

Vaccines for influenza, other diseases will be 'printed' at home in the future

Rather than warehouses of refrigerated cures for static diseases, we need a highly distributed agile system for producing vaccines and medicines. We need biomanufacturing at the edge—not just the hub.

But don't envision edge biomanufacturing as giant factories and smokestacks. Instead, think of bioprinters that resemble inkjets, flexible enough to print a wide array of medicines.

...

While traditional vaccines involve producing proteins or even entire organisms on a massive scale, tests have shown that it's possible to vaccinate an animal by injecting some of its cells with DNA that encodes one of a pathogen's proteins. So a miniaturized DNA printer may be all we need to protect ourselves from many diseases.

Imagine versatile self-upgrading bioprinters extending into every pharmacy and medical office—each with a vast FDA-sanctioned repertoire of templates. This would be a game changer in public health and emergency response.

Prepping the nation for flu season? No need to guess which flu variant will be spreading months in advance and then bet it all on a massive centralized production run. Just print the precise vaccine required at thousands of locations across the country.

Read full, original post: [Printing vaccines at the pharmacy or at home will be the way of the future](#)