Real-world sounds are rarely isolated pure tones. Instead, natural environments contain multiple sources of competing sounds that vary in both frequency and amplitude over time. The developing child must learn about important sounds such as speech in these complex sound environments. This presentation will focus on the development of hearing in the presence of competing sounds. Results from studies investigating the speech perception abilities of children in complex listening situations will be highlighted. It has been well documented that these environments offer a greater challenge for children than for adults with normal hearing sensitivity, but the results of recent studies indicate that children with hearing loss are at an even greater disadvantage that their peers with normal hearing. The perceptual processing of sounds in these challenging conditions may be delayed or altered for children with hearing loss if they experience reduced or degraded access to sound during early life.