

IMPORTANT

F. No. 15-38/2010-NTCA (Part)
Government of India
Ministry of Environment, Forest & Climate Change
National Tiger Conservation Authority

B-I Wing, 7th Floor,
Pt. Deendayal Antodaya Bhawan,
CGO Complex, Lodhi Road, New Delhi – 110003
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Tel. (EPABX): + 91 11 24364837-42
FAX: +91 11 24367836

Dated: 03.10.2018

To
The Chief Wildlife Warden(s),
All Tiger Range States

Sub: Lion deaths in Gujarat

Ref: 1. This Authority letter of even number dated 20.10.2015 (copy enclosed)
2. This Authority letter of even number dated 14.06.2013 (copy enclosed)

Sir,

Reference is invited to the subject and letter cited above. In this context, I am directed to say that as reported in the media, certain number of lion deaths in the State of Gujarat have been attributed to Canine Distemper, a viral disease where in dogs (feral on domestic) act as a transmitting host.

In this regard, advisories communicated through letters referred above are hereby reiterated to reduce likelihood of tigers acquiring the said infection.

Action as appropriate may kindly be taken on an urgent basis.

Encl: As above.

Yours faithfully,



(Dr. Vaibhav C. Mathur)
Assistant Inspector General (NTCA)

Copy to:

1. Field Director(s), All Tiger Reserve(s).
2. All Regional Offices, NTCA.

F.No. 15-38/2010-NTCA
Government of India
Ministry of Environment, Forest and Climate Change
National Tiger Conservation Authority

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New Delhi 110003
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Dated the 20th October 2015

To,
The Chief Wildlife Warden (s),
All Tiger Range States

Subject : Special Drive in respect of Canine Distemper

Reference: This Authority letters of even no. dated 14.6.13 and 18.6.13 and 15-38/2010-NTCA (Part III)

Sir,

Reference is invited to the subject and letters cited above. In this context, I am directed to request you to kindly expedite creation of immunity buffers around Tiger Reserves' under your jurisdiction, in consultation with district veterinary officials, Indian Veterinary Research Institute (IVRI) and the Wildlife Institute of India. Funding support in this context may be solicited under the ongoing CSS-PT. This needs to be done as a special, time bound drive.

2. In this context, the following points are suggested for guidance;

The concept of creating immunization buffers around Tiger Reserves should be initiated keeping in mind the principles of herd immunity; the latter is briefly discussed as follows:

- i. Herd immunity concept proposes that in contagious diseases such as Canine Distemper (CD), the chain of infection is likely to be disrupted when large numbers of a population are immune (vaccinated) or less susceptible to the disease (due to vaccination).
- ii. The rationale behind this is that the **exposure** of unvaccinated /susceptible animals (tigers in the case of tiger reserves) to infected animals shall be **substantially reduced**. Hence, greater the proportions of individuals which are vaccinated/ resistant/immune to the disease, lesser are the chances of its transmission. In essence vaccinated animals act as a firewall between tigers and stray animals
- iii. Therefore, a policy of herd immunity can be formulated for stray dogs and cats around Tiger Reserves to prevent the spread of CD and provide a level of protection to a vulnerable, unvaccinated group like tigers
- iv. However, the **herd immunity threshold** i.e. proportion of immune individuals in a population (in the instant case population includes all animals susceptible to CD including tigers) above which a disease may no longer persist needs to be arrived at in and around Tiger Reserves. Possible source of information can be retrospective data available with the local Veterinary & Animal Husbandry office or Veterinary Colleges, which shall help to see secular trends of CD cases in the said geographical area. Analysis of disease data can help establish
 - o Virulence of the CD virus prevalent in the area and
 - o The efficacy of commonly used vaccines to see number of cases contracting the disease in spite of vaccination

Empirical data of different diseases however, has shown that vaccinating 70 to 80% of the population helps in reduction of transmission of the disease. This shall help in designing a vaccination protocol for the envisaged immunization buffers with optimum costs as the entire population need not be vaccinated

- v. If retrospective data is not available, then support from Veterinary Colleges/Animal Husbandry Departments needs to be solicited in conducting a **sero-prevalence study** of stray dogs and cats around the TR for CD. The sylvatic presence of CD in tiger reserves can be established by;

- Retrospective data on wild animal mortality available with TR management
- Screening of serum samples of tigers after blood collection subsequent to immobilization

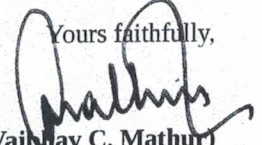
- vi. Site specific preventive measures can be taken keeping in mind the following factors:

- The CD virus is fragile and will perish above 20-25 degrees C in sunlight. Therefore, drying of fomites after washing is sufficient

- Any case of death if detected in the buffer/adjoining areas, the carcass should be removed and the disinfected by flaming or 1:30 solution of bleach
- The CD virus is susceptible to chemicals such as 0.75% phenol, 1:30 bleach solution and detergents
- Accordingly disinfectant baths can be put up at all entry points to the Park for vehicles coming from outside, staff should be advised to maintain strict hygiene of their premises inside the Reserve
- Advisories in the form of hoardings, posters, leaflets in dailies can be issued highlighting common signs and forms of CD with graphics with contact numbers for reporting if a CD case is suspected in and around the Reserve

Further, advisories of this Authority on the said subject of Canine Distemper virus are reiterated for taking action as appropriate.

