

# AirWaves

A Publication of West Michigan Air Care



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www.AirCare.org

## Equestrian Injuries: No “Horsing” Around

Through out history, the use of horses for work and play is well documented. Devastating injuries can result from horse-related injuries. According to the CDC’s National Center for Injury Prevention, over 100,000 people are treated for horse-related injuries annually. The majority of injuries occur after falling or being thrown from a horse, though horse kicks are known to cause serious injury to both adults and children.

Jenita Mosier-Bishop and her family are the owners of the Double RR Ranch equestrian farm in Dowagiac. Working closely with horses is a way of life for the entire family, including then 4-year-old daughter Francesca. September 2, 2010 was a day that Jenita will remember as the start of a lifestyle change regarding the importance of equestrian safety for her family.

Francesca’s love for horses started at a young age with exposure from her family’s business. Her mother recalls her first horse ride at only 3 months old. Last fall Francesca was at the stables with her older sister helping groom a horse that was relatively new to the farm and

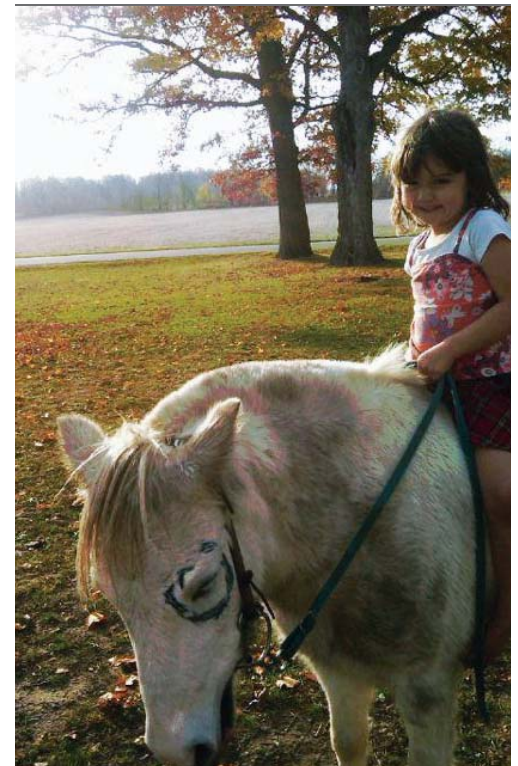
unfamiliar to the girls. When the horse suddenly became agitated, it kicked with its right hind leg striking Francesca in the face and throwing her to the ground. The extent of her injuries was not immediately known. She was taken to Borgess Lee Memorial Hospital Emergency Room by her family and admitted under the care

*In the last 5 years, Bronson Methodist Hospital and Borgess Medical Center together have treated 115 horse injury victims. Falls account for 75-80% of these injuries while kicks account for 20-25%.*

of Dr. Robert Britton. Radiology studies showed Francesca had a significant injury to her face with multiple fractures including her eye socket, cheek bone, and the upper part of her jaw (an injury pattern known as a LeFort II) with a concern for damage to her right eye itself.

West Michigan Air Care was called to airlift Francesca to the University of Michigan Hospital in Ann Arbor for specialized care of her injuries. She was taken to surgery to stabilize her facial fractures within four hours of arrival to U of M. She was discharged home just over 24 hours after her initial admission. Francesca returned for follow-up surgery and stitch removal one week later and was discharged the same day.

Locally, both Kalamazoo hospitals have seen horse-related injuries that are consistent with



Francesca Bishop

the national averages. In the last 5 years, Bronson Methodist Hospital and Borgess Medical Center together have treated 115 horse injury victims. Falls account for 75-80% of these injuries while kicks account for 20-25%. Dr. Scott Davidson, Director of Trauma Services at Bronson, who has seen patients with serious head and abdominal injuries from horse kicks said, “The force behind a horse kick can result in an injury that is critical if not fatal. When it comes to children, supervision is the key to prevention.”

The importance of safety near horses cannot be stressed enough. A few tips (see reference) that can help to prevent serious horse-related injuries include: constant awareness of a horses strength, nature and behavior; getting to know the horse you are working with, respect it and be alert to things which may frighten or spook it; be cautious around the hind legs of a horse (they are well designed



05/19/2011

Francesca and her mother Jenita revisit some of the helicopter crew that flew them to University of Michigan last September, flight nurse Sara Sturgeon and pilot Krystian Zygowiec. Flight nurse not pictured: Matt Heffelfinger.

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# Air Care's Photo Album – Winter/Spring 2011

Air Care has flown to many of your scenes so far this year, working with several fire departments and many EMS agencies like LifeCare, Reading, Marshall, Charlotte, South County, and LaGrange. Fire Departments like Pine Grove are taking advantage of Air Care's Landing Zone (LZ) classes and many communities have invited Air Care to make an appearance at their big events. Sign up on [www.aircare.org](http://www.aircare.org)!

Remember to keep your phones and cameras ready. If you snap a great shot of the helicopter, it could end up in our next photo album!



Staff and students at Hillsdale Workforce Development and Technology Center



Critical care stabilization begins as soon as Air Care arrives with blood products, pain medications, rapid sequence intubation, and minor surgical procedures.



Emergency evacuation scenario with Timber Ridge Ski Patrol.



LZ classes are recommended at least every other year.



Staff and students at Van Buren Technology Center



Our powerful medium-twin engine Dauphin aircraft is the same type of aircraft used by the U. S. Coast Guard and can fly at speeds exceeding 200 mph.



It's almost unfair how much TLC our helicopters get. Maintenance and aviation personnel inspect the duty ship daily, and the aircraft is kept clean and well-maintained inside and out by all crew. A physician's sports car never got this much attention.



