A new analysis of published studies found a 45% increased risk of congenital heart defects in newborns when women become pregnant via in vitro fertilization (IVF)/intracytoplasmic sperm injection (ICSI) than through spontaneous conception. The Ultrasound in Obstetrics and Gynecology analysis included 8 studies with 25,856 children obtained from IVF techniques and 287,995 children spontaneously conceived and a total of 2289 congenital heart defects. Congenital heart defects were found in 1.30% and 0.68% in the IVF/ICSI and spontaneous conception groups, respectively.

“We believe that IVF/ICSI pregnancies present an increased risk of CHDs as a consequence of early placental dysfunction; however this hypothesis should be demonstrated in future studies. We recommend fetal echocardiography in all pregnancies from IVF/ICSI,” said lead author Dr. Paolo Cavoretto, of the IRCCS San Raffaele Hospital, in Milan, Italy.