Distance Chart Information for Cap-Chur Projectors

This Distance Chart is only a guide, a starting point to assist in helping you achieve the best performance from your Cap-Chur Equipment. The type of sights used (scope or standard iron sights) and how you sight the projector in will be a determining factor on the range achieved. This Distance Chart was created using the standard sights that come with each Projector. The Elevator of each Rear Sight was set in its highest position. To adjust your Rear Sight to the highest position "as we did, pull the Elevator of the Rear Sight all the way toward the Breech end of the Projector.

Variables that Effect Distance

1. **Temperature** - With any of the CO2 powered Projectors (Short, Mid and Long Range), very cold temperatures will decrease both the life of your CO2 Gaspaks and decrease your distances, while very hot temperatures will both increase your CO2 Gaspaks' life and your distances.

2. **Altitude** - Shooting in high altitudes will increase your distances, while shooting at extreme low altitudes will decrease your distances.

3. **Wind** - Shooting a Syringe downwind will increase your distance. Shooting into the wind will decrease your distance.
4. **Excessive Cleaning Oil** - In the Extra Long Range Projector, this can cause the Power Load to misfire (the Power Load will not have as much power as it should).

Variables to Consider when Selecting Power setting (Short & Mid Range) or Power Loads (Extra Long Range)

1. **Drop** - When using Immobilization/Medication equipment you need a drop in the flight of the syringe from your point of aim to the point the syringe impacts the animal. It just needs to drop at least 1 (one) to 2 (two) inches. This means the Syringe is losing some of its speed before it hits the animal.

2. **Target Area** - This is the area of the animal (hip or neck, never stomach or ribs) where you are aiming. The size of your Target Area will differ greatly between species. With cattle, your Target Area maybe as much as 12 inches at the hip and 4 inches at the neck, whereas a dog's Target Area at the hip may be only 1 to 2 inches. The bigger the Target Area the more Drop you may allow for. The smaller the Target Area, the smaller amount of Drop you will need to allow for. Note: If you decide to use the neck as your Target Area, always aim more toward the shoulder than the head. Also, using the neck as a Target Area should only be used on large animals such as cattle and never animals smaller than a large dog.
3. **Range** - Range is the distance between you and your Target Area.
4. **Syringe Size** - Larger Syringes require more power to propel them than smaller Syringes.

Most Common Questions

1. Do I need longer Needles? Mine are not sticking.
2. What causes my Syringe to bounce out?

3. What causes my needles to bend and/or break?
   answer: The answer to all three questions is the same; you are getting a 'Hard Hit'. When the Cap-Chur Syringe impacts on a target (animal), the Cap-Chur Charge goes off to force the drug out of the Syringe and inject it into the animal. A Hard Hit occurs when your Range is too close, literally causing the Syringe to hit too hard. This can cause 'Bounce Out'. When a Bounce Out occurs it looks as if the syringe is flying sideways. This will also cause the Syringe to hit the animal and fail to inject all of your medication. Hard Hits are also the most common cause of bent or broken Needles.

Note: The biggest cause of failure in Cap-Chur equipment is insufficient practice with the Practice Syringes. All Projectors are shipped with 2 (two) complete Practice Syringes. By practicing with these, you will eliminate most of your problems and gain experience that will save you money in the long run.

Mid Range Projector

First Setting

Size	*Maximum Distance			*Drop	*Minimum Distance			*Drop
1cc Syringe	20 yards	or	60 feet	10 inches	15 yards	or	45 feet	**0 inches
metric	18 meters			25 cm	14 meters			**0 cm
2cc Syringe	20 yards	or	60 feet	12 inches	15 yards	or	45 feet	**0 inches
metric	18 meters			30 cm	14 meters			**0 cm
3cc Syringe	20 yards	or	60 feet	14 inches	15 yards	or	45 feet	2 inches
metric	18 meters			36 cm	14 meters			5 cm
4cc Syringe	17 yards	or	51 feet	6 inches	15 yards	or	45 feet	2 inches
metric	16 meters			15 cm	14 meters			5 cm
5cc Syringe	17 yards	or	51 feet	8 inches	12 yards	or	36 feet	4 inches
metric	16 meters			20 cm	11 meters			10 cm
7cc Syringe	12 yards	or	36 feet	7 inches	10 yards	or	30 feet	**0 inches
metric	11 meters			18 cm	9 meters			**0 cm
10cc Syringe	12 yards	or	36 feet	11 inches	10 yards	or	30 feet	4 inches
metric	11 meters			28 cm	9 meters			10 cm
15cc Syringe	10 yards	or	30 feet	8 inches	5 yards	or	15 feet	2 inches
metric	9 meters			20 cm	5 meters			5 cm
20cc Syringe	10 yards	or	30 feet	14 inches	5 yards	or	15 feet	2 inches
metric	9 meters			36 cm	5 meters			5 cm

Second Setting

Size	*Maximum Distance			*Drop	*Minimum Distance			*Drop
1cc Syringe	25 yards	or	75 feet	5 inches	20 yards	or	60 feet	**0 inches
metric	23 meters			13 cm	18 meters			**0 cm
2cc Syringe	25 yards	or	75 feet	6 inches	20 yards	or	60 feet	3 inches
metric	23 meters			15 cm	18 meters			8 cm
3cc Syringe	20 yards	or	60 feet	3 inches	15 yards	or	45 feet	**0 inches
metric	18 meters			8 cm	14 meters			**0 cm
4cc Syringe	20 yards	or	60 feet	4 inches	15 yards	or	45 feet	**0 inches
metric	18 meters			10 cm	14 meters			**0 cm
5cc Syringe	20 yards	or	60 feet	6 inches	15 yards	or	45 feet	3 inches
metric	18 meters			15 cm	14 meters			8 cm
7cc Syringe	20 yards	or	60 feet	9 inches	15 yards	or	45 feet	4 inches
metric	18 meters			23 cm	14 meters			10 cm
10cc Syringe	15 yards	or	45 feet	6 inches	12 yards	or	36 feet	**0 inches
metric	14 meters			15 cm	11 meters			**0 cm
15cc Syringe	15 yards	or	45 feet	8 inches	12 yards	or	36 feet	1 inches
metric	14 meters			20 cm	11 meters			3 cm
20cc Syringe	15 yards	or	45 feet	12 inches	10 yards	or	30 feet	2 inches
metric	14 meters			30 cm	9 meters			5 cm

*** All Distance and Drop measurements made with the Sights Set at Maximum Height**

**** Denotes Syringe Hit the Point of Aim with the Sights Set at Maximum Height**