

How the Health System Works at the Grassroots in Uttar Pradesh



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Background

In August 2019 issue of Policy Watch, we had examined policy implications and governance issues of universal health care in India, and in our January 2020 issue we followed it up with a critical review of the health system in India. One of the aspects of our Samarth Zilla (capable districts) study is to understand how institutions operate at the ground level, and in the process, try to identify the intervention areas to improve their delivery system.

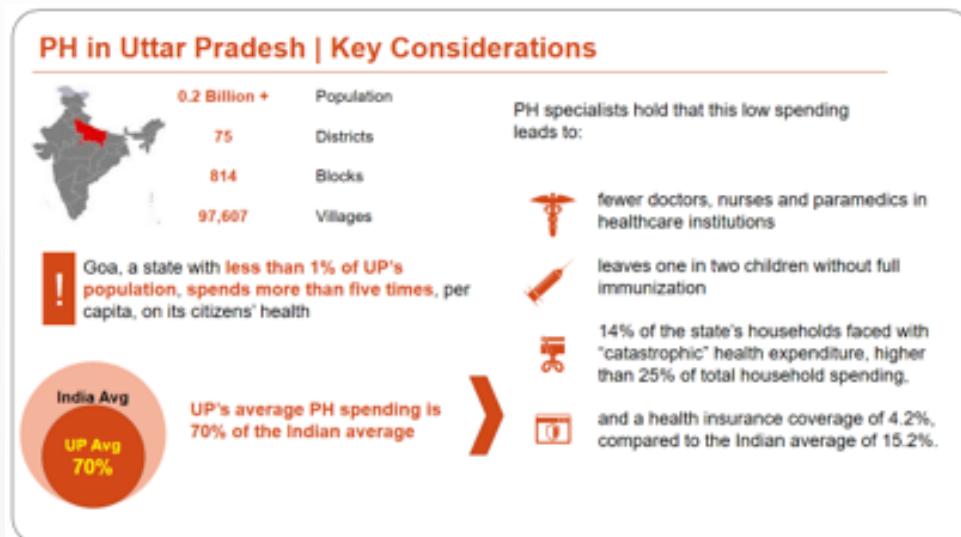
The following report is based on field visits carried out about a year ago including interactions with doctors and other health professionals in Uttar Pradesh. We believe that in spite of variations across states, many of the issues that have emerged are generic in nature and, to that extent, our analysis and response framework may be helpful to other states as well.

Macro Data

According to NITI Aayog's latest report (June 2019), Uttar Pradesh has been "the least performing state with an overall score of 28.61 (as compared with Kerala's score of 74.01). UP's score has declined although it is one of the EAG (empowered Action Group) states.

To understand why this is so, we'll draw upon aggregate data available from such sources as NITI Aayog, Central Board of Health Intelligence, Sample Registration System (SRS) Bulletin and system level data pertaining to departmental functioning derived from field visits. Aggregate data will help us to identify the critical public health (PH) issues confronting the state while system level data would help us understand why things are what they are, indicating possible clues to addressing outstanding Public Health issues.

State of Public Health in UP: Looking at Aggregate Data: In this article, we have restricted ourselves to consider only such aggregate data that have significance for identifying intervention areas that the Directorate of Medical Health (DOMH) may consider to bring about improvements in Public Health delivery system. The following exhibit provides a bird's eye view of some vital statistics:





Public Health Indicators, including Variations in health outcomes in UP

- UP's IMR of 68 deaths/1000 live births; last among the states according to AHS 2012-13 (world's largest sample survey)
- IMR: Kanpur Nagar: 37, much better than India average of 42; but Shrawasti is at 96
- MMR: Meerut mandal (including urban Noida & Ghaziabad): 151, while overall UP: 258; Devi Patan: 366 (worse than Ethiopia & Haiti)
- Sex Ratio: > 100 in Aligarh, MBD, Mainpuri, Deoria & Balrampur; while < 850 in Varanasi, Firozabad, Agra, Bijnore & Budaun
- NNR: 49 (highest among all states) compared with Jharkhand: 23; Kanpur Nagar: 24; while Siddharthnagar: 70
- UP reports more than 75% of Japanese encephalitis (JE) cases reported nationwide. In 2016, of 1,277 Acute Encephalitis Syndrome (AES) deaths reported in India, 615 were in UP, as were 73 of 275 reported JE deaths nationwide.
- Immunization: Shrawasti (24.9%); Bahraich (27.5); Balrampur (36.4%); Budaun (30.7%); Sitapur (35.4%); Sonbhadra (32.4%).



