

An Analysis of Peer Effects on Vaccination Behavior
Using a Model of Privately Provided Public Goods

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Abstract

Traditional economic models of vaccination behavior simply assume that agents free ride on the vaccination decisions of others. We provide three different models of private provision of a public good, such as a joint production model and a conjectural variation model, to explain how a positive peer effect regarding vaccination behavior arises. We conduct two empirical studies using Japanese data in these models. The first empirical analysis, using a data set on the vaccination behavior of neighbors residing in the same block of a city, finds the existence of positive peer effects on individuals' vaccination decisions. The second empirical analysis also confirms that there are peer effects on the vaccination decisions of members of the same household using a dataset from the national survey we conduct.

JEL classification: H41; I12

Keywords: Peer effect; Public Good, Vaccination; Free-rider.

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