Background:
The Euro-Peristat network documented disparities in perinatal outcomes between countries in Europe in its reports published every 5 years, but trend analyses were limited because data were not collected annually.

Methods:
Using the Euro-Peristat PHIRI protocol, we estimated rates and assessed trends between 2015 and 2019 for preterm birth, stillbirth, neonatal mortality and caesarean delivery. Country-specific relative risks (RR) for year, modelled as a continuous variable, were estimated and random effects meta-analysis used to generate pooled RRs. Heterogeneity was measured with the I² statistic (percentage of variability in estimates due to heterogeneity rather than sampling error).

Results:
Stillbirth rates ≥24 weeks of gestational age (GA) varied in 2019 from <2.5 per 1000 births in Denmark, Estonia, Finland and Slovenia to over 4 per 1000 in Belgium, Cyprus, UK Wales and Lithuania. Preterm birth rates ranged from <6% in Lithuania, Finland, Latvia, Estonia and Denmark to 8% or more in Portugal, Belgium, UK Scotland and Cyprus. Fewer than 20% of births were by caesarean in Norway, the Netherlands, Finland, Estonia in comparison to one-third in Cyprus, Ireland, Italy, UK Scotland. Trends over time differed between countries and were not related to the level of the indicator: the pooled RR by year for preterm birth was 0.99 [0.99; 1.00] with five countries having significant decreases and three countries having increases. Caesarean section rates were stable overall (RR: 1.00 [0.99; 1.01]) but with high heterogeneity (I² = 99%); in six countries rates increased significantly, whereas in nine rates decreased between 2015 and 2019.

Conclusions:
European countries have varying rates and trends of the principal perinatal health indicators. Investigation of policies in high-performing countries could provide guidance for improvement elsewhere.