Related Public Health Data

- In Uttar Pradesh, doctors accounted for more than half of all health workers, the highest such proportion in the country, according to this 2016 World Health Organization study, probably a result of not having enough other health workers in the first place. UP also had the lowest share of female health workers, 19.9%, compared to the Indian average of 38%.
- For example, most of the 30 Indian districts ranked lowest in terms of density of nurses were located in UP, with some also located in Bihar and Jharkhand. UP, which had 16.16% of the country's population, had only 10.81% of overall health workers. Although numbers based on the latest census data – as yet not analysed – may have improved partly because of improvement due to the 11-year-old National Rural Health Mission (NRHM), UP's overall rankings are likely to be unchanged, given that UP still has a 50% shortfall of the nursing staff at primary health centres (PHCs) and community health centres (CHCs).
- The latest government data on UP's government hospitals are not promising.
- CHCs in UP are 84% short of specialists, according to the Rural Health Statistics, 2016. PHCs and CHCs, taken together, have only half the staff they should have. Although all PHCs have doctors, one in three PHCs does not have a lab technician.
- Of 36 Indian states and union territories, UP was third from the bottom in terms of infant mortality rate (IMR, deaths per 1,000 live births) across rural and urban areas, the latest Sample Registration System Bulletin for 2015, released in December 2016, showed. Many relatively poor states do much better than Uttar Pradesh.

Related PH Data

Shortage of Doctors at PHCs (as on 31/3/2017): Health Infrastructure - Comparative Chart

Unique for UP?

State	AP	Gujarat	Haryana	Rajasthan	UP	All India
Required	193	383	112	579	822	5624
Sanctioned	65	62	12	665	523	2945
In Position	56	9	4	189	103	864
Vacant	9	53	8	476	420	2150
Shortfall	137	354	108	390	719	4760
%	70.9	97.5	96.4	67.3	87.5	84.6

State	Goa	Manipur	Uttarakhand	Punjab	UP	All India
Population (Mn)	2				200	
Sub Centre	214	421	1847	2950	20521	
PHCs	24	85	257	432	3621	
CHCs	4	17	60	151	822	
Sub-Div Hospital	2	1	17	41	0	
District Hospital	2	7	20	22	160	
Per Capita Health Expenditure (Rs)	2439	1364	1042	691	452	647



Implications of Public Health Data

- UP is among the lowest in terms of healthcare expenditure resulting in poor infrastructure, high OOP expenses – calls for higher allocation
- Shortage of doctors not unique to UP; what is interesting is that doctors accounted for more than half of all health workers, the highest such proportion in the country – this calls for a clear enunciation of recruitment policy
- Many districts have alarming health statistics; there's also sharp variations in health outcomes – calls for calibrated response reflected in planning, execution, monitoring, review and re-strategizing
- Overall, doctors need to be trained in analyzing Public Health data & draw action plans



Field Data: Public Health Facilities Visited

An extensive interactive survey was carried out in the following three districts of Bijnor, Varanasi and Ghazipur. In each of these districts, we covered the district hospital (DH), one Community Health Centre (CHC) and a Primary Health Centres (PHC):

	Bijnor	Varanasi	Ghazipur
Hospital	Combined Hospital	District Hospital	District Hospital
CHC	Dhampur	Cholapur	Saidpur
PHC	Nator	Chairgaon	Sadat

Field Data | Bijnore

Combined Hospital, Bijnore

- > Shortage of staff: Bijnore Combined Hospital operates with 12 doctors as against sanctioned strength of 27
- > 38 doctors selected through Public Service Commission – applications rejected 5-6 months ago; no action taken
- > Doctors on contract turning out to be added cost rather than benefit
- > "There should be devolution of power, like 3-tier panchayat system
- > "Recruitment should be done district-wise or zone-wise
- > "With so much pressure of work, why should CMO issue fitness certificate?"
- > "Technology useful in managing better outcomes: e.g. Smart phones very helpful in managing cold chain. ASHAs using it; good in vaccine management

CHC Block Dhampur

Verbatim

They don't work beyond stipulated working hours – not available for critical incidents beyond normal duty hours. Do not do medico-legal cases

Since they are allowed to do private practice, their primary focus is not with us

Difficult to manage doctors on contract: (a) they prescribe medicines which is available only outside, which is not allowed; (b) you can't transfer them

In some cases, quality poor: don't even know what is hb

It is demoralizing for regular doctors

With such poor results, why should the decision to appoint retired doctors rest with HO? Why can't it be decentralized at district or zone basis, who are more familiar with local demand-supply, and more familiarity and control over local retired doctors

