Abstract: The threats posed by the recently declared influenza pandemic have sharpened public interest in public health emergency preparedness and augmented existing government efforts at improving response capabilities to outbreaks of influenza. These efforts started in the wake of the avian bird flu scare of the early 1990s, based on a realization of the need for proactive strategies to develop and implement response measures to widespread influenza outbreaks – including, in particular, the development and availability of vaccines. While public health experts have taken the lead in engineering a primarily government-driven preparation and response framework to address the threat of infectious disease (primarily influenza), policy makers recognize that effective preparation requires the engagement of both public and private sector capabilities and involvement. Recent legislation relating to public health emergencies has addressed some of the legal issues surrounding private sector involvement in the wake of large-scale influenza outbreaks, including limitations on liability for providers of emergency countermeasures. But despite the importance of innovations in medical technologies to improve responsiveness to infectious disease and the linkage of patent law and public health concerns at the international level, the role of innovation policy and, more specifically, patent law and policy, in creating or impeding effective responses to public health emergencies has been largely ignored in domestic policy discussions. This is particularly puzzling given that Congress is simultaneously considering patent reform and measures to improve emergency preparedness in the face of the recently declared influenza pandemic. I argue that a truly effective response to the outbreak of infectious disease requires a more thorough exploration of the role(s) that patent law might play as part of a proactive innovation policy informed by public health objectives. Incorporating considerations of public health into patent policy and coordinating patent policy with strategies for addressing critical public health needs are critical steps towards addressing missed opportunities for more effective public-health oriented innovation. As a starting point, I suggest measures to increase the flexibility of patent law to respond to evolving forms of public-private cooperation in developing and making available new vaccines, especially new generation vaccine technologies. While I focus in this paper on the role that patent policy can and should play in addressing the special challenges of vaccine development and, to a lesser extent, the development of antiretrovirals, many of the conclusions extend to the development of other drugs and medical technologies oriented towards addressing public health emergencies.