

## Indications for Fetal Echo

Congenital heart diseases are the most common type of fetal malformations, affecting about one-third of children with congenital anomalies (for an overall incidence of just under 1% of all live births). The most common cardiac defects are VSDs which are usually asymptomatic and close on their own. The incidence of VSDs can be as high as 5% of all live births if all infants received an echo. Outlined below are pre existing conditions as well as different medications that may predispose to fetal cardiac anomalies and therefore warrant a fetal echo in pregnancy.

### Maternal indications

- Alcohol exposure
- Family history: First degree relative or multiple second degree relatives with structural cardiac disease
- IVF conception
- Medication exposure (see supporting documentation for individual studies)
  - Ace Inhibitors
  - Indomethacin or other NSAID's after 20 weeks excluding ASA 81mg for at least 48 hours
  - Lithium
  - Cellcept
  - Antiepileptics
  - Parenteral Retinoids
- PKU
- Pre-existing diabetes mellitus or diagnosis in first trimester
- + Rho or La Antibodies (SSA, SSB)
- Known chromosome abnormality or genetic syndrome in 1<sup>st</sup> degree relative associated with congenital heart disease (e.g. 22q11.2 deletion syndrome, Noonan, CHARGE,)

### Fetal indications

- Abnormal four chamber view or three vessel view
- Extra-cardiac structural abnormalities (eg. CDH, abdominal wall defects, NTD, limb abnormalities)
- Fetal arrhythmia (Association with AV Canal defect)
- Hydrops fetalis
- Increased nuchal translucency ( $\geq 3.0$  mm)
- Monochorionic twin pregnancy
- Known fetal chromosomal abnormalities

#### Notification to Users

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*These algorithms are designed to assist the primary care provider in the clinical management of a variety of problems that occur during pregnancy. They should not be interpreted as a standard of care, but instead represent guidelines for management. Variation in practices should take into account such factors as characteristics of the individual patient, health resources, and regional experience with diagnostic and therapeutic modalities. The algorithms remain the intellectual property of the University of North Carolina at Chapel Hill School of Medicine. They cannot be reproduced in whole or in part without the expressed written permission of the school.* <http://www.mombaby.org>