

LAY ABSTRACT

TITLE: Pubertal development in girls by breast cancer family history: the LEGACY girls cohort

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Breast development, menstrual periods, and pubic hair development are puberty milestones that play a role in breast cancer risk. We studied how those three puberty milestones in girls in the LEGACY Girls Study were related to whether girls had a family member who had been diagnosed with breast cancer. We collected information about breast development, pubic hair development, and starting menstruation from 533 girls with a family history of breast cancer and 497 girls without a family history of breast cancer. We found that heavier body weight was related to earlier breast development

and pubic hair growth, and starting menstrual periods sooner. Girls with a family member with breast cancer were slightly more likely to have early breast development compared to girls without a family member with breast cancer. The total length of time from breast development to beginning menstrual periods was longer for girls with a family history of breast cancer. Our results suggest that a family history of breast cancer may be related to earlier breast development.