Abstract: While there are many evidences of the effect of medical malpractice tort, research on the effect of medical malpractice criminal sanctions are rare. This paper tries to identify the causal effect of criminal prosecution utilizing exogenous variations over the likelihood of criminal prosecution. In 2004, a medical accident occurred in Fukushima prefecture, Japan and an obstetrician was prosecuted one year af- ter. This prosecution exogenously changed the likelihood of criminal prosecution in Fukushima prefecture. Using difference-in-differences strategy and synthetic con- trol strategy, we estimate the causal effect of criminal prosecution. The prosecution decreased the number of obstetricians by 14% and some of them changed their busi- ness to gynecology, which involves lower risk. However, the effect is concentrated on obstetricians, not all physicians. In addition, the paper shows that the sentence of acquittal did not resolve the effect caused by the initial prosecution. This illuminates the importance of criminal prosecution itself and social sanctions, not subsequent criminal sanctions.