

Action plan for LSD Control

Strategy

a) **Mass vaccination:** As per the new guidelines for Government of India blanket vaccination of all the bovine population leaving the LSD infected animals is to be done. At least 75% of the total susceptible livestock population in plain area and 50 % of hill areas of the state will be brought under the umbrella vaccination coverage, so as to develop herd immunity. The Vaccination program will be as an intensive drive and will be accomplished within a time period of 30 days which can be extended as per requirement. High quality 10*⁵ TCIDs of GTPV vaccine (*Uttarkashi* strain), as per the guideline of Govt. of India will be used. Vaccination-squads at Panchayat level, comprising of Veterinary Officers and Livestock Extension Officers will undertake these vaccination works.

Each vaccination squad will consist of one Veterinary Officer Two Livestock Extension Officer and two sub staff. Each squad shall vaccinate approximately 200 animals per day Each Farmer will be issued vaccination card according to the vaccination of his animal, which will have detail about the date of vaccination and next due date of vaccination.. District wise animal population (cow and buffaloes) of the state is as under:-

Cattle population in the state and number of target animals to be vaccinated

S. No.	District	Cattle Population	75% Cattle Population	Cattle to be vaccinated in Plain area	Cattle to be vaccinated in Hill area	Total Cattle to be vaccinated
1	Almora	149080	100000		50000	50000
2	Bageshwar	76181	57000		28500	28500
3	chamoli	145625	100000		50000	50000
4	Champawat	79686	59000	24000	17500	41500
5	Dehradun	194043	140000	70000	35000	105000
6	Haridwar	179395	130000	130000	0	130000
7	Nainital	176506	130000	60000	35000	95000
8	Pauri Garhwal	256311	190000	40000	75000	115000
9	Pithoragarh	162869	120000		60000	60000
10	Rudraprayag	74237	55000		27500	27500
11	Tehri Garhwal	86362	86000	10000	38000	48000
12	Udham Singh Nagar	166349	120000	120000	0	120000
13	Uttarkashi	105479	79000		39500	39500
	Total	1852123	1366000	454000	456000	910000

Vaccine availability

S. No.	District	Total vaccine distributed	Animals to be vaccinated	Animals Vaccinated	Animals remaining for vaccination	Vaccine Available	Vaccine Required
1	Almora	20000	50000	8576	41424	11424	30000
2	Bageshwar	20000	28500	2957	25543	17043	8500
3	chamoli	15000	50000	4309	45691	10691	35000
4	Champawat	24000	41500	15242	26258	8758	17500
5	Dehradun	60000	105000	47332	57668	12668	45000
6	Haridwar	167500	130000	75260	54740	92240	Some animals are vaccinated at 3 ml dose rate
7	Nainital	67000	95000	58888	36112	8112	28000
8	Pauri Garhwal	84500	115000	23434	91566	61066	30500
9	Pithoragarh	30000	60000	5677	54323	24323	30000
10	Rudraprayag	20000	27500	11371	16129	8629	7500
11	Tehri Garhwal	44000	48000	11567	36433	32433	4000
12	US Nagar	106000	120000	100827	19173	5173	14000
13	Uttarkashi	30000	39500	20086	19414	9914	9500
	Total	688000	910000	385526	524474	302474	222000

- Vaccine Procured 1010000
- Vaccine Available 322000

Availability of disposable hypodermic needle for inoculation

- Kumaon Region 50000 at Sadar Veterinary hospital Haldwani
- Garhwal Region 50000 at Sadar Veterinary hospital Dehradun

Sufficient vaccine is available and further more vaccine can be procured on demand from districts.

b) Animal Movement Management: Entry of infected/unvaccinated animals from neighboring country will be strictly controlled and prohibited. Vaccination certificates will be insisted at entry points; disease suspected animals would be quarantined. Border check posts and quarantine stations of Animal Husbandry Department will be established across the international borders.

c) **Outbreak Management:** Incidence of LSD outbreaks will be handled on war foot basis. On the wake of outbreaks, animal movement from and to the foci of infection will be restricted; thorough disinfection of infected premises will be carried out. Ailing animals will be properly treated. Ring Vaccinations, extending from the periphery to the point of infection will be conducted within a radius of 5-10 Kms. A reserve stock of vaccine will be maintained at the central stores of each district and shall be available throughout the year.

d) **Vector control:** Control of vector population (ticks, flies, mosquitoes, fleas, midges) in the premises and the animal body should be carried out using the insecticide, repellents and other chemical agents. Distribution of Acaricides is advised.

Sufficient acarides are available with the districts for the control of external parasites

Name of Acaricide	Packing	Nainital	US Nagar	Almora	Bageshwar	Pithoragarh	Champawat	Dehradun	Pauri	Tehri	Chamoli	Rudraprayag	Uttarkashi	Haridwar	Total
Amitraz Susp.(12.5%w/v)	50ml	759	980	676	321	597	294	731	852	498	549	0	392	1158	7807
Closetol bolus (1gm)	4 boli	9458	12180	8411	3987	7415	3650	9079	10594	6151	6809	3904	4873	14380	100891
Deltamethrin Solution 12.5 mg/ml	50ml	1522	1960	1353	642	1193	587	1460	1705	990	1096	0	785	2313	15606
Inj. Doramectin(10 mg/ml)	50 ml	261	335	230	110	204	101	255	290	169	185	104	136	394	2774
Ivermectin Tab.(10 mg)	5 Tab	6700	8627	5952	2823	5259	2587	6429	7501	4355	4821	2772	3450	10185	71461
Ivermectin Tab.(100 mg)	1 Tab	13395	17251	11900	5646	10501	5172	12858	14998	8712	9644	5529	6902	20358	142866

e) **Disinfection and cleaning measures:** Affected Premises, vehicles plying through the affected animal holdings should be carried out with appropriate chemicals / disinfectants [Ether (20%), chloroform, formalin (1%), phenol (2% /15 minutes), sodium hypochlorite (2- 3%), iodine compounds (1:33 dilution) and quaternary ammonium compounds (0.5%)].

f) **Awareness programme:** Mass awareness campaign to be taken up to make the public aware of the disease and report to the veterinary authority immediately when suspected cases are detected. This will help in prevention and control of LSD. An amount of Rs. 10000.00 per block for awareness camp has been provided to the district chief veterinary officers and an amount of Rs. 50000.00 is already available with districts for printing and publication.