

# ZNAČAJ NACIONALNE „VAKCINALNE NEZAVISNOSTI“

## THE IMPORTANCE OF NATIONAL “VACCINE INDEPENDENCE”

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### SAŽETAK

U savremenom svetu gde se zarazne bolesti šire brže nego ikada, imunizacija ostaje naša najsnažnija odbrana. Vakcinacija je most koji povezuje iskustva prošlih pandemija sa nadom u budućnost bez epidemija - zasnovana na znanju, solidarnosti i pravovremenoj zaštiti. Međutim, globalne krize poput pandemije COVID-19, geopolitičkih tenzija i poremećaja u lancima snabdevanja pokazale su koliko su države koje zavise od uvoza vakcina ranjive, naročito u vanrednim situacijama. U tom kontekstu, koncept „vakcinalne nezavisnosti“ postaje ne samo strateško, već i pitanje nacionalne bezbednosti.

„Vakcinalna nezavisnost“ podrazumeva sposobnost jedne države da razvija, proizvodi i distribuiru vakcine za sopstvene potrebe. Osim što omogućava pravovremen i adekvatan odgovor na izbijanje epidemija, ona doprinosi stabilnosti zdravstvenog sistema, jačanju poverenja građana, ekonomskom razvoju i naučnoj autonomiji. Institut za virusologiju, vakcine i serume „Torlak“, sa tradicijom dugom jedan vek, predstavlja stub vakcinalne bezbednosti Srbije i regiona. Obnova i modernizacija kapaciteta Instituta omogućila je ponovo pozicioniranje Srbije kao značajnog aktera u regionalnoj vakcinalnoj politici. Tokom poslednjih godina, kroz strateška ulaganja i modernizaciju, Institut je napravio iskorak ka savremenim biotehnološkim kapacitetima koji omogućavaju brži i efikasniji odgovor na izazove savremenih epidemija. Posebno važan iskorak predstavlja izgradnja pogona za RNK (mRNA) tehnologiju, čime se Srbija svrstava među retke zemlje koje razvijaju i implementiraju ovu najsavremeniju platformu za proizvodnju vakcina nove generacije. Ova tehnologija omogućava brzu prilagodljivost u razvoju vakcina protiv novih sojeva virusa, što je od presudnog značaja u svetu brzih mutacija i pandemijskih pretinja. Pored toga, u okviru Instituta Torlak izgrađena je nova dijagnostička zgrada najvišeg bezbednosnog nivoa - BSL3, koja omogućava rad sa visoko patogenim mikroorganizmima. Time je značajno ojačan kapacitet za pravovremenu i preciznu laboratorijsku dijagnostiku zaraznih bolesti, ali i za razvoj i kontrolu bioloških preparata u skladu sa najvišim međunarodnim standardima.

Nacionalna „vakcinalna nezavisnost“ je oslonac zdravstvene bezbednosti svake države. Ona se ne gradi preko noći, već zahteva dugoročnu strategiju, političku volju i ulaganje u naučno-istraživačku i proizvodnu infrastrukturu. Očuvanje i jačanje institucija poput Instituta Torlak od presudne je važnosti za osiguranje dostupnosti vakcina, ali i za jačanje međunarodne saradnje i uloge Srbije u globalnim zdravstvenim okvirima.

Ključne reči: vakcine, vakcinalna nezavisnost, Institut Torlak, javno zdravlje, zdravstvena bezbednost, Srbija

### ABSTRACT

Nowdays, where infectious diseases spread faster than ever, immunization remains our most powerful defense. Vaccination is the bridge that connects the experiences of past pandemics with the hope for a future free from epidemics - grounded in knowledge, solidarity, and timely protection. However, global health crises such as the COVID-19 pandemic, geopolitical tensions, and disruptions in supply chains have revealed how vulnerable countries that rely on vaccine imports can be, especially in emergencies. In this context, the concept of "vaccine independence" becomes not only a strategic imperative but also a matter of national security.

“Vaccine independence” refers to a country's ability to develop, produce, and distribute vaccines for its own needs. Beyond enabling a timely and adequate response to disease outbreaks, it contributes to the stability of the healthcare system, strengthens public trust, supports economic development, and fosters scientific autonomy. The Institute for Virology, Vaccines and Sera “Torlak,” with a tradition spanning over a century, stands as a pillar of vaccine security for Serbia and the wider region. The renewal and modernization of the Institute's capacities have enabled Serbia to reposition itself as a significant factor in regional vaccine policy. In recent years, through strategic investments and modernization efforts, the Institute has taken an increase toward advanced biotechnological capabilities, enabling faster and more efficient responses to the challenges of modern epidemics.

A particularly important milestone is the establishment of a facility for RNA (mRNA) technology, placing Serbia among the rare countries developing and implementing this state-of-the-art platform for next-generation vaccine production. This technology allows for rapid adaptability in developing vaccines against emerging virus strains, which is crucial in a world of fast mutations and pandemic threats. Additionally, Torlak has built a new diagnostic facility with the highest biosafety level - BSL-3 - enabling work with highly pathogenic microorganisms. This has significantly enhanced the capacity for timely and accurate laboratory diagnostics of infectious diseases, as well as for the development and quality control of biological products in accordance with the highest international standards.

National “vaccine independence” is the core stone of any country's health security. It is not built overnight; it requires a long-term strategy, political will, and investments in scientific research and production infrastructure. Preserving and strengthening institutions such as the Torlak Institute is of vital importance not only for ensuring vaccine availability but also for bolstering international cooperation and Serbia's role in global health frameworks.

Keywords: vaccines, vaccine independence, Torlak Institute, public health, health security, Serbia