

## **Why are jumping drills so important in Dog Sports?**

Humans are Bipeds and dogs are Quadrupeds, one being a vertical line and the other being a horizontal line. Bipeds only have two legs to balance on to adjust for their jumping landings and sprinting speeds. This sometimes is benefited by a roll out of a jump because of the Biped's vertical body position; However, Quadrupeds have four legs to cushion the landings and have a horizontal body top line which mechanically handles a landing differently. Quadrupeds should always land and then move out of a jump to cushion the momentum for maximum landing cushioning. The dog's landing move out (landing follow through) can be forward in momentum or opposite in momentum and can actually be up or down movement, but anytime a dog's head is moving down the chances that the dog can do a bad face plant is higher, especially at low fast speeds chasing a fast moving object near the ground. That gives the dog less time to correct their jump, direction, or speed. So, I recommend a dog solid controlled landing and quick moving into another trick which includes a move out of forward, opposite, or up momentum, but not down (with the dog's head down). The weakest part of the dog's top line (backline) is where the ribs end and the lumbar vertebrae begin. So, one of the most important factors when jumping your dog is to make sure that UPON the LANDING a dog's back should never bow in the T-13/L-1 section in an unnatural twist, swing, or reverse bow or do not let your dog hyper extend their elbows with their body force doing in the opposite direction. To maximize the least landing force a dog should land with their entire body going on one direction with a follow through landing. This does not include the body positioning in the air as a dog can be taught to hang, pop up, or pose in the air and have solid landings.

If your dog is crashing I would suggest you read Dr. Christine Zink, and Julie Daniels book "Jumping A-Z". It is a Dog Agility book and can help explain from a veterinary's perspective on a dog's jumping styles and gaits. What I have done with a dog with a jumping problem is to video tape my dog playing Frisbee disc and watch it in slow motion to see where my dog is having a problem. So, then video tape the dog jumping over a hurdle at different heights and compare the dog's jumping style doing to different types of jumps. Is the problem on the take off - push, or hang time, or landing, or move out - follow through. Does a dog consistently crash on the landing or does the dog not push equally with both rear legs. If does either, is it on the same leg or can you see a weak spot on the dog body: like a short front leg extension; or short rear leg extension; or an unequal push off; or a weak spot in the top line; does a dog's top line have a hard break when the dog lands; does the dog land on his rear legs vertically? Identifying if your dog has a weak link: elbow, shoulder, wrist, hock, stifle, hip, or lumbar vertebra area are important areas to rule out. The best thing is to try to isolate the weak area and see if there is a medical reason for the crashing. Sometimes the dog just has too much drive and will propel their body anywhere to get the disc and crashes because the dog went too high or too fast for their jumping experience level and years of experience. Some dog's have natural gracefully jumping and some dogs do not. You can teach your dog to be a better jumper by doing hurdle jumping drills. It has work for many of my dogs and my student's dogs.

All dogs can learn to land on solid and/or learn to move out of a maneuver with a follow through. In slow motion you can watch a dog jump over a hurdle and you can see that a dog actually uses their front shoulders then the rear legs to push off of, which goes for the landings as well, front then rear. Dogs have standing (still) jumps - which can be vertical or horizontal in trajectory, they have Running jumps - which can be vertical or horizontal in trajectory, Flipping jumps - which can be vertical or horizontal in trajectory. The last jump is a vault which is either a standing or running jump/touch off of a body part (vault is still a kind of jump, just a push off of a body part instead of the ground). A brief list of jumping styles is: a stretch, a full stretch, a tuck, a full tuck, a half bound, and a bound.

A good example is a Dock Diving Dog. They run, jump, and push off of a raised decking surface and propel their body into the air while landing in the water safely. No matter what the height or the trajectory the dog is at they pretty much land safely whether their feet come first on the landing or not. When Dock Diving I know many dogs that jump higher and further in distance than they ever could or would on the ground because the water cushions/breaks the landing. Dog's are actually very smart, they usually can learn quickly that the water will break their landing so they can push as hard as they want when landing in the water. There are a few dog breeds that we call Kamikaze (crazy) dogs, like Malinois, Jack Russell, Cattle dogs, and even some Border Collies to name a few that will do anything to get the Frisbee disc. Those are the dogs that need to do a lot of hurdle jumping and hurdle drills to teach them proper landing on the ground. That is something that I teach and recommend to any dog sports person that is having a problem with a crashing dog. Many dogs can easily learn to crash land because they know they can not physically handle the landing height or speed while landing on the ground.

Jumping styles can vary and depend on your dog's structure and what your dog's structure allows him to do naturally. Aussies are more vertically leapers, but that takes a lot of energy to do a vertical lift. Border Collies are more angulated and cut and turn faster usually too much speed to jump high. So, when you add speed a dog tends to lose height, but you can usually get a better disc catcher. With the Cattle dog you have a dog with more muscle mass and usually their backs are not so flexible. Cattle dogs are usually very ridged jumpers with a high velocity of speed and sometimes height, too. Jacks are the somewhat the same as a cattle dog with more spring.

This information is from my Quarter horse training (barrel racing ) experience and dog sports training and hope this helps explain why it is important to teach your dog proper jumping techniques. Start with jumping drills, jumping drills, and more jumping drills, just not too young.

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