MEMORANDUM

TO: North Carolina Immunization Program (NCIP) Participants

FROM: Wendy Holmes, R.N., Head Immunization Branch

SUBJECT: 2019 Hurricane Season Preparedness

The purpose of this memo is to remind NCIP providers of the upcoming hurricane season and to ensure you are prepared ahead of time for severe weather conditions that might impact your facility. 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. In preparation, we ask that you take the following steps and precautions to protect your vaccine supply before an emergency.

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

- Keep a copy of your Emergency Vaccine Management Plan and Routine Vaccine Management Plan on or near your refrigerator and freezer where vaccine is stored at all times. All Emergency Vaccine Management Plans and Routine Vaccine Management Plans must be reviewed and updated annually or within the past 12 months and include a signature of the individual responsible for the content. [www.immunize.nc.gov/providers/storageandhandling.htm](http://www.immunize.nc.gov/providers/storageandhandling.htm)
- Review Routine Vaccine Management and Emergency Vaccine Management Plans to ensure they are current. All staff who might receive vaccine deliveries (current, new, and temporary) should be familiar with storage and handling plans and understand what to do in the event of refrigerator or freezer malfunctions, power failures, natural disasters, or other emergencies. Building maintenance, janitorial and security staff should also be aware of the plans and know the procedures to notify designated staff about any potential problems with the vaccine storage equipment or power outages.
- Ensure the primary and back-up vaccine coordinators are appropriately trained in routine and emergency policies and procedures, tracking weather conditions and severe weather patterns, and safe transportation of vaccine, if needed. Please note in flood-prone areas, disaster threats to your facility may continue after the initial storm has passed.
- Set up and maintain a monitoring/notification system during times of inclement weather or other conditions that might cause a power outage.
- Suspend vaccination activities whenever possible BEFORE the onset of emergency conditions to allow enough time to pack and transport vaccine.
- Review the vaccine transport guide and verify that you have the appropriate packing materials to safely transport or temporarily store your vaccine, including a certified calibrated datalogger to monitor...
temperatures. Place new batteries in your digital data logger thermometers. If the primary datalogger can easily be moved, it may be packed with the vaccine being transported if a backup is not available. (https://www.immunize.nc.gov/providers/ncip/pdf/transport_guidance.pdf)

- Test emergency generators if you have one and review their test log(s) to make sure the weekly/monthly tests are successful and verify enough fuel is available for one- or two-days use.

**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 8.0 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 – 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.
- 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.
- 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).

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 less 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, 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 a 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, option 4, to report the incident and for further instruction.

Additional guidance on vaccine storage and handling may be found at: https://www.cdc.gov/vaccines/hcp/admin/storage/index.html

Please call the Immunization Branch at 1-877-873-6247 and press option 4 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, in the event that 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 pm will be returned as soon as possible on the next business day.

cc: SMT IB Staff Vaccine Manufacturers Elizabeth Hudgins Brian Combs Gregg Griggs Harita Patel Terri Pennington Ann Nichols Robin Barfield