The objective of this talk is to provide a contemporary review of ultrasound devices and techniques as applied to delivery of thermal therapy to the prostate. This technology allows focal treatment or direct destruction of tissue for treatment of cancer or benign prostatic hyperplasia (BPH), or as an adjunct in the delivery of radiation therapy or chemotherapy, including temperature targeted drug delivery. Two therapeutic regimens are explored – hyperthermia in the 40-45°C range and high temperature (>50°C) at lethal thermal dose exposures for thermal ablation. Commercial and clinical systems in development are reviewed including: transrectal high-intensity focused ultrasound (HIFU) systems integrated with ultrasound image guidance; transurethral and endorectal high-intensity ultrasound devices under MR guidance and control; interstitial ultrasound for hyperthermia integrated with HDR brachytherapy; and multi-sectored endorectal applicators for hyperthermia adjunct to external beam radiation therapy with potential for thermal sensitive drug delivery. These image guided ultrasound therapy systems have the promise to deliver selective and precise thermal therapy or larger volume hyperthermia as required for the specified strategy for treatment of prostate disease. Educational objectives include technical concepts and treatment strategies of ultrasound therapy technology applied to treating prostate disease.