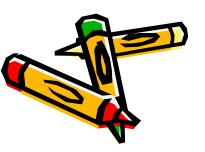


Learning objectives

- 1. To describe historical background
- To describe in details the measures to safeguard public health at fairs, festivals and camps

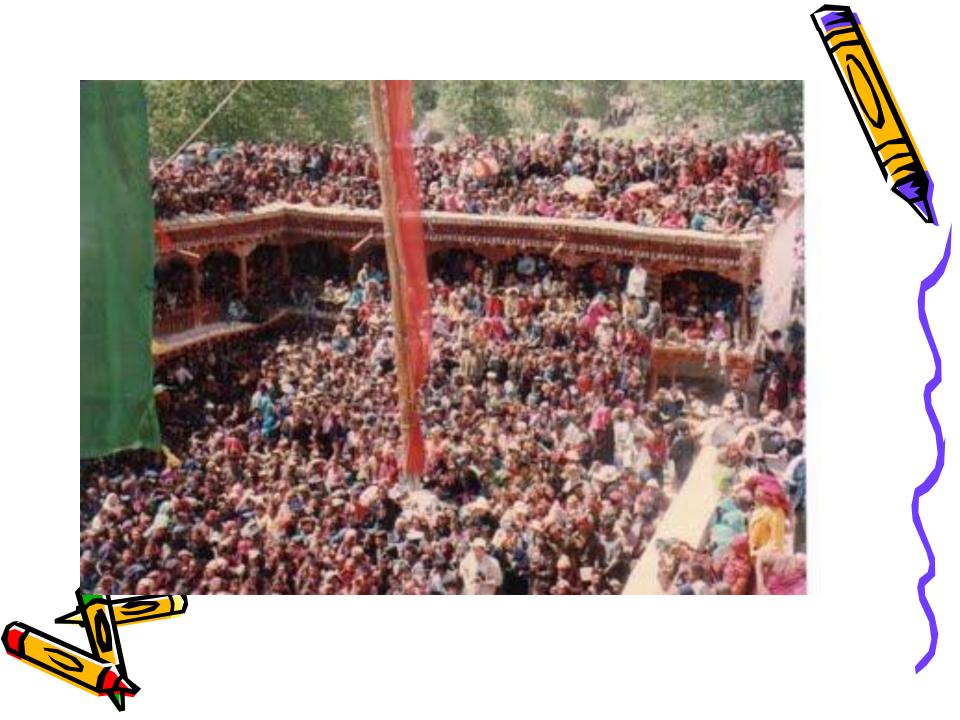


Pushkar Mela of Rajasthan









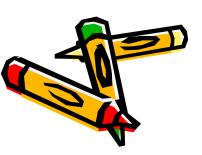












- Outbreak of cholera in Puri
- An epidemic at Hardwar mela in 1867 spread to Persia and Soviet Russia and costed millions of lives
- GOI 1912 Provincial pilgrim committees to examine sanitary requirements of pilgrim centres in the country and to recommend measures to be adopted by the festival authorities for the safeguard of public health

- Adequate provisions for safeguarding public health at pilgrim centres are of national and international importance as festivals are not parochial affairs
- Sanitary arrangements for fairs, festivals can be discussed under the heads:
 - administrative measures including finance
 - sanitary measures
 - Communication
 - medical services



Administrative measures

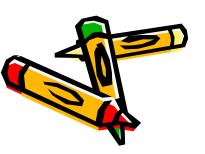
- Large festivals: committee appointed, including representatives of the local bodies, temple authority, railways, police department
- Planning in advance about each and every minute details
- Technical and supervisory staff from local and state authorities
- Mobilizing services of the voluntary organizations

Finance

- Collection of money from:
 - Taxation on shops, carts, vehicles, food establishments, lodging houses
 - Pilgrimage tax on railway tickets
 - Temple donations
- Utilized for the provision of:
 - Sanitary facilities
 - Medical facilities

Sanitary measures

- 1. <u>Safe water supply</u>
 - Must not be contaminated
 - When possible, piped filtered supply through taps
 - Or, tube well @ 1/200 person
 - Or, existing dug wells covered, fitted with hand pumps after chlorination
 - All sources: daily chlorination



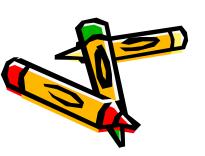
2. Conservancy services

- <u>Rubbish conservancy</u>
 - Swept at least thrice a day
 - Disposed at a distant place by burning
 - <u>Collection</u>: large dust bins for <u>urban</u>; temporary pits fenced around to a small height for <u>rural</u>



