On the November 22, 1998, broadcast of 60 minutes, Kevorkian allowed the airing of a videotape he had made on September 17, 1998, which depicted the voluntary euthanasia of Thomas Youk, 52, an adult male with full decisional capacity who was in the final stages of ALS. After Youk provided his fully-informed consent on September 17, 1998, Kevorkian himself administered a lethal injection. This was novel, as all of his earlier clients had reportedly completed the process themselves. During the videotape, Kevorkian dared the authorities to try to convict him or stop him from carrying out assisted suicides. This incited the prosecuting attorney to bring murder charges against Kevorkian, claiming he had single-handedly caused the death.

On March 26, 1999, Kevorkian was charged with first-degree homicide and the delivery of a controlled substance (administering a lethal injection to Thomas Youk) Kevorkian's license to practice medicine had been revoked eight years previously; thus he was not legally allowed to possess the controlled substance. As homicide law is relatively fixed and routine, this trial was markedly different from earlier ones that involved an area of law in flux (assisted suicide). Kevorkian, however, discharged his attorneys and proceeded through the trial pro se.

The Michigan jury found Kevorkian guilty of second-degree homicide. It was proven that he had directly killed a person because Thomas Youk was not physically able to kill himself. Youk, unable to assist in his suicide, agreed with Kevorkian under voluntary euthanasia: the consent to kill him using controlled substances. The judge sentenced Kevorkian to serve a 10-25 year prison sentence and told him: "You were on bond to another judge when you committed this offense, you were not licensed to practice medicine when you committed this offense and you hadn't been licensed for eight years. And you had the audacity to go on national television, show the world what you did and dare the legal system to stop you. Well, sir, consider yourself stopped." Kevorkian was sent to prison in Coldwater, Michigan.

In the course of the various proceedings, Kevorkian made statements under oath and to the press that he considered it his duty to assist persons in their death. He also indicated under oath that because he thought laws to the contrary were archaic and unjust, he would persist in civil disobedience, even under threat of criminal punishment. Future intent to commit crimes is an element parole boards may consider in deciding whether to grant a convicted person relief. After his conviction (and subsequent losses on appeal) Kevorkian was denied parole repeatedly.