Yours faithfully,



(Vaibhav C. Mathur)

Assistant Inspector General (NTCA)

Copy to: 1. The Inspector General of Forests (NTCA), Regional Office, Nagpur, Bengaluru and Guwahati
2. The Field Director(s), All Tiger Reserves

OK
Issued by
S.P.
Sedhe
23/10/15

No. 15-38/2010-NTCA
Government of India
Ministry of Environment and Forests
National Tiger Conservation Authority

Annexe No. 5, Bikaner House,
Shahjahan Road, New Delhi-110011.
Telefax: 2338 983
E-mail: jdntca@gmail.com
Dated the 14th June, 2013

To,

The Chief Wildlife Warden(s),
All Tiger Range States.

Sir,

Recently there has been media coverage regarding spread of lethal Canine Distemper Virus (CDV) in tiger, in countries like Indonesia and Russian Federation. The said disease is incurable, causing high fever, watery eyes, lethargy, vomiting, diarrhea, progressing to seizures, paralysis and death. The infected animals have also been observed to display strange behaviour, with disorientation, inability to predate, besides loss of fear.

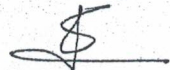
As a precaution, the following preventive measures are suggested:

- (1) Vaccination of stray cattle, cats and dogs living around tiger reserves should be done on a regular basis.
- (2) Incidents of wild animals showing abnormal behaviour, as above, must be reported immediately.
- (3) Tissues of dead animals (brain tissue for CDV) should be collected for pathological analysis.
- (4) Facilities of deep fridge for storing samples should be ensured in each tiger reserve.
- (5) Record of each sample collected and their analysis should be maintained.
- (6) Periodic checking of water quality in tiger reserves (pre and post monsoon) alongwith their chemical analysis should be undertaken.

The Field Directors and field staff may please be directed accordingly. A research paper on the detection of 'Peste des petits ruminants virus' (PPRV) in tissues of Asiatic Lion is also enclosed herewith for your kind perusal.

Encl: As above

Yours faithfully,



(S.P. Yadav)

Deputy Inspector General (NTCA)

Copy to:

1. The Director, Wildlife Institute of India, Dehradun.
2. Field Director, All Tiger Reserves.
3. IG/AIG, NTCA Regional Offices – Bengaluru / Guwahati / Nagpur.

Copy for information to:

1. PS to MEF.
2. PPS to Secretary (E&F), MoEF.
3. PPS to DGF & SS, MoEF.
4. PS to ADG (WL), MoEF.

etc.
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Government of India
Ministry of Environment, Forest and Climate Change
National Tiger Conservation Authority

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New Delhi-110003
Tele : +91 11 24362445
Fax : +91 11 24364250
E-mail : aig3-ntca@nic.in

Dated the 17th December 2014

To,
The Chief Wildlife Warden (s),
Madhya Pradesh and Uttarakhand

Subject : Special Drive in respect of Canine Distemper

Reference: This Authority letters of even no. Dated 14.6.14. and 18.6.14

Sir,

Reference is invited to the subject and letters cited above. In this context, I am directed to request you to kindly expedite framing a proposal to create immunity buffers around Panna and Corbett Tiger Reserves', in consultation with district veterinary officials, Indian Veterinary Research Institute (IVRI) and the Wildlife Institute of India, for soliciting financial support under the ongoing CSS-Project Tiger. This needs to be launched as a special, time bound drive.

2. In this context, the following points are suggested for guidance;

The concept of creating immunization buffers around Tiger Reserves should be initiated keeping in mind the principles of herd immunity; the latter is briefly discussed as follows:

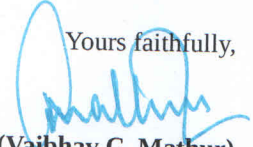
- i. Herd immunity concept proposes that in contagious diseases such as Canine Distemper (CD), the chain of infection is likely to be disrupted when large numbers of a population are immune (vaccinated) or less susceptible to the disease (due to vaccination).
- ii. The rationale behind this is that the **exposure** of unvaccinated /susceptible animals (tigers in the case of tiger reserves) to infected animals shall be **substantially reduced**. Hence, greater the proportions of individuals which are vaccinated/ resistant/immune to the disease, lesser are the chances of its transmission. In essence vaccinated animals act as a firewall between tigers and stray animals
- iii. Therefore, a policy of herd immunity can be formulated for stray dogs and cats around Tiger Reserves to prevent the spread of CD and provide a level of protection to a vulnerable, unvaccinated group like tigers
- iv. However, the **herd immunity threshold** i.e. proportion of immune individuals in a population (in the instant case population includes all animals susceptible to CD including tigers) above which a disease may no longer persist needs to be arrived at in and around Tiger Reserves. Possible source of information can be retrospective data available with the local Veterinary & Animal Husbandry office or Veterinary Colleges, which shall help to see secular trends of CD cases in the said geographical area. Analysis of disease data can help establish
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Yours faithfully,



(Vaibhav C. Mathur)

Assistant Inspector General (NTCA)

Copy to: 1. The Inspector General of Forests (NTCA), Regional Office, Nagpur
2. The Field Director(s), Corbett and Panna Tiger Reserve.