- Night soil conservancy

- Permanent pilgrim centres: sewered latrines
- Shallow trenches should never be advocated
- Well or pit latrine should not be within 30 feet of any shallow water source
- Septic tank latrines
- Spraying of DDT twice daily for prevention of fly breeding



3. Wholesome food supply

- All norms or regulations must be strictly followed
- Food inspector

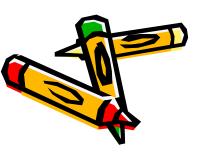
4. Accommodation

 All sanitary measures and guidelines for healthful housing must be strictly followed even if the accommodation is temporary



Medical services

- One medical personnel on duty for fairs or festivals having more than 5000 visitors in a day
- A properly located and well equipped dispensary including preparedness to meet medical emergencies
- Insecticides, disinfectants
- Demand for compulsory production of immunization certificates at specific places
- Health workers
- Health education
- Preparedness to control any epidemic situation





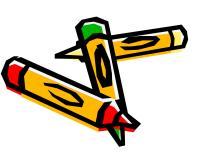
Camp Sanitation

In view of the fact that camps and temporary settlements have been freely set up all over the country, the following points require consideration with reference to camps:

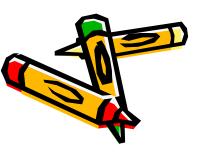
- 1. Camp site
- 2. Accommodation and equipment
- 3. Water supply
- 4. Food and cooking arrangements
- 5. Disposal of refuse, excreta and waste water

1. Camp site

- On a high ground not subject to floods or water logging
- Good approach from the main road
- Not too close to a bazar or congested area, but facility for transport and easy accessibility to supplies should be kept in mind

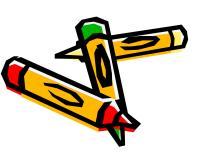


- Ground and surroundings: dry and free from dense vegetation
- Hollows and excavations should be filled up to prevent mosquito breeding
- Facility for obtaining water

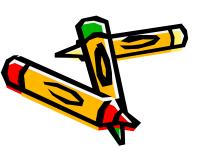


2. Accommodation and equipment

- Tents: risk of overcrowding
- Tent walls: must be looped up daily to allow fresh air and sunlight to enter
- Trenches: cut round the tent to hold rain water and to provide surface drainage
- Lay out of the camp should be properly planned after a survey of the site



- The <u>front of the tent</u> should face the prevailing wind
- <u>Sleeping accommodation</u> in front with kitchen and mess nearby
- The <u>conservancy area</u> should be concentrated leeward, not more than 200 yards from the most distant sleeping place and not in a place likely to pollute the water supply
- <u>Bathing and water point</u>: away from conservancy, with proper drainage to prevent water logging



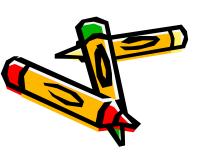
3. Water supply

- Not only safe, chances of accidental contamination should also be nil
- Whatever the source, water should be examined bacteriologically before use and disinfected
- Wells: covered, water drawn with pumps
- No animals should be allowed to be watered from the same source
- Transport of water from source to consumption site: all vessels kept cleaned and covered
- Chlorination must be done

4. Food and cooking arrangements

- Fresh food daily
- All milk should be boiled
- Perishable foods: refrigerate if available
- Kitchen: well lighted, ventilated, fly proofed and with a smoke outlet
- Suitable provision for storage: clean,
 protected from rodents and flies

- Sullage: made to pass into pits
- Provision for washing the cooking utensils
- Provision of ample supply of hot water
- Cooks and other food handlers: should not be suffering from communicable diseases or should not be the carriers of the same
- Cleaning of utensils: strictly not with earth, instead baked sand stored in a clean tin can be used

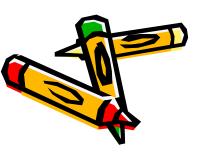


5. Disposal of refuse and excreta

- a) Dry refuse:
 - from kitchen and other parts of the camp
 - Daily collected in sand bags by concerned persons
 - Refuse like veg. peels, remnants of food: land filling or deep burial or incinerator

b) Liquid waste:

- Human and animal urine, kitchen sullage, ablution water
- Soakage pit can be used



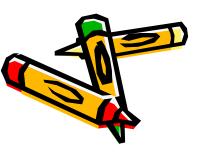
c) Faeces:

- Shallow trench should be avoided
- Deep trenches: should be made fly proof
- At least 50 yards away from the source of water and kitchen
- Always be super structured
- Where convenient, bored hole, well or pit latrine can be provided
- Conservancy staff
- Ample water

pproach: clean, lighted at night

Stable litter

- Horse manure, cow dung
- Daily collection and complete removal to prevent infestation by flies and other biting insects
- Incineration or deep burial



Good organization and effective coordination from the beginning

