June 23, 2020

Ms. Barbara MacKenzie  
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NIOSH  
Dept. Of Health and Human Services  
Centers for Disease Control and Prevention  
Robert A. Taft Laboratories  
1090 Tusculum Ave, MS-C26  
Cincinnati, OH 45226

Re: Docket ID No. CDC-2020-0046 and NIOSH-233-C

Dear Ms. MacKenzie,

The National Home Infusion Association (NHIA) appreciates the opportunity to submit comments on NIOSH’s three proposed documents: NIOSH Procedures for Developing the NIOSH List of Hazardous Drugs in Healthcare Settings; NIOSH List of Hazardous Drugs in Healthcare Settings 2020; and Managing Hazardous Drug Exposures: Information for Healthcare Settings published in the Federal Register on May 1, 2020. NHIA is the trade association that represents home and specialty infusion therapy providers, as well as companies that manufacture and supply infusion and specialty pharmacy products. As the leading voice for the industry, we write to share our comments on the proposed changes to the current NIOSH documents, most recently revised in 2016.

For more than 40 years, home infusion pharmacies have safely, and effectively coordinated services associated with administering intravenous medications, including hazardous drugs, to patients in their homes. With the recent changes in United States Pharmacopeia (USP) standards related to hazardous drug compounding, many home infusion and specialty providers have adapted to the recommendations of USP General Chapter <800> Hazardous Drugs – Handling in Healthcare Settings¹. NHIA appreciates the efforts NIOSH to improve and clarify the management, compounding, and administration of hazardous drugs.

¹ USP General Chapter <800> Hazardous Drugs https://www.usp.org/compounding/general-chapter-hazardous-drugs-handling-healthcare
On page 25440, the agency specifically invites comments on two questions related to this topic. NHIA’s opinion on question one is listed below. At this time, NHIA does not have any opinion on botulinum toxin as this is not a widely used product in home and specialty infusion.

1. Which unique identifier is most useful for users of the NIOSH List of Hazardous Drugs in Healthcare Settings?

   It is NHIA’s opinion, the generic drug name is currently used and most appropriate. Chemical names, CAS numbers, and brand names are not commonly used in the healthcare setting and use of generic name is preferred.

**NIOSH Procedures for Developing the NIOSH List of Hazardous Drugs in Healthcare Settings**

1. On page XXX, section IV., the NIOSH definition of a “hazardous” drug is a drug that is approved for use in humans by the FDA’s center for Drug Evaluation and Research (CDER). Footnote 12 indicated that although biologic products, such as vaccines, blood and blood components, allergenics, somatic cells, gene therapy, tissues, recombinant therapeutic proteins, are included in the FDA definition of a drug, they are not included in the drugs that NIOSH evaluates for potential inclusion on the List because they are approved for use by FDA’s Center for Biologic Evaluation and Research (CBER), not the FDA’s CDER. The botulinum toxins is an example of this. NHIA agrees that these agents should not be considered for addition to the NIOSH List of Hazardous Drugs in Healthcare Settings.

2. Page 12, section V states those drugs “known to be a human carcinogen” or “reasonably anticipated to be a human carcinogen” are listed as criteria. However, in the NIOSH List of Hazardous Drugs in Healthcare Settings, page 10, the statement “Table 1 now includes drugs that meet the NIOSH definition of a hazardous drug and contain MSHI in the package insert, and/or are classified by the NTP as “known to be a human carcinogen....” and in the NIOSH List of Hazardous Drugs in Healthcare Settings 2020, page 10, the statement is made “...but are not drugs which have MSHI or are classified by the NTP as “known to be a human carcinogen...” Both statements negate the statement “reasonably anticipated to be a human carcinogen.” NHIA recommends that the procedures document and the List are aligned with the definitions and include them both in the NIOSH List of Hazardous Drugs in Healthcare Settings 2020 document.

3. Page 9, under B Step 2 and page 18 under E. Step 5, Category 1-Insufficient Toxicity Information Available to Meet NIOSH Definition of Hazardous Drug. This exclusion could be disconcerting due to approval of a drug that could pose a risk to employees. On page 25441 of the Federal Register, Vol. 85, No. 85, Friday May 1, 2020, we recognize this was address by both the peer review and with NIOSH response, however NHIA is concerned there is no consistent requirement or standard for drug manufacturers to ensure information is provided in the product labeling related to potential for special handling. NHIA recommends NIOSH work with the FDA to develop procedures for manufacturers that will ensure consistency in providing this information.
NIOSH List of Hazardous Drugs in Healthcare Settings, 2020

1. Page 11, CAUTION section, states the list is not all-inclusive and drugs that were reviewed, were new drug approvals, or those with new safety-related warnings from the FDA during the period between January 2014 and December 2015. The current proposal leaves an approximate 5-year gap of new drug approvals or those drugs with updated safety related warnings up to the responsibility of each home infusion provider. NHIA recommends review and inclusion of drug approved through 2019 prior to publication of the final NIOSH List of Hazardous Drugs in Healthcare Settings.

