



NC DEPARTMENT OF  
**HEALTH AND  
HUMAN SERVICES**

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Division of Public Health

September 16, 2022

**MEMORANDUM**

**TO:** North Carolina Immunization Program (NCIP) Participants

**FROM:** Carrie Blanchard, PharmD, MPH  
Interim Immunization Director *CB*

**SUBJECT: 2022 Hurricane Season Preparedness**

The purpose of this memo is to remind NCIP providers of the 2022 hurricane season and to ensure you are prepared ahead of time for severe weather conditions that might impact your facility. The 2022 Atlantic hurricane season is ongoing and part of the annual tropical cyclone season in the Northern Hemisphere. It officially began on June 1 and will end on November 30. During the months of June through November, hurricanes or tropical storms could pose a threat to North Carolina. Proper preparation is key to successfully handling an emergency, whether it is a hurricane, unexpected power failure, or a refrigerator or freezer malfunction. A direct storm impact is not required to have effects from a hurricane. Some of the worst historical damage is from slow moving or stalled tropical storms, not hurricanes. If a hurricane makes landfall, the Immunization Branch will coordinate vaccine response efforts with State and Local Preparedness and Local Health Departments to deliver Tdap vaccine to locations in need. In preparation of hurricane readiness, we ask that you take the following steps and precautions to protect your vaccines before an emergency.

*To ensure your facility is ready, please take a moment to review your vaccine storage and handling preparedness:*

- Once you're under pressure, having a written plan will take the guesswork out of what you need to do to protect your vaccine supply.
  - Review and update if your Emergency Vaccine Management and Routine Vaccine Management Plans if needed.
  - Ensure all staff are familiar with emergency management plans including after-hours roles and responsibilities.
- Remember that in flood-prone areas, disaster threats to your facility may continue for days after the initial storm has passed.
- Suspend vaccination activities whenever possible **BEFORE** the onset of emergency conditions to allow enough time to prepare your office for the conditions expected.
- Vaccines should be sheltered in place, when at all possible. We request that you only move vaccines when it is apparent that you will be without power for an extended amount of time, and it is safe for you to do so.
  - Know where you will get your supplies now. It may be difficult to acquire supplies during an emergency.
- Make sure any vaccine supplies, such as ancillary kits for COVID vaccine, are stored on shelves off the floor to prevent damage from potential flooding.

**NC DEPARTMENT OF HEALTH AND HUMAN SERVICES • DIVISION OF PUBLIC HEALTH, IMMUNIZATION BRANCH**

LOCATION: 5601 Six Forks Road, Building 2, Raleigh, NC 27609  
MAILING ADDRESS: 1917 Mail Service Center, Raleigh, NC 27699-1917  
www.ncdhhs.gov • TEL: 919-707-5550 • FAX: 919-870-4824

AN EQUAL OPPORTUNITY / AFFIRMATIVE ACTION EMPLOYER

- Set up and maintain a monitoring/notification system during times of inclement weather or other conditions that might cause a power outage.
- Test emergency generator(s) if you have them and review their test log(s) to make sure the weekly/monthly tests are successful and verify enough fuel is available for at least 72 hours of continuous use.
- Review the vaccine transport guide(s) and verify that you have the appropriate packing materials to safely transport or temporarily store your vaccine. Please consider the availability of supplies during planning and give yourself additional time to acquire materials necessary for transport or storage.
  - [https://www.immunize.nc.gov/providers/ncip/pdf/transport\\_guidance.pdf](https://www.immunize.nc.gov/providers/ncip/pdf/transport_guidance.pdf) for general vaccine transport guidance
  - <https://covid19.ncdhhs.gov/media/3070/download?attachment> for COVID-specific guidance
- Use a CDC acceptable certified, calibrated digital data logger to monitor temperatures. Place new batteries in your digital data logger thermometers. If the primary data logger can easily be moved, it may be packed with the vaccine being transported if a backup is not available.
- Confirm that your staff have a current Tdap booster as recommended by the Advisory Committee on Immunization Practices (ACIP). If not, make plans now to fully immunize all staff members, so they are protected before an emergency occurs.

#### Key points to remember if a power failure occurs:

- Determine the cause of the power failure and estimate the time it will take to restore power. If a time frame for the restoration of power cannot be determined, **do not leave vaccine in a non-working unit.**
- Maintain thermal conditions during a power outage, never open the storage unit door until power is restored or it is determined that vaccines need to be packed in separate storage containers and/or transported to an alternative storage facility. The storage unit temperature may be maintained with the proper amount of water bottles in the refrigerator and frozen water bottles in the freezer. You should have at least a case (24) of 8 or 16.9 fluid ounce frozen water bottles on-site, that can be conditioned and used for transport.
- Begin preparing for your emergency procedure – shelter in place or transport, **if necessary**– after 30 minutes of a power outage. This includes pre-chilling on-site coolers or calling your emergency back-up location to prepare for your probable arrival. Please consider the type of vaccine you are transporting and the storage capacity at the location the vaccine is being moved to.
- Place a digital data logger with your vaccines during transport and monitor the data logger thermometer to ensure vaccines remain within the appropriate temperature range(s). It is critical to avoid freezing vaccine during transport (improperly packing vaccine with ice can damage vaccines). Damage to the immunogenicity of a vaccine exposed to temperatures outside of the recommended range might not be visually apparent.
- Do not wait for refrigerator temperatures to reach 8°C (46° F) or freezer temperatures to reach -15°C (5°F) to begin your emergency vaccine procedures. **Reminder:** immediate action is required when temperatures fall outside the recommended range(s).
- Document the date and time vaccine was moved to the back-up location and monitor temperatures in the back-up refrigerator/freezer where vaccine(s) are stored. Back-up storage units must adhere to the same requirements as the primary storage units.

#### When power has been restored:

- Record the temperature in the unit as soon as possible after power has been restored. Continue to monitor the temperatures until they reach the normal 2–8°C range in the refrigerator, or -15°C or colder in the freezer. Be sure to record the duration of increased temperature exposure and the maximum temperature observed.
- Keep exposed vaccine separated from any new product you receive and continue to store at the proper temperature(s), if possible. Please note that during natural disasters, which may impact large geographical areas, vaccine shipments could be suspended due to road conditions.
- Do not discard or administer vaccines exposed to out-of-range temperatures. Mark exposed vaccine with the date and time and label “DO NOT USE,” move the exposed vaccine to an approved working storage unit at your back-up location, and contact the Immunization Branch at 1-877-873-6247, to report the incident and for further instruction.

Additional guidance on vaccine storage and handling is available from the CDC at: <https://www.cdc.gov/vaccines/hcp/admin/storage/index.html>.

Please call the Immunization Branch at 1-877-873-6247 for storage and handling staff or call the storage and handling staff directly at 919-707-5574 if you have questions or need assistance with preparedness. Please also note that the Immunization Branch may be closed during times of inclement weather. However, if our office is closed, please leave a message and one of our helpdesk staff will return your call as soon as possible. Messages left after 5 p.m. will be returned as soon as possible on the next business day.

Please regularly check the Immunization Branch website (<https://immunize.nc.gov>) or the North Carolina Immunization Registry announcements to ensure you have the most up-to-date information possible.

If you prepare for the worst, then you will only have *good* surprises.

cc: Management Team	IB Staff	Vaccine Manufacturers	Elizabeth Hudgins	Brian Combs
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