

## 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.

## Short Range Projector

### Second Setting

Size	*Maximum Distance		*Drop	*Minimum Distance		*Drop
1cc Syringe metric	15 yards 14 meters	or 45 feet	5 inches 13 cm	10 yards 9 meters	or 30 feet	**0 inches **0 cm
2cc Syringe metric	15 yards 14 meters	or 45 feet	6 inches 15 cm	10 yards 9 meters	or 30 feet	**0 inches **0 cm
3cc Syringe metric	15 yards 14 meters	or 45 feet	6 inches 15 cm	10 yards 9 meters	or 30 feet	**0 inches **0 cm
4cc Syringe metric	15 yards 14 meters	or 45 feet	11 inches 28 cm	10 yards 9 meters	or 30 feet	**0 inches **0 cm
5cc Syringe metric	15 yards 14 meters	or 45 feet	12 inches 30 cm	10 yards 9 meters	or 30 feet	**0 inches **0 cm
7cc Syringe metric	10 yards 9 meters	or 30 feet	3 inches 8 cm	5 yards 5 meters	or 15 feet	**0 inches **0 cm
10cc Syringe metric	10 yards 9 meters	or 30 feet	7 inches 18 cm	5 yards 5 meters	or 15 feet	**0 inches **0 cm
15cc Syringe metric	10 yards 9 meters	or 30 feet	20 inches 51 cm	5 yards 5 meters	or 15 feet	**0 inches **0 cm
20cc Syringe metric	7 yards 6 meters	or 21 feet	20 inches 51 cm	5 yards 5 meters	or 15 feet	**0 inches **0 cm

### Third Setting

Size	*Maximum Distance		*Drop	*Minimum Distance		*Drop
1cc Syringe metric	25 yards 23 meters	or 75 feet	4 inches 10 cm	20 yards 18 meters	or 60 feet	**0 inches **0 cm
2cc Syringe metric	25 yards 23 meters	or 75 feet	18 inches 46 cm	20 yards 18 meters	or 60 feet	**0 inches **0 cm
3cc Syringe metric	20 yards 18 meters	or 60 feet	2 inches 5 cm	15 yards 14 meters	or 45 feet	**0 inches **0 cm
4cc Syringe metric	20 yards 18 meters	or 60 feet	9 inches 23 cm	15 yards 14 meters	or 45 feet	**0 inches **0 cm
5cc Syringe metric	20 yards 18 meters	or 60 feet	10 inches 25 cm	15 yards 14 meters	or 45 feet	**0 inches **0 cm
7cc Syringe metric	18 yards 17 meters	or 54 feet	3 inches 8 cm	15 yards 14 meters	or 45 feet	**0 inches **0 cm
10cc Syringe metric	15 yards 14 meters	or 45 feet	7 inches 18 cm	12 yards 11 meters	or 36 feet	**0 inches **0 cm
15cc Syringe metric	15 yards 14 meters	or 45 feet	20 inches 51 cm	10 yards 9 meters	or 30 feet	**0 inches **0 cm
20cc Syringe metric	15 yards 14 meters	or 45 feet	20 inches 51 cm	10 yards 9 meters	or 30 feet	**0 inches **0 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

