Pediatric cancer genetic counseling is a growing area of practice for genetic counselors. In addition to the complexity and lack of consensus guidelines for many pediatric cancer predisposition syndromes, there are unique ethical and psychosocial challenges. This study explored how genetic counseling programs are training their students in pediatric cancer genetic counseling. Surveys from 265 current students and recent graduates were analyzed. Almost all respondents reported instruction specific to pediatric cancer genetic counseling, and the majority (74%) felt that their program prepared them slightly or moderately well to provide pediatric cancer genetic counseling. While most respondents did not observe (64%) or counsel (69%) a patient with a current diagnosis of pediatric cancer during clinical rotations, more students had exposure to patients with a personal or family history of pediatric cancer. The highest number of respondents (41%) indicated the amount of training was “about right,” followed by “less than expected” (35%). Responses to open-ended questions revealed interest in further opportunities for training in the classroom and clinic. This study suggests that many respondents do not feel prepared or comfortable providing pediatric cancer genetic counseling at the time of graduation. However, they feel equipped to access resources and continuing education if interested.