Advisory for Livestock Owners during COVID 19 Lockdown

Issued in public interest by
ICAR-Indian Veterinary Research Institute, Izatnagar

Do’s & Don’ts for Livestock farms

- Restrict the movement of visitors to the livestock farms & practice biosecurity measures.
- Strength of farm workers/ animal shed attendants should be minimized with maximum output per worker without jeopardizing their health.
- Workers coming to livestock farms should wear mask (see below for how to use mask), be thermal scanned or asked for their health on daily basis (considering no facility for thermal screening at livestock farm) and advised to sanitize with appropriate sanitizer and maintain social distance while cleaning animal shed, chaffing and distributing fodder and milking dairy animals etc.,
- If any worker is found ill, he should be channelized to take standard health measures to avoid any possibility for disease spread.
- As far as possible keep soap, bucket of water and hand sanitizer at the entrance of the animal shed and instruct all human resources at livestock farms, to sanitize exposed body parts regularly at an interval of 1 to 2 hour with appropriate sanitizer/wash with soap.
- The animal farm equipments and accessories should be cleaned and sanitized regularly.
- Workers should not use watch, jewelry etc. and refrain from used of mobile phones. If used phones should be frequently sanitized.
- High touch points should be cleaned twice daily by mopping with 1% hypochlorite solution. In case of metallic surfaces where bleach is not suitable 70% alcohol should be used.
- Wherever possible, automation techniques (CCTV camera) may be used to monitor animal health and various other activities.
- Farm managers should keep sufficient feed, fodder and medicine in hand to manage the lockdown period.
- Trading of livestock, if highly needed should be managed through e-trading. In case of purchase of animals, animals should be quarantined for a period of three weeks before induction into existing herd.
- Follow good management practices related to feeding, housing (clean, dry and well ventilated), water and general hygiene to keep animal healthy and productive (install IVRI mobile apps for good management practices)
- Observe animals for any abnormal behaviour/posture/feed intake/ rumination/defecation and urination twice daily (morning and afternoon) & if needed consult the veterinarian.
- Isolate the sick animals & in case of emergency contact the nearest Veterinary hospital.
- Vaccinate the animals against Foot and mouth Disease and Hemorrhagic septicemia (Cows and buffaloes), PPR (goats) in consultation of your veterinarian
- Except pregnant animals deworm all animals for external and internal parasites in consultation with your veterinarian
- Proper water intake of animal should be monitored to protect them from heat stress.
• Supplementation of herbal immune boosting products in ration can boost immunity of animals. It may be done in consultation with the veterinarian.
• Avail routine reproductive services (Artificial Insemination & Pregnancy Diagnosis) and specific problems (Infertility & Dystocia) at home and minimize visit to veterinary hospitals.
• Pay more attention on estrus detection, especially visiting/observing dairy livestock early in the morning or late evening to catch maximum estrus animals.
• These months (April, May & June) are favorable breeding season for our Indigenous cattle breeds since in these months majority of Indian cattle breed exhibit estrus sign despite rise in temperature.
• Evening buffalo splashing/bathing of buffaloes with cold water may be done especially in pregnant buffaloes to prevent adverse effect of summer on estrus and conception & prevent early embryonic mortality-abortion due to heat waves.
• Offer ample milk or electrolyte water to newborn calves to prevent dehydration, heat stroke and death of neonatal stocks.
• Transportation of animals to customer’s door for milking should be restricted during this period.
• All human resources at livestock farms should be advised to install Arogya Sethu App mandatorily.

How to use a mask

• Before putting on a mask, clean hands with alcohol-based hand rub or soap and water.
• Cover mouth and nose with mask and make sure there are no gaps between your face and the mask.
• Avoid touching the mask while using it; if you do, clean your hands with alcohol-based hand rub or soap and water.
• Replace the mask with a new one as soon as it is damp and do not re-use single-use masks.
• To remove the mask: remove it from behind (do not touch the front of mask); discard immediately in a closed bin; clean hands with alcohol-based hand rub or soap and water.

(Source: WHO)

Primary treatment for Surgical conditions that can be given by farmers

• **Wounds:** Wounds can result from the injury by agricultural implements, fall, road accidents or infighting among the animals. There may be skin cuts and bleeding may be apparent. Wounds should be gently washed with a clean and cold Alum water or saline. Copious amounts of water should be used to flush out any contaminated or dirty wounds. A large syringe or pump can be used to effectively irrigate wounds. Cuts that are bleeding can be dealt with by applying a pressure bandage (clean gauze or cloth wrapped around with some padding) pressed firmly against the wound; over it an ice bag is pressed firmly on the area; or a tourniquet can be applied. After the bleeding has been controlled, clean the wound with hydrogen peroxide or savlon and apply an antibiotic ointment/betadine or turmeric powder with a gauze or cotton bandage wrapped snugly over the wound. Change the dressing daily.
and check the animal from removing it. If you see some maggots in the wound, the wounds should be treated by turpentine oil, if it is not available Neem oil can be applied.