PHC Nator

Field Data | Bijnore

Combined Hospital, Bijnore

- > Need for coordination between DH and Medical College (e.g. iron capsules given to students under School Health Program resulted in vomiting as these were taken with milk rather than with lemon water)
- > Centralized decision making results in suboptimal results and inordinate delays:
 - For Mobile Hospitals, doctors taken from PHCs which is already reeling under staff shortages. Hire separate.
 - 100 bedded Female Hospital lying vacant for past three years; ACs stolen. "Why can't Addl Director, Moradabad zone be responsible for handing over/taking over?"
 - Digital X-ray machine lying unopened for 2 years as sanction for X-ray room was pending; Same story reg dialysis machine.

CHC Block Dhampur

- > At Dhampur CHC, dilapidated condition of staff quarters
- > No ward boy: last incumbent retired in June 2018
- > 180 feet borewell repaired by pooling in money: after all you need water to run CHC and for patients, staff and family to drink water
- > Poor management for acquiring basic equipment/machines:
 - > No money to purchase inverter; solar light
 - > Protracted decision making process
 - > So, managed inverter thru funds from Rogi Kalyan Samiti (Patient Welfare Fund)
 - > And solar light from MLC quota
 - > CHC is running from funds from NHM program
- > **"You can't run a PHC/CHC and you are building a 100-bedded hospital!"**

PHC Nator

Field Data

Combined Hospital, Bijnore

CHC Block Dhampur

PHC Nator

Other observations of CMS

- > Regarding Comprehensive Child Survival Program, developed format to check whether outcomes were taking place led to Home Based New Born Care (UNICEF)
- > Was involved with Adolescent Health program: under Innovation Fund
- > Was appreciated by then DM, Rajiv Kapur; sent to Sweden for training; but after DM was transferred, everything stopped
- > He is a National Trainer in maternal health; but not recognized as a resource person in any registry (i.e. if such a thing is maintained)
- > **Three things needed to improve PH delivery:**
 - Full strength of doctors
 - Regular doctors, and not on contract
 - Quick disposal of cases: don't push files and put them in cold storage; take action

Varanasi

- While doctors and staff pointed out many standard operating issues, like shortage of staff, two doctors sharing one room, non-payment of DA arrears for 4 years leading to dissatisfaction amongst staff, etc., the infrastructure as well maintenance was excellent.
- There was also evidence of initiative and innovation in terms of creating a herbal garden, provision of solar light
- The PHC at Chiraigaon was also relatively better than what has been observed in other districts of Bijnore and Ghazipur
- It therefore appears that dynamism and leadership role at district level (CMO) does make some difference (It is also possible that Varanasi being the PM's constituency is able to garner a more responsive chord)
- The number of suggestions offered by doctors and staff to improve delivery outcomes were impressive
- However, the living quarters of doctors and staff was in a dilapidated condition



Ghazipur

- Ghazipur had 108 doctors against sanctioned strength of 197. Of these, 22 doctors out of a sanctioned strength of 41 doctors were in district hospital. At district level 200 bedded hospital, there was no surgeon, no physician, no pathologist... and some critical resources were also not positioned
- The problem of shortage of doctors was compounded by the absence of large number of doctors. The decision was therefore taken to cut payment of 6 doctors whose attendance record was especially bad.
- What was alarming was the condition of Saidpur CHC which was in an extremely dilapidated and pathetic condition as the photograph below testifies:

Saidpur: Alarming State of Civil Infrastructure



Systemic failure has resulted in pathetic state of civil infrastructure, wherein doctors, paramedics and their families are residing under constant threat that these may collapse anytime, which may result in severe injuries or worse, kill them...

Saidpur: Alarming State of Maintenance



Buildings in CHC Saidpur are in an alarmingly bad state. Ceilings in the residences of medical staff have been falling regularly, wherein few doctors & their families had a narrow escape. It is essential to mention that it has not happened overnight. PWD Engineer, when spoken to, had all excuses and sounded indifferent. It is a genuine concern of the staff residing in these buildings since they may give way any moment.

