

Part 1: Background

A. Glossary of terms:

- **Body mass index (BMI):** BMI is defined as weight (kg)/height (meters)².
- **Case-series:** Report of a number of cases of a disease/condition.
- **Case-control study:** Retrospective comparison of exposures of persons with disease (cases) with those of persons without the disease (controls).
- **Cohort studies:** Follow-up of exposed and non-exposed defined groups, with a comparison of disease rates during the time covered.
- **Confidence interval (CI):** The range of numerical values in which we can be confident (to a computed probability, such as 90 or 95%) that the population value being estimated will be found. Confidence intervals suggest the strength of evidence. Where confidence intervals are wide, they indicate less precise estimates of effect. The larger the trial's sample size, the larger the number of outcome events and the greater the confidence that the true relative risk reduction is close to the value stated. Thus when the confidence intervals are narrow the "precision" is increased. In a "positive findings" study the lower boundary of the confidence interval, or lower confidence limit, should still remain important or clinically significant if the results are to be accepted. In a "negative findings" study, the upper boundary of the confidence interval should not be clinically significant if the result is to be accepted with confidence.
- **Confounding variable/Confounder:** A variable that can cause or prevent the outcome of interest, is not an intermediate variable, and is associated with the factor under investigation. A confounding variable may be due to chance or to bias. Unless it is possible to adjust for confounding variables, their effects cannot be distinguished from those of factor(s) being studied.
- **Dose-response relationship:** A relationship in which change in amount, intensity, or duration of exposure is associated with a change - either an increase or decrease - in the risk of a specified outcome.
- **Etiologic fraction (EF):** EF is a measure of the proportion of cases caused by an exposure in the exposed population. It is measured and expressed as a percentage.
- **Intrauterine growth restriction (IUGR)*:** A fetus or infant who has not attained his/her intrauterine growth potential. Most publications regarding this subject define IUGR as a birth weight below the 3rd centile or below the 10th centile for gestational age. Studies using a definition based on an infant's growth potential were included in this review.
- **Low birth weight (LBW):** Birthweight less than 2,500g.
- **Odds ratio (OR):** An odds ratio is calculated by dividing the odds in the treated or exposed group by the odds in the control group. When the OR is adjusted for confounding variables it is called an adjusted OR.
- **Preterm birth*:** Birth occurring prior to 37 completed weeks of gestation (includes 36 weeks and 6 days).

- **Prospective study:** Study design where one or more groups (cohorts) of individuals who have not yet had the outcome event in question are monitored for the number of such events, which occur over time.
- **Randomized controlled trial:** Study design where treatments, interventions, or enrollment into different study groups are assigned by random allocation rather than by conscious decisions of clinicians or patients. If the sample size is large enough, this study design avoids problems of bias and confounding variables by assuring that both known and unknown determinants of outcome are evenly distributed between treatment and control groups.
- **Relative risk or risk ratio (RR):** The ratio of the probability of developing, in a specified period of time, an outcome among those receiving the treatment of interest or exposed to a risk factor, compared with the probability of developing the outcome if the risk factor or intervention is not present.
- **Retrospective study:** Study designs in which cases were individuals who had an outcome event in question. Data are collected and analyzed after the outcomes have occurred.
- **Small for gestational age (SGA):** An infant below the 10th centile for weight for his/her gestational age (some studies have used the definition of an infant below the 3rd centile).
- **Systematic review/Meta-analysis:** A review in which bias has been reduced by the systematic identification, appraisal, synthesis, and, if relevant, statistical aggregation of all relevant studies on a specific topic according to a predetermined and explicit method.
- **Very low birth weight (VLBW):** Birthweight less than 1,500g.
- **Weighted mean difference (WMD):** A method used to combine measures on continuous scales (such as weight), where the mean, standard deviation and sample size in each group is known.

*The terms “prematurity” and “intrauterine growth retardation” have been used in the past but in the recent literature they are commonly replaced by the more appropriate terms **preterm birth** (born preterm) and **intrauterine growth restriction**. Wherever possible in assessing the impact of a factor or an intervention we attempted to distinguish SGA from IUGR, but when not possible these terms were used interchangeably.