

ABSTRACT

This paper studies the incentives created by liability rules on an actor who chooses a care level in several periods. An accident may occur, and harm result, in any period. If an accident does not occur, the effects of prior actions on the risk in the current period are cumulative in the sense that expected harm increases over time. If an accident occurs, the actor starts fresh in the next period.

Strict liability obviously induces the actor to choose levels of care identical to those that maximize social welfare. In this context, in an infinite period problem, the actor grows more careful over time; over a finite horizon, conditions under which care increases with time are identified.

"Forgiving" and "unforgiving" negligence rules are then defined and compared. Under a forgiving rule, responsibility for harm occurs only if the actor fails to meet her standard in the period in which the harm occurs. Many forgiving rules fail to induce socially optimal actions, though one optimal rule is identified. One may more easily design optimal, unforgiving rules but, over long time horizons, these rules approximate strict liability rules.

The model is motivated by concern over the generation of hazardous waste and over liability rules like those imposed by the Comprehensive Environmental Response, Compensation and Liability Act.