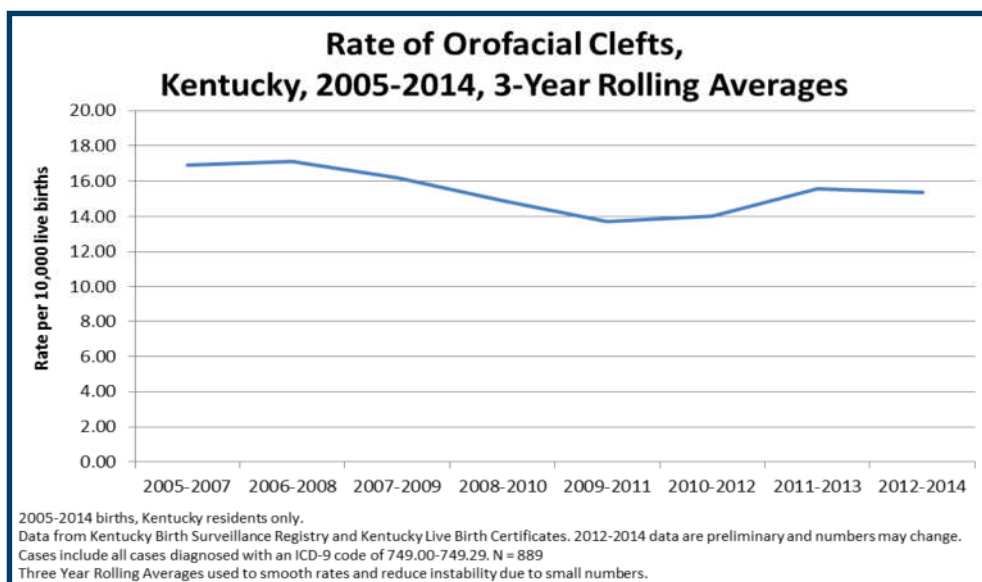




Orofacial Clefts

Orofacial clefts are birth defects that happen when the tissue that makes up a baby's mouth does not close entirely when it is forming.¹ Children with orofacial clefts often have problems with feeding and speech and might also have ear infections, hearing problems, and problems with their teeth.¹ The two types of orofacial clefts are **cleft palate** and **cleft lip**. In Kentucky, about 89 children are born every year with an orofacial cleft, which is a rate of 15.6 cases per 10,000 live births. The rate of orofacial clefts has been declining slightly over time (see graph below).



Causes

Multiple genetic and environmental factors likely influence the development of orofacial clefts although no specific genetic changes are known to be causative.¹

Isolated Cleft Palate: The roof of the mouth (palate) is formed between the sixth and ninth weeks of pregnancy.¹ A cleft palate happens if the tissue that makes up the roof of the mouth does not join together completely during pregnancy. For some babies, only part of the palate is open (incomplete cleft palate) while for others, the front and back of the palate is affected (complete cleft palate).¹

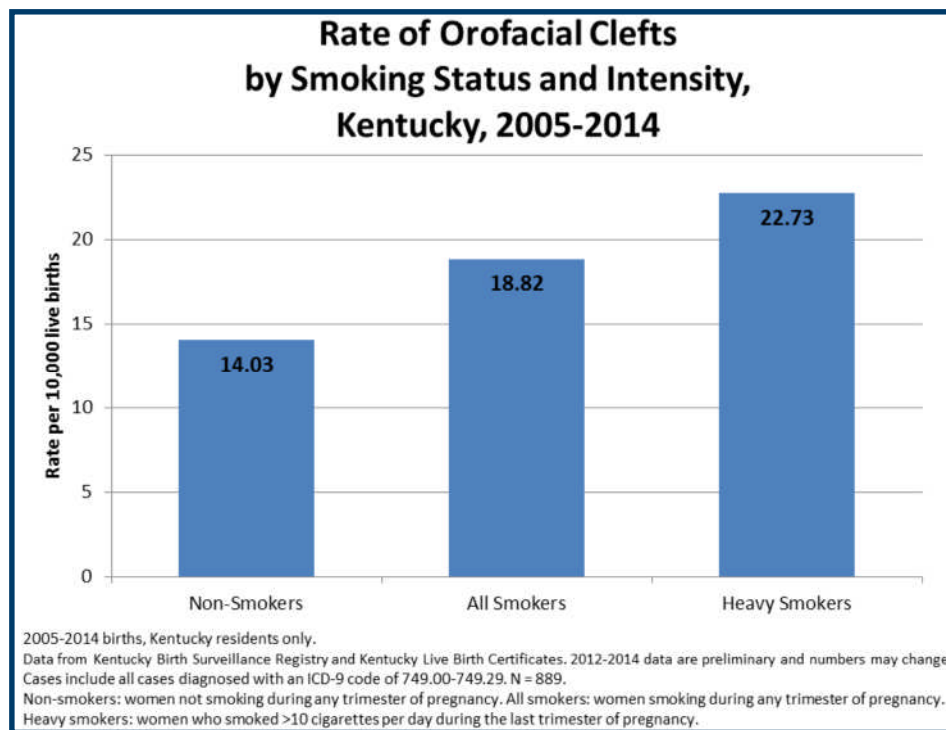
Isolated Cleft Palate		
	Number of Cases Annually	Rate per 10,000 live births
Kentucky	31	6.3
U.S. ²	2,651	6.3

Cleft Lip with or without Cleft Palate: The lip forms between the fourth and seventh weeks of pregnancy.¹ A cleft lip happens if the tissue that makes up the upper lip does not join completely before birth, which results in an opening. The opening can be a small slit (incomplete cleft lip) or it can be a large opening that goes into the nose (complete cleft lip). A cleft lip can be on one side of the lip (unilateral cleft lip), or both sides of the lip (bilateral cleft lip). Children with a cleft lip also can have a cleft palate but do not always.¹

Cleft Lip with or without Cleft Palate		
	Number of Cases Annually	Rate per 10,000 live births
Kentucky	58	10.2
U.S. ²	4,437	10.6

Risk Factors

- **Women with diabetes.**¹ According to Kentucky Birth Surveillance Registry (KBSR) data, having pre-existing diabetes doubles the risk of having a child with an orofacial cleft, and gestational diabetes increases the risk by 25%.
- **Non-Hispanic White women.**³ KBSR data reveal that Non-Hispanic Black women were approximately 35% less likely to have a child with an orofacial cleft, compared to Non-Hispanic White women.
- **Women who smoke during pregnancy.**¹ Compared to non-smokers (women who did not smoke during any trimester of pregnancy), smokers (women who smoked during at least one trimester of pregnancy) were about 35% more likely to have a child with an orofacial cleft according to KBSR data. Heavy smokers (women who smoked >10 cigarettes per day during the last trimester of pregnancy) were over 60% more likely to have a child with a cleft versus non-smokers. This data indicates a trend based on intensity of smoking, with higher risk of orofacial clefts related to greater tobacco exposure (see graph below).



Prevention

A woman might be able to reduce her risk of having a child with an orofacial cleft by monitoring her health during pregnancy through early and consistent prenatal care. Her provider can promote a healthy pregnancy by helping her manage health conditions, medications, and diet. Healthcare providers can also give advice about smoking cessation, which would help reduce the risk of having a child with an orofacial cleft.

References

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3. Centers for Disease Control and Prevention. Key findings: Racial and ethnic differences in the occurrence of major birth defects. National Center on Birth Defects and Developmental Disabilities. <http://www.cdc.gov/ncbddd/birthdefects/features/raciaethnicdifferences.html>. Last updated October 21, 2015. Accessed February 12, 2016.