Ep. 94 – How Birth Defect Surveillance Protects Moms & Babies: From Zika to Opioid Exposure

How do public health experts detect emerging risks to pregnancies before they become widespread crises? In this episode of The MotherToBaby Podcast, host Chris Stallman, genetic counselor, mom of four, and teratogen information specialist, sits down with Dr. Amanda Elmore, Assistant Professor of Maternal & Child Health at the University of South Florida, to explore the powerful role of birth defect surveillance.

Dr. Elmore shares how her career in public health began during the Zika virus epidemic—reviewing medical records of exposed infants to help the CDC understand the real-world impact of in-utero exposure. She explains how surveillance systems track structural and functional birth anomalies, serve as early warning systems for new and emerging exposures, and shape everything from clinical care and referral services to national public health policy.

The conversation also dives into:

- How surveillance led to rapid public health responses during the Zika crisis
- What neonatal abstinence syndrome (NAS) reveals about opioid exposure during pregnancy
- The push for real-time data using electronic medical records and health information exchanges
- How machine learning and natural language processing may transform how cases are identified
- Why a life-course perspective matters for children born with birth defects
- How surveillance data supports funding, prevention efforts, and long-term family services

Dr. Elmore also shares her vision for the future: a more standardized, timely, and integrated national system that can better support prevention, research, and lifelong care for affected children and families.

This episode offers a behind-the-scenes look at how data quietly powers some of the most important protections for moms and babies.

 Have questions about exposures during pregnancy or breastfeeding?
You can contact MotherToBaby for free, confidential, evidence-based information:
 Call: 866-626-6847
 Text: 855-999-3525
 Visit: https://mothertobaby.org/

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