

# Montana FICMMR

## Fetal, Infant, Child, and Maternal Mortality Review

MAY, 2014

### CHILDHOOD DROWNING DEATHS, MONTANA, 2006-2012

The Montana Fetal, Infant, Child, and Maternal Mortality Review (FICMMR) statute requires local jurisdictions to review all deaths of Montana-resident infants and children under the age of 18, fetal deaths from 20 weeks gestation through birth, and maternal deaths up to one year postpartum.<sup>1</sup> The goal of FICMMR is to determine whether deaths were preventable and make recommendations to prevent future deaths. This report addresses statewide findings about childhood drowning deaths in Montana from 2006 through 2012.

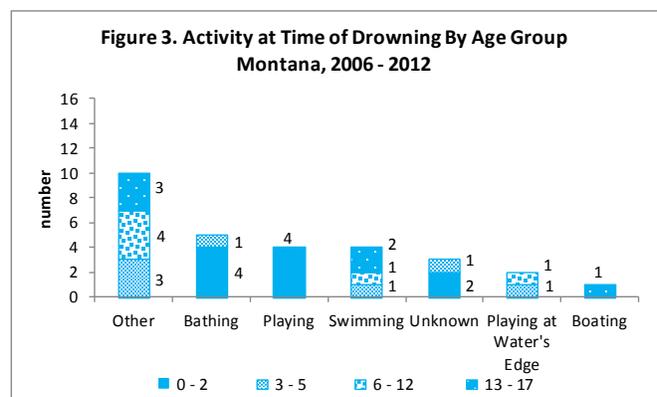
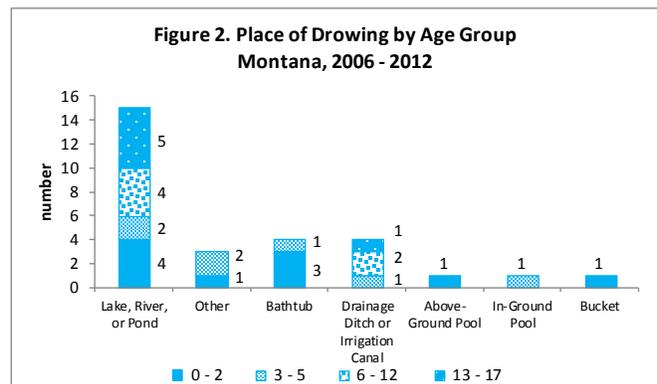
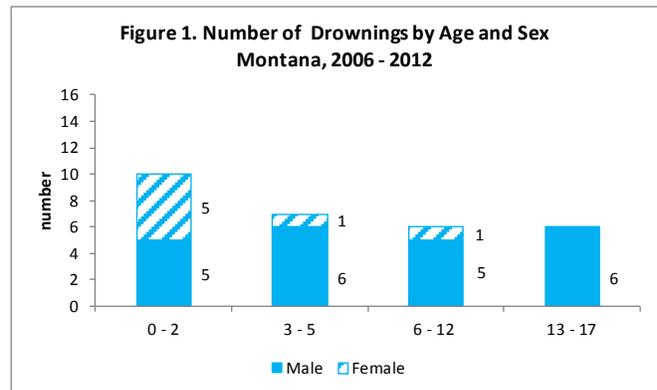
From January 2006 through December 2012, 29 children ranging in age from less than 1 to 16 years old died from drowning. Seventy-six percent of the decedents were male with deaths in youngest age group equally distributed between the sexes. Nearly 60% of all drowning's occurred in children less than 6 years old (Figure 1).

Half of all deaths occurred on a lake, river, or pond followed by bathtub, drainage ditch or irrigation canal, above-ground swimming pool, in-ground swimming pool, or bucket (Figure 2). The remaining 3 drownings involved a falling into a septic tank, swollen creek, or utility sink (n=1).

Children in the youngest groups more often died while in a bathtub or falling into a container of water, whereas the older age groups more often drowned while in or near a lake, river, or pond with children six years and older almost exclusively occupying this category (Figure 2).

The case reports indicated a wide variety of activities taking place either near or on bodies of water but in the majority of these cases, children were performing an activity not normally associated with water but the result of which lead to an unplanned and fatal contact with water including walking or hiking (n=3) and driving or riding in an off-road vehicle (n=2) (Figure 3). Only four of the drowning's listed in the "other" category involved children purposely in contact with water: floating down a river while wearing a life-vest, fell off a homemade raft during its construction, and wading near shore. Lastly, one child died while being carried through water by a parent.

Children between birth and age two were more likely to drown while either bathing or playing (Figure 3).



