

## عنوان مقاله:

Backward bifurcations in epidemiological models

## محل انتشار:

اولین همایش ملی ریاضیات زیستی (سال: 1397)

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## نویسندگان:

Azizeh Jabbari - Marand Faculty of Engineering, University of Tabriz, Tabriz, Iran

Hossein Kheiri, - Faculty of Mathematical Sciences, University of Tabriz, Tabriz, Iran

Mohsen Jafari, - Faculty of Mathematical Sciences, University of Tabriz, Tabriz, Iran

Fatemeh Iranzad - Faculty of Mathematical Sciences, University of Tabriz, Tabriz, Iran

## خلاصه مقاله:

This paper is about the phenomenological study of bifurcations in epidemiological models, in particular, in backward bifurcation. We consider models that exhibit such bifurcation and also consider the factors that cause them. The phenomenon of backward bifurcation in disease transmission models, where a stable endemic equilibrium co-exists with a stable disease-free equilibrium when the associated reproduction number is less than unity, has been observed in a number of disease transmission models. The epidemiological consequence of backward bifurcation is that the classical requirement of the reproduction number being less than unity becomes only a necessary, but not sufficient, for disease elimination (hence, the presence of this phenomenon in the transmission dynamics of a disease makes its effective control in the community difficult).

## کلمات کلیدی:

Backward bifurcation, Equilibrium, Reproduction number, Stability

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/882658>

