Oral benzocaine products – Safety communication

- On May 23, 2018, the FDA announced that over-the-counter (OTC) benzocaine products should not be used to treat infants and children < 2 years of age.
    - The FDA is also warning that these products should only be used in adults and children ≥ 2 years of age if they contain certain warnings on the drug label.
- Benzocaine products carry serious risks and provide little to no benefits for treating oral pain, including sore gums in infants due to teething.
- Benzocaine can cause methemoglobinemia, a condition in which the amount of oxygen carried through the blood is greatly reduced. This can be life-threatening and result in death.
- Benzocaine is a local anesthetic contained in some OTC products for the temporary relief of pain due to minor irritation, soreness, or injury of the mouth and throat.
    - They are marketed as gels, sprays, ointments, solutions, and lozenges under brand names such as Anbesol®, Orabase®, Orajel™, Baby Orajel, Hurricaine®, and Topex®, as well as store brands and generics.
- Due to the significant safety risk of methemoglobinemia, the FDA has urged manufacturers that they should stop marketing OTC oral drug products for treating teething in infants and children < 2 years of age.
- If companies do not comply, the FDA will take action to remove these products from the market. The FDA has also urged manufacturers of OTC oral drug products containing benzocaine for adults and children ≥ 2 years of age to make the following changes to the labels of their products:
    - Add a warning about methemoglobinemia and contraindications, directing parents and caregivers not to use the product for teething and not to use in infants and children < 2 years of age.
    - Revising the directions to direct parents and caregivers not to use the product in infants and children < 2 years of age.
- The FDA is also requiring a standardized methemoglobinemia warning to be included in the prescribing information of all prescription local anesthetics.
- Prescription local anesthetics include articaine, bupivacaine, chloroprocaine, lidocaine, mepivacaine, prilocaine, ropivacaine, and tetracaine.
    - Prescription local anesthetics are given as an injection into the body area that needs to be numbed for minor procedures or surgeries, or they are applied directly to the skin or mucous membranes.
- Parents and caregivers should follow the American Academy of Pediatrics' recommendations for treating teething pain:
    - Gently rub or massage the child's gums with one of your fingers.
    - Use a firm rubber teething ring.
- Topical pain relievers and medications that are rubbed on the gums are not useful because they wash out of a baby's mouth within minutes. The FDA has previously cautioned parents and caregivers to not give certain homeopathic teething tablets to children.

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- Alternative treatments for adults who experience mouth pain may include a dilute salt water mouth rinse and OTC pain relief medications. Adults should follow the American Dental Association's recommendations for mouth sores and spots:

    — Schedule regular oral health checkups.
    — Keep a food and drink diary and a list of oral hygiene products in use.
    — Avoid all tobacco products.
    — Moderate alcohol intake, if applicable.
    — Notify a dentist if there are any changes in the mouth.

- Consumers using benzocaine products to treat mouth pain should seek immediate medical attention if they experience signs and symptoms of methemoglobinemia such as pale, gray or blue-colored skin, lips, and nail beds; shortness of breath; fatigue; confusion; headache; lightheadedness; and fast heart rate.

    — Signs and symptoms of methemoglobinemia may appear within minutes to one to two hours after using benzocaine. Symptoms may occur after using benzocaine for the first time, as well as after prior uses.

- Healthcare providers should warn patients of the possibility of methemoglobinemia and advise them of the signs and symptoms when recommending or prescribing local anesthetic products.

- Healthcare providers using local anesthetics during medical procedures should take steps to minimize the risk for methemoglobinemia. These include monitoring patients for signs and symptoms suggestive of methemoglobinemia; using co-oximetry when possible; and having resuscitation equipment and medications readily available, including methylene blue.

- Some patients including those with asthma, bronchitis, emphysema, heart disease, and the elderly are at greater risk for complications related to methemoglobinemia.

- The FDA has been closely monitoring the risk of methemoglobinemia with the use of OTC and prescription local anesthetics and previously communicated about this risk.

    — More than 400 cases of benzocaine-associated methemoglobinemia have been reported to the FDA or published in the medical literature since 1971. There are likely additional cases that the FDA is unaware of.
    — The FDA recently evaluated 119 cases of benzocaine-associated methemoglobinemia from adverse event reports and the medical literature from 2009 - 2017. Twenty-two of these cases occurred in patients < 18 years, and eleven of these were in children < 2 years of age. Four patients died, including one infant.

- The FDA also conducted a study comparing the relative ability of benzocaine and lidocaine to make methemoglobin which showed that benzocaine generated much more methemoglobin than lidocaine in a red blood cell model.

- The FDA will continue to monitor the safety and efficacy of OTC benzocaine products and intends to take additional actions in the future as needed.