<sup>1</sup> Montana Code Annotated 50-19-401 through 50-19-406, [http://leg.mt.gov/bills/mca\\_toc/50\\_19\\_4.htm](http://leg.mt.gov/bills/mca_toc/50_19_4.htm)

One of the playing deaths occurred at a residence with an unfenced swimming pool, two drowned while playing near water, and one child died after falling into a bucket. The remaining age groups performed a wide range of water and non-water activities prior to their deaths. Interestingly, only one of these drownings was boating-related and only four involved swimming.

At least one parent and/or grandparent were present in 75% of the cases (Figure 4). One child was supervised by an older sibling and another was determined not to require supervision because of their age. In the remaining incidents the decedents were supervised by their friend's parent (n=2), an acquaintance (n=2), or babysitter (n=1).

In nearly 60% of these drownings, supervision was determined to be inadequate (Figure 5). Only two drownings were supervised by parents for whom the decedent was the family's only child. Fifteen of the remaining children were supervised by a parent and/or grandparent, all of whom had experience raising at least one other child (data not shown).

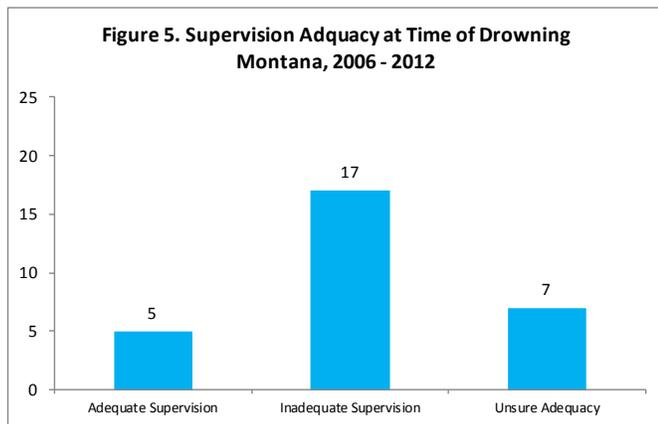
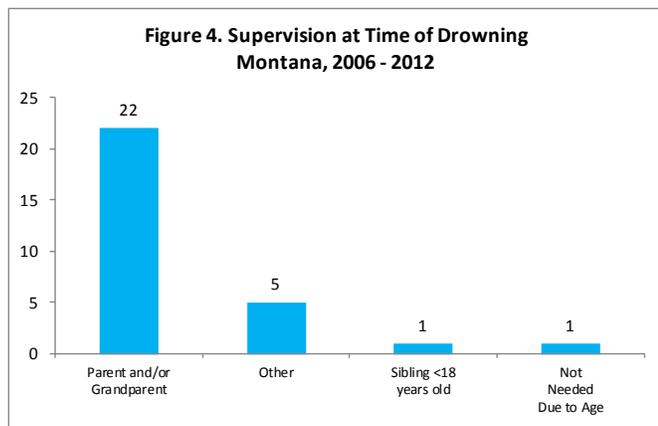
### Summary and Recommendations

The local investigating FICMMR Teams determined that nearly all these deaths were preventable, citing lack of adequate supervision as the main risk factor. Very few of these deaths occurred while children were knowingly playing in or on the water; rather they happened as the result of some unsupervised activity near a body of water. Two cases involved a supervising adult who was intoxicated. And tragically, one case was the result of a failed water-rescue attempt in which the sibling-rescuer drowned. Prevention measures for reducing drownings include:

- When children are in or near water, adults should avoid distracting activities such as reading, playing cards, talking on the phone, and using alcohol or drugs. Adults responsible for supervising preschool children should be close enough to reach the child at all times.<sup>2,3</sup>
- Preschool children should never be supervised by other children.<sup>3</sup>
- Drowning can happen fast and quietly. Never leave a young child—no matter how briefly—while they are bathing.<sup>2</sup>
- Swimming pools should be fully enclosed by a fence and equipped with a self-closing and self-latching gate. This can help keep children away from the area when they are not supposed to be without adequate supervision. Ideally, pool fences should completely separate the house and play area from the pool.<sup>3</sup>

<sup>2</sup> Centers for Disease Control and Prevention, <http://www.cdc.gov/safechild/Drowning/index.html>

<sup>3</sup> American Red Cross, <http://www.redcross.org/prepare/disaster/water-safety/home-pool-safety>



#### Resources for the Prevention of Childhood Drowning

- Montana Injury Prevention Program  
<http://www.dphhs.mt.gov/ems/prevention/>
- Centers for Disease Control and Prevention  
<http://www.cdc.gov/safechild/Drowning/index.html>
- American Red Cross  
<http://www.redcross.org/prepare/disaster/water-safety>