LZ class with Pine Grove Fire Department



# Fly Guides to the Rescue!

Some situations leave health care providers uncertain whether an Air Care transfer to a trauma center is appropriate. Fly Guides to the rescue! These handy reference cards are free from Air Care and have been sent to community hospitals, EMS agencies, and fire departments throughout Southwest Michigan. The old standards were based on mechanism of injury, but the new guidelines are based on the actual presentation of the patient.

If you've ever been in these tricky situations, the Fly Guides can help:

A motor vehicle rollover crash victim is walking about the crash site with an upper extremity fracture. Distal pulses are intact and the patient's vital signs are stable. His Glasgow Coma Score is 15 and he reports no loss of consciousness, but the car is damaged beyond recognition. Should you transport via helicopter to a trauma center based on mechanism of injury?

**Firefighter:** *No. According to the First Responder Fly Guide, the patient does not meet physiologic criteria to require air transport and a trauma center.*

**Paramedic:** *No. Patient condition does not meet physiologic criteria according to the Paramedic Fly Guide.*

**Community hospital:** *No. Patient does not require transfer to a specialist at a trauma center according to the Community Hospital Fly Guide.*

The victim of a motorcycle vs. deer accident is lying in the middle of a county road. He has a closed right femur fracture and cannot move his legs. He has total recall of the accident. Should you launch or put Air Care on stand-by for this patient?

**Firefighters:** *Stand-by. The patient is not able to move non-injured extremities on command.*

**Paramedics:** *Launch. Traumatic paralysis is present.*

**Community Hospitals:** *Launch. The patient has a time dependent need for neurosurgical evaluation and potential surgical intervention for spinal cord injury at a trauma center.*

Your patient fell 10 feet from a tree stand and can't recall prior events. His vital signs are stable but he loses and regains full consciousness repeatedly. Can I launch Air Care based on Fly Guide activation criteria?

**Firefighters:** *No, but you can put Air Care "on stand-by" and assist paramedic evaluation with your prior observations.*

**Paramedics:** *Yes. Potential loss of airway may require rapid sequence intubation (RSI). RSI medications are very important to prevent increased pressure from further damaging the brain.*

**Community Hospitals:** *Yes. This patient will require specialist evaluation at a trauma center.*

As you can see, the Fly Guides are helpful when you want to back up your decision-making with support from the Centers for Disease Control and the Michigan Trauma Coalition. West Michigan Air Care developed the Fly Guides using these national and state recommendations. Provider levels are carefully taken into account and 911 Dispatchers have their own Fly Guides as well. Both trauma centers in Kalamazoo have approved the Fly Guides. You can find copies of the Fly Guides online at [www.aircare.org](http://www.aircare.org) under the last tab called "When to Request" or contact us at 1-800-922-1234.

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for kicking); and most importantly, adult supervision of children around horses, especially one that is unfamiliar to them. Helmets for small children when they are around horses is also recommended (Localriding.com, 2011).

Despite a small, nearly faded scar to her right cheek, Francesca is a happy, healthy 5-year-old with no permanent effects from her injury. She was back with her family's horses one month after her injury though her mother said "We have had a lifestyle



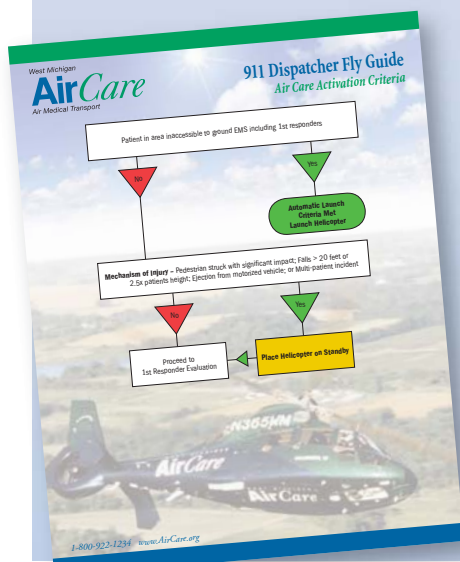
*Francesca Bishop has recovered well after being kicked by a horse.*

change when it comes to the horses and our safety." Since the accident, Jenita states they have separated their home and business locations, thereby separating horses that are there for training from their personal animals. This step alone has decreased the exposure to unfamiliar horses for the Francesca and her siblings. Jenita also said she has become more proactive when it comes to rules and supervision when her children are near the horses. "Francesca's injury made me realize how important it was that I follow through as a parent," said Jenita. "No matter how tired or busy I may be, my children's safety comes first."

Tips references obtained from: [www.localriding.com/prevent-equestrian-injury.html](http://www.localriding.com/prevent-equestrian-injury.html)



*By Sara Sturgeon  
Flight Nurse  
West Michigan Air Care*



# SAFETY CORNER

## Landing Zone Safety Points



When Air Care flies to your scene or helipad, remember these key safety points:

- » Do not approach the aircraft until the blades have completely stopped. Approach only from the front.
- » Prevent traffic from entering the landing zone (LZ) at any time during aircraft descent, ground time, and departure.
- » “Wave off” Air Care before landing if a hazard is suddenly identified.
- » Warning: rotor wash generates high winds! Secure loose objects like hats, tarps, and construction materials so they won’t strike bystanders or blow into rotor blades. Wear eye protection.

- » To prevent injury and damage to vehicles, keep ambulance doors and all vehicle doors closed until Air Care shuts down.
- » Stay vigilant until Air Care departs the scene!

Thanks for keeping a close eye on our safety and yours. Remember to ensure the LZ is selected in accordance with Air Care guidelines, found on the inside cover of our 2011 calendar and at our website. To arrange an LZ class contact us at [www.aircare.org](http://www.aircare.org) and sign up under the Event Request tab.



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