



National Center for Immunization & Respiratory Diseases

Vaccine 2D Barcoding for Mass Vaccinations

Mass vaccination in pandemics or outbreaks can magnify the challenges of standard vaccination operations. For example, vaccines may be administered in nontraditional settings by nontraditional vaccine providers. Supplies may be limited. That's why it's critical to report accurate data. Inaccurate data can misinform response efforts, endanger vaccine recipients, and introduce inefficiencies into pandemic operations and the vaccine supply chain.

Two-dimensional (2D) barcodes are found on most vaccines. Healthcare providers can use these to track vaccine products and capture accurate and complete data when a vaccine is administered. If scanning equipment and software are available, then scanning 2D barcodes on individual vaccine products for data entry can reduce some manual data entry challenges during mass vaccination.

2D scanning offers the following benefits to healthcare providers^{1,2}:

- ✓ Increases completeness and accuracy of lot number, expiration date, and National Drug Code recorded into an electronic medical record (EMR).
- ✓ Increases safety through EMR alerts (where available) to verify the product, validate the vaccine schedule, and check for contraindications, expired vaccines, and allergies.
- ✓ Expedites inventory entry and vaccine administration processes.

Inventory management

2D scanning can improve inventory management, increase data accuracy, and provide a more complete picture of current inventory for ordering as EMR technology allows. Accurate inventory management is critical to identify where vaccines have been distributed in the event of an emergency such as a vaccine recall.

Additional Resources:

Two-Dimensional Vaccine Barcodes: additional information on vaccine 2D barcode scanning

Guidelines for Large-Scale Influenza Vaccination Clinic Planning: guidance on mass vaccination clinic setup

¹ Centers for Disease Control and Prevention. **Findings Report: 2D Barcoding Scalability Pilot**

² Centers for Disease Control and Prevention. **Evaluation of the Impact of 2D Barcodes on Vaccine Secondary Packaging**