- Such a sorry state couldn't have emerged as an overnight phenomenon; but a result of years of neglect and mismanagement
- In a letter dated 25/7/2016, superintendent of CHC, Saidpur wrote to CMO Ghazipur that the conditions of housing colony of doctors and employees is so bad that every other day some portions of roof of keeps falling
- Evidently, no action even after two years as the same and greater concerns was raised in letter dated 28/9/18. This time, concern was expressed about the collapse of boundary wall and the imminent collapse of the water tank of women's hospital at Saidpur:



Field Data Summary:

1. Most PHCs away are from village centre, with poor infrastructure and facilities. This makes it difficult for patients, paramedics and doctors to approach as well use the facility. This issue is connected with availability of free land, and therefore has policy implications.
2. The condition of infrastructure – both at centres and living quarters of doctors - ranges from bad to pathetic. In any civilized society, these would be considered sub-human.
3. Repeated letters and representations for rectification do not elicit results. In some case, these are not even responded to.
4. At one CHC, doctors and staff pooled in money to repair pump and maintain water supply
5. There is a shortage of doctors, paramedics, and equipment. Shortage of doctors has been compounded by their absence. Poor maintenance.
6. Doctors on contract, no solution. If at all, recruitment should be localized
7. Condition at CHCs not much better. Unsurprisingly, occupancy rate at CHC at best 10%. Equipment lying unutilized because of lack of specialist doctor and technician
8. This has resulted in massive overcrowding at District Hospitals. The situation has been aggravated by long delays in installing equipment which lies unused because it takes long time to get clearance from headquarters.
9. It is therefore evident that centralized decision making has done little to resolve problems; actually there's ample evidence to indicate it has aggravated problems by inordinate delay. This has resulted in negative impact on morale, work culture & efficiency
10. Doctors and other employees at field units are eager for some change, and say that “even little improvement in basics will have wide ramifications”

While field conditions being what they are, how do these get addressed? Professionals in the field point out that the key lies in the Directorate of Medical Health (DOMH) situated in the state capital, Lucknow, as nothing can move without DOMH sanction. So, our research led us to investigate the functioning of DOMH.



DOMH Findings:

1. Nature of work: The nature of work is basically routine, clerical; and is generally geared towards providing data or information, and responding to questions or queries raised in various forums. In other words, it is mainly reactive, rather than proactive. Almost every department has to deal with legal issues arising out of court cases. Since Joint Directors (JDs) have neither the expertise nor inclination on such matters, clerks or section officers take care of such matters; JDs just sign on the dotted line. Same goes for other administrative matters that don't have legal angle, like budgeting, purchase.

Doctor-administrators say: *"We don't have expertise; we are not trained to do such work. Our education, training and experience are in clinical; not administrative or legal. Result: we are not doing the things we can or should."* But on matters on which they can certainly play a role bypasses them. Matters relating to functioning of CHC, PHC are reviewed or monitored by ADs, not by Director or JDs at DOMH. Equally important, no evidence has been found with respect to development of position paper, policy or review document. Therefore, there's no evidence of charting direction; much less bringing about change.

2. Workload: Doctors say that while in the field they were overburdened with work, at DOMH there's not much work. It is therefore not unusual to find two or more JDs along with Director huddled in one room.

3. Work Methods: While respective departments generate lot of data, have developed forms and formats, their appears to be lack of integrative mechanism either reflected in, or an outcome of lack of, lack of understanding of standard management practices associated with planning, organizing, directing/motivating and controlling; not to speak of aspects like innovating and marketing or raising resources. A good example is the method adopted by most Additional Directors:

- Once in a quarter, they go on field visits, including surprise checks
- They review all programs: e.g. IMR and measles
- They review the functioning of PHC, CHC, DH
- They consider such issues as manpower, target, how much achieved, gap analysis
- They ask for suggestions; help required
- And they submit a tour report

It is therefore no wonder that issues raised by PHC, CHC and DH remain largely unaddressed

4. Interactions with other Directors at DOMH: From work point of view it is negligible. Doctors say; "they do their work, we do ours".

5. Dynamics of decision making: Notes, queries are put up in files; Directors/Joint Directors respond likewise. The protocol of hierarchy is scrupulously followed. Even when the Director and Joint Directors are sitting next to each other, the superior will not put his/her initials

unless the junior has initialed first. Brief meetings do take place, usually on specific points, especially when the superior makes the notation “PI speak” on the file.

