

## **Use of ACEIs, ARBs, and Statins in Women of Childbearing Age**

Prescribing medications that may cause birth defects or result in neonatal complications is sometimes necessary for the appropriate medical management of women of childbearing age. Some medical conditions offer little choice of drug therapy because the medications used in their management are often associated with risks to the developing fetus (e.g. bipolar disorder and epilepsy), but others (e.g. hypertension and hyperlipidemia) offer clinicians more flexibility in drug selection.

Angiotensin converting enzyme inhibitors (ACEIs), angiotensin II receptor blockers (ARBs), and HMG-CoA reductase inhibitors (statins) are medications primarily used to treat patients with a variety of chronic cardiovascular or renal conditions. Their use has increased tremendously over the past several years, in part due to the increasing prevalence of these chronic diseases but also as a result of recent evidence-based clinical guidelines strongly encouraging their use in appropriate patients.<sup>1-3</sup>

Although these drugs have important benefits for certain patient populations, they also have been associated with fetal harm. Statins are FDA pregnancy category X and are contraindicated in women who are or may become pregnant. ACEIs and ARBs are category D in the second and third trimesters, and a recent report suggests increased risk in the first trimester as well.<sup>4</sup> The FDA has recommended drugs from these classes be avoided in any trimester.

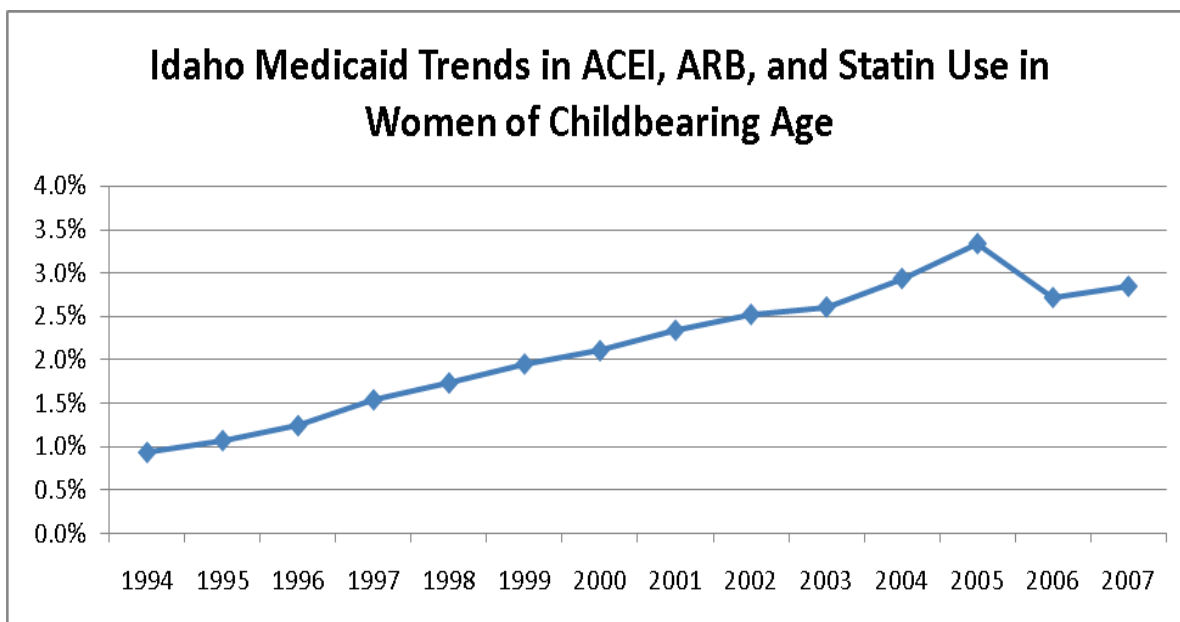
### **KEY POINTS**

- Current clinical practice guidelines highlight the need for increased utilization of ACEIs, ARBs, and statins that may pose increased risk to a developing fetus; use of these agents in childbearing age women in Idaho has increased 3-fold in the last decade.
- Although use of medications known to cause fetal harm is sometimes necessary in certain medical conditions, ACEIs, ARBs, and statins should always be avoided during pregnancy.
- Because more women of childbearing age are being affected by conditions that may require treatment with drugs associated with fetal risk, increased awareness on the part of clinicians is important.
- Drug utilization reviews in Idaho and other states have shown that ACEIs, ARBs, and statins are often prescribed to childbearing age women, even with no documentation of contraception.
- Contraception should be discussed, provided, and documented in women prescribed ACEIs, ARBs, and statins; and should be avoided in women for whom contraception is not desired or feasible.

*Idaho Drug Utilization Review Program*  
*Educational Leaflet for Physicians, Pharmacists, and other Healthcare Professionals*

In a recent review of Idaho Medicaid medical and pharmacy claims data, it was revealed that the use of ACEIs, ARBs, and statins has increased 3-fold among women of childbearing age since 1994 (see figure below). Rate of exposure to these drugs during pregnancy has likewise increased.

A recently published analysis revealed similar findings and reported that women who filled a prescription for category D or X medications were no more likely to than women who filled a prescription for category A or B medications to receive contraceptive counseling or medication.<sup>5</sup> Counseling on and providing for concurrent contraception is an important means of minimizing potential harm when prescribing medications posing increased fetal risk to women of childbearing age.



## References

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4. Cooper WO, Hernandez-Diaz S, Arbogast PG, et al. Major Congenital Malformations after First-Trimester Exposure to ACE Inhibitors. *The New England Journal of Medicine*. 2006; 354: 2443-2451.
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