2. NHIA recommends that the inclusion of hormonal agents, such as estrogens, in Table 1, be reconsidered and those that have reproductive risk be moved to Table 2 with the NIOSH criteria as a developmental and/or reproductive hazard. Those in Table 1 that have other toxicities other than reproductive be moved to Table 2. This would align with the American Hospital Formulary Service (AHFS) class assignments of 10:00 antineoplastic agents.

3. NHIA recommends the exclusion of non-conjugated monoclonal antibodies from the list. Table 1 has a listing of hazardous drugs with variable levels of occupational exposure and risk. Monoclonal antibodies do not have direct cytotoxic action like conventional antineoplastic agents. The potential harmful effects of these agents are not due to exposure from preparation, but rather due to physiological activity in vitro. These agents do not directly or indirectly damage DNA or RNA and are therefore not considered to be teratogenic, mutagenic, or carcinogenic. Dermal, oral, mucosal, or respiratory exposure will be mitigated via standard person protective equipment (PPE) required to be worn during non-hazardous drug compounding. NHIA’s opinion is that all monoclonal antibodies should be removed from the NIOSH List of Hazardous Drugs in Healthcare Settings.

4. NHIA recommends removal of blinatumomab from Table 2 of the list. This product is known to cause organ toxicity and neurotoxicity in vitro, therefore occupational exposure risk is negligible. See comment #3 for more details as to our reasoning behind recommendation for removal from the list.

5. NHIA recommends that ganciclovir and valgancyclovir be moved to Table 2 rather than Table 1. There is no supplemental information for the change to Table 1 from Table 2 in the proposed draft. With no evidence provided to support the decision to include these agents in Table 1 and with confusion regarding the application of USP Chapter <800> Hazardous Drugs-Handling in Healthcare Settings, the standard for home infusion pharmacies, NHIA recommends leaving these agents in Table 2.

Managing Hazardous Drug Exposures: Information for Healthcare Settings

1. NHIA recommends that provision for compounding of hazardous drugs be aligned with USP Chapter<800> Hazardous Drugs-Handling in Healthcare Settings released in 2019. The chapter outlines all relevant policies and procedures to safely and effectively compound hazardous drugs while protecting personnel from risk and exposure by establishing standards for all procedures related to storing, handling, and compounding.
hazardous drugs in healthcare facilities. NIOSH references the Oncology Nursing Society standards, but these standards do not apply in pharmacies that routinely handle these products during the preparation process. USP <800> is the nationally accepted standard for protecting pharmacy employees and the conspicuous lack of reference by NIOSH will result in potential harm of exposure of these employees to hazardous drugs.

2. NHIA recommends use of the Resource Conservation and Recovery Act (RCRA)\(^4\) published by the Environmental Protection Agency (EPA) hazardous waste disposal. RCRA has regulations governing hazardous waste identification, classification, generation, management, and disposal. These regulations also protect employees from exposure after hazardous drugs are compounding by providing strict direction on proper disposal and handling.

3. Page 14, last definition, for containment-segregated compounding area (C-SCA), instead of "with a Biological Safety Cabinet (BSC) or Compounding Aseptic Containment Isolator (CACI)\(^1\), NHIA would recommend stating “with a primary engineering control.” NHIA also recommends eliminating the use of low- or medium-risk level sterile preparations and use wording referring to “when preparing sterile preparations, assign appropriate beyond use dates (BUDs).” Risk-level categories have been removed in the recent update to USP Chapter <797>.

4. Page 44 does not indicate the use of sterile gloves. NHIA as well as USP, American Society of Health-System Pharmacists (ASHP), and others recognize the use of sterile gloves as best practices, with the use of two pairs of gloves while compounding hazardous drugs. In addition, the reference to repeated sanitization is relevant, however, use of spray action is not a best practice and gels can interfere with the integrity of glove composition. We would suggest wording stating “when compounding hazardous drugs, use sterile gloves with frequent sanitization with sterile isopropyl alcohol (sIPA) 70% and allow them to dry.”

5. Page 57, chart has dosage forms and volumes that are not compatible with Closed System Transfer Devices (CSTDs) in the suggested scenarios. NHIA recommends consideration of a statement such as “if the dosage form allows.”

In NHIA’s opinion, drugs listed in the 2016 version of the list, Table 3, should not be moved to Table 2. NHIA’s opinion is to keep the three-table format and maintain Table 3 as was done previously or in an appendix to the list. These agents met the criteria for “developmental and/or reproductive hazard” which are now being combined with agents that meet the definition of MSHI or are classified by NTP as “known to be carcinogenic” or classified by IARC as “carcinogenic” or ‘probably carcinogenic” and has potential to cause confusion for how exactly these agents should be handled. NHIA believes this change needs to be reevaluated keeping in mind the focus of employee safety in the handling and compounding of these medications.

In conclusion, NHIA asks NIOSH to adopt the recommendations for CDC-2020-0046 and NIOSH-233-C. We feel that these recommendations align with the home infusion and specialty pharmacy industry and will allow providers to continue to service patients while maintaining the safety of the industry’s workforce.
NHIA appreciates the opportunity to provide comments on these important documents. For questions or additional information, please contact info@nhia.org.

Sincerely,

Connie Sullivan, BSPharm
President & CEO