6. Work Conditions: Mostly cramped rooms; many Joint Directors sharing cabin

7. Pride, Commitment, Work satisfaction: With a few notable exceptions, doctors at DOMH take little pride in the work they do. During our interactions, the only animated discussion and recall was about their work in PHCs, CHCs and District Hospitals where living and working conditions were harsh but at least they were doing something meaningful. But in their current position at the Directorate, they have neither work satisfaction, nor commitment. Nothing expresses the situation better than the following quotes:

- “I have only a few months/a year to retire”
- “I didn’t want to come to Lucknow: decent accommodation is a problem”
- “Over last few years here, I have lost touch with my domain and skills”
- “We just sign on the dotted line”

8. A Question of Perspective: The focus of Directors, Joint Directors limited to their roles and responsibilities; there’s almost no concern with overarching issues or interdepartmental concerns. The focus is also on mundane operational issues – largely driven and managed by subordinate staff. It has therefore been difficult to ascertain the perspective of DOMH: what is its mission-vision; what is the big picture they want to see? Consequently, there appears a lack of collective think in terms of direction Public Health in UP should traverse. Yet... every senior official at DOMH is acutely aware of ground realities, no less because they have themselves experienced them. When probed, almost everyone acknowledges that while things have somewhat improved over time, many glaring problems remain, and much needs to be done. Many officials have also indicated what could be done to improve outcomes. Suggestions range from changes in policy, structure, devolution of decision making, system and process changes, and work methods. In the section on Recommendations, many of their suggestions find place.

Yet, what is intriguing is that almost none of these suggestions have been articulated, much less strongly advocated. It is as if they were waiting for “somebody else” to take the initiative. In the main, three explanations have been attributed for stagnancy:

- lack of political will
- Corruption / vested interest
- Top management / leadership (although they themselves constitute this segment)





Assessment & Implications:

Nine major issues stand out for redress

1. Improvement in infrastructure at PHC & CHC and staff housing – especially those which are in acute condition
2. Addressing shortage of doctors & paramedical staff
3. Concern with non-clinical work like medico-legal and routine administration – especially at DOMH
4. Need for decentralization of decision making
5. Need for deeper appreciation of public health (PH) issues (data analysis, working out implications and developing action plans to address critical Public Health issues)
6. Need for changes in policies related to land for PHC, greater allocation for healthcare, recruitment...
7. Need for monitoring, review, assessment and remedial action to be undertaken along principles and practices of management
8. Training/capacity building as a fulcrum of (a) doing things better, and (b) as an agent of change
9. Role of Leadership in bringing about change



Response Framework:

Based on the foregoing, the following response framework is likely to improve Public Health delivery:

1. The first step of course is to increase allocation for healthcare
2. Next, it would make sense to do away with policy mandating setting up of PHC on panchayat land or land received as gift, grant, donation. They should be located close to where the people live. The current faraway location is at the root of problems besetting PHCs.
3. Let PHCs be manned exclusively by AYUSH doctors, supported by a short standardized program to help them diagnose critical cases for referral. This will release many doctors and paramedics for CHC.
4. Likewise, it makes sense to release bulk of doctors posted at DOMH. On the one hand, they are ill suited for routine administrative work, including legal matters, and on the other, the sector is losing out on scarce resources having deep experience.
5. Since occupancy rate at most CHCs is about 10% - wasting 90% capability – it would make sense to integrate, say, six CHCs into a 100-bedded satellite hospital. This would require 60-70 doctors, but with integration, manpower issues would be greatly addressed
6. There is merit in the argument to invest substantially in staff housing on township lines as is with PSUs, university, army, paramilitary... this will address issues related to safety, isolation, schooling...

7. Similarly there is merit in the argument to overhaul recruitment of doctors on contract: responsibility and accountability for recruitment and management resting with CMO and Additional Director in charge of zone
8. Officials at DOMH neither have extra knowledge nor special expertise to warrant decision making of operational issues. On the contrary, delays and inaction have led to avoidable hardship, wastage of resources, poor outcomes & low morale. Therefore, decision on operational matters should rest with CMO/CMS
9. To enable (7) above, ADs heading respective zones need to oversee planning, resource allocation, review, monitoring and course correction
10. To enable (8) above, ADs, CMOs and CMSs need to be imparted capsule training in management
11. While many centrally sponsored programs address Public Health issues, these by themselves cannot address sharp imbalances; nor do they account for significant variations in a state of “continental proportions”. Why these happen, what are the implications, and how they need to be addressed in an integrated manner would require development of a guiding framework. While understanding the three core functions of public health and the 10 Essential Public Health Services may not be rocket science, they do demand an organized method of learning. All ADs, CMOs therefore need to undergo basic training in public health, including the five-fold cyclical method of implementation. This will help revert to the earlier situation of linking health and social issues, since it is the government’s responsibility to provide primary health
12. Field data as well inputs from health professionals point to the need to integrate functioning of Medical Hospital and Medical College with field work. This will significantly improve the quality of teaching in medical colleges; while doctors at hospital would become updated with latest advances in research and medical technology.
13. Doctors are recruited in UP’s Provincial Medical and Health Services as Medical Officers (emphasis added). And as medical officers in the public health (PH) domain, they have to undertake tasks and discharge roles and responsibilities that medical practitioners operating on their own, nursing homes and private hospitals do not have to bother about. It can therefore be argued that DOMH re-start the earlier practice of imparting one-month training on Management Orientation Programme to all freshly recruited doctors; to be followed by MDP on finance and medico-legal matters.
14. Finally, to implement much of what has been pointed in above paras, greater application of technology, especially ICT, is called for, such as inventory management, dispensing medicines, useful in managing better outcomes: e.g. smart phones very helpful in managing cold chain. ASHAs using it; good in vaccine management.



