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1 **Influenza virus activation of the interferon system.**

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8

9 **Abstract.**

10 The host interferon (IFN) response represents one of the first barriers that  
11 influenza viruses must surmount in order to establish an infection. Many  
12 advances have been made in recent years in the understanding of the  
13 interactions between influenza viruses and the interferon system. In this review,  
14 we summarise recent work regarding activation of the type I IFN response by  
15 influenza viruses, including attempts to identify the viral RNA responsible for IFN  
16 induction, the stage of the virus life cycle at which it is generated and the role of  
17 defective viruses in this process.

18

19 **Introduction.**

20 The influenza viruses are a leading cause of respiratory illness in humans and  
21 are responsible for annual seasonal outbreaks that have serious economic  
22 impact. In addition, the wide host range of the virus and the potential for genome  
23 reassortment between human influenza viruses and those of other species mean  
24 these viruses present a pandemic threat. To establish a productive infection and

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