	29,928	1.68	\$32,264
Food Preparation & Serving related Occupations	61,523	3.45	\$15,866
Building and grounds Cleaning and maintenance Occupations	75,479	4.24	\$16,785
Personal care and service Occupations	130,457	7.32	\$15,484
<b>Sales and office Occupations</b>	<b>544,914</b>	<b>30.59</b>	<b>\$29,473</b>
Sales and related Occupations	185,640	10.42	\$22,172
Office and administrative			



## Appendix S: NYC Females by Occupation

Bischoff & Chavkin (2008)			
Occupation	Estimated Number	Percentage (%)	Median Earnings in the Past 12 Months (in 2006 Dollars)
Support Occupations	359,274	20.17	\$31,073
<b>Farming, fishing, and forestry occupations</b>	<b>151</b>	<b>0.01</b>	<b>\$47,580</b>
<b>Construction, extraction, maintenance, and repair occupations</b>	<b>8,201</b>	<b>0.46</b>	<b>\$31,820</b>
Construction and extraction Occupations	3,964	0.22	\$22,608
Installation, maintenance, and Repair occupations	4,237	0.24	\$45,870
<b>Production, transportation, and Material moving Occupations</b>	<b>71,331</b>	<b>4.00</b>	<b>\$16,832</b>
Production occupations	50,645	2.84	\$15,692
Transportation and Material Moving Occupations	20,686	1.16	\$21,207
<b>TOTAL NUMBER OF FEMALE WORKERS IN NYC</b>	<b>1,781,315</b>		
*Percentages do not add up to 100%			
Source: U.S. Census Bureau, 2006 American Community Survey			