Conclusion:

Public health being one of the pillars of Samarth Zilla, significantly improving our creaking Public Health delivery system is vital. While the problems manifest in the field, the solution lies in restructuring the apex body; in this case DOMH. Truly, as the Buddha said, “Yatha Raja, Tatha Praja”. Thus the restructuring is not just in form, but in terms of work culture, professional ethos, accountability and participation.

टीकों के भण्डारण के लिये आकस्मिक योजना

उम्मेद सत्यय सत्य विजयती उपलब्ध ना उम्मेद पर (8 घण्टे से अधिक देर तक)

ध्यान रखिए

- सफाई बैंक कोजिए, खराबी का पता लगाइये और उसे ठीक कराइये।
- खराबी जल्दी ठीक कराने के लिए विजली विभाग को सूचित कीजिए।
- ब्लॉक मेडिकल ऑफिसर/ जिला प्रतिरक्षण अधिकारी अधिकारी को सूचित कीजिए।
- विजली विभाग से पता लगाइये कि विजली की सप्लाई कितनी देर में बहाल हो जायेगी।
- स्टेफनरुजर को घम भी बी की पोलीशन और फ्लोनिंग तथा उपकरण के साथ उसकी फ्लोरोरिडो बैंक कोजिए।
- बैंक कोजिए की स्टेफनरुजर का पता विजली के सफाई में लगा हो।
- कठोरता पोल होने पर तापमान में अंतर, चतुष्टय या किसी अन्य तरह की खराबी होने पर कोल्ड चैन टेक्नीशियन को सूचित कीजिए।
- कोल्ड चैन कक्ष में कोल्ड चैन के अतिरिक्त कोई अन्य सामान ना रखें।

कोल्ड बाँक्स में टीकों का भण्डारण

- कोल्ड बाँक्स के तले और दीवारों पर कंडिशनर आईस बैंक रखा।
- बैक्सीन वाइजस के बीच थर्मामीटर रखा। कोल्ड बाँक्स को जरूरत पड़ने पर ही खोलिये।
- कोल्ड बाँक्स को बैंक कर दीजिए।
- ध्यान रहे कि डी.पी.टी., टी.टी., पैन्टालेन्ट, एफ.आई.पी.वी. और हेपेटाईटिस बी के टीके आईस बैंक से बिल्कुल सटाकर न रखें।
- यदि कोल्ड बाँक्स उपलब्ध न हो या विजली 72 घण्टों से ज्यादा समय तक गायब रहने वाली हो, तो सभी टीके ममय समय पर थर्मामीटर से उपकरण के स्टोरज तापमान को मानिटर करने रहिए।
- अगर स्टोरज तापमान 8 डिग्री से. में अधिक हो तो टीके को कोल्ड बाँक्स में रख दीजिए।

महत्वपूर्ण नाम व टेलीफोन नम्बर

1. आई.ओ.	शिवकुल	9758787820
2. कोल्ड चैन हेण्डलर	डॉ. गुरु चरन	8193951023
3. प्रभारी चिकित्साधिकारी	डॉ. एस. के. निगास	7983935207
4. जिला प्रतिरक्षण अधिकारी	राजेश कुमार	9205598397
5. जिला बैक्सीन कोल्ड चैन मैनेजर	अंजार जावेद	9457168033
6. जिला कोल्ड चैन टेक्नीशियन		9412749659
7. विजली विभाग		101
8. अतिरिक्त विभाग		

- नजदीकी कोल्ड चैन प्वाइंट का नाम- PHC KOTWALI
- नजदीकी कोल्ड चैन प्वाइंट के प्रभारी/नोडल- Dr. PARMOD DESWAL 8273870746
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