- **Lacerations**: Lacerations can be treated in the same way as cuts, but an ice bag must be used to reduce swelling and prevent further inflammation. Skin lacerations should be dressed with Neem oil.
- **Fracture**: Fracture of the bone can be diagnosed by swelling and angulation of the limbs. In case of a compound fracture, bone fragments will be seen sticking through the skin. Fractures cause great pain and discomfort to the animal. The pet animals will cry or bite when the affected area is touched and will usually not walk on the affected limb. Some animals will walk with lameness despite the break. Apply an ice pack or cold wet compress to the affected area to reduce the swelling and inflammation. Protect the animal from further injury by confining it to a small room. Apply a temporary splint to broken limbs to avoid further damage to the bone and other tissues.
- **Electric shock**: If you find the animal physically being electrocuted, turn off all power and then unplug the cord. If the animal is conscious do not put your fingers in its mouth. If the animal is unconscious, open the mouth by placing your fingers on either side of the jaw, and gently open it. Pull the tongue out so it is not blocking the airway. Once the mouth has been cleared, check that the animal for breathing. Tilt the head upward so the airway is clear. Check the breathing by watching the mouth and nose for any sign of breath, or by watching the flanks (stomach) rise and fall. If the animal is not breathing (but there is a pulse), try to give respiration by your mouth or compressing the chest.
- **Burns**: The burned area will show seared flesh, reddened skin, lesions, and blisters. The animal may suffer respiratory distress. Thermal burns cause a singed or charred area; the exposed skin is reddened or inflamed; the wound is warm or hot to the touch. Depending on the type and extent of the burn, it can often be treated at home. Thermal burns can be treated topically by applying large quantity of cold water, the jellylike substance from an aloe plant, a solution made from Burnol (available at most pharmacies).
- **Sprains**: Sprains can be caused while walking or running on uneven floor and may cause rapid swelling. The affected area will be hot to the touch. The animal will not walk normally, if it walks at all. Apply cold compresses or ice packs gently to the swollen area; keep the area cool for a day or two, changing the compress or ice when necessary. Wrap the affected area snugly with cloth, gauze, or athletic bandages; secure the wrapping. Keep the animal quiet; and discourage activity.
- **Foreign bodies in eyes**: Foreign objects can be flushed from eyes with body temperature saline.
- **Hoof problems**: Hooves can present special challenges on the farm. Wounds with maggots in hooves should be flushed with clean alum water or solution of Iodine and apply turpentine oil. From the second day wound may be dressed with iodine solution. The animal should be housed in a clean dry environment. A cotton cloth or bandage should be applied.
- **Horn Fracture/ Avulsion**: The condition is emergency due to massive bleeding and pain in animals. The avulsed horn is applied gently with bandage soaked in Tr. Ferriperchloride/ Tr. benzoin to check bleeding. Isolate the animal to avoid further injury to the part by other animals. Antiinflammatory and antibiotics to check pain and infection respectively.
• **Bloat:** Ruminants are susceptible to bloat and precautions for free gas and frothy bloat are recommended in preparing for large animal emergencies. Frothy bloat is normally seen following the ingestion of large amounts of very succulent legume forages. Commercial products (Bloatasil) can be purchased. Vegetable oil as a drench can be used at the dose rate of a cup to an adult goat/sheep and 3-4 cups to cattle. Free gas bloat can be relieved with a speculum and a garden hose through the animal’s mouth. Sometimes in an extreme case the use of a bloat trochar through the left flank of the animal into the rumen might be necessary.

• **Heat Stroke:** There may be increase in body temperature beyond the point of normal physiological temperature. It is due to hot weather, high humidity, inadequate ventilation, exposure to direct sunlight and overcrowding. In pet heat stroke can be noticed in a locked car in the sun or if animal is muzzled it for long durations in summer. This can be managed by putting ice bags on the head and keeping the animal in cool room.

**Preventive measure for milk vendors**

- Milk handler should wear gloves as well mask while selling milk. Gloves are not substitute for hand washing and frequent hand washing is mandatory.
- Hand sanitizer should be used while supplying milk from one customer to another
- Milk collected should be filtered immediately with clean cloth and must be kept covered in cold areas.
- If milk is to be sold in loose condition, it should be transported at earliest to consumer/retail market in covered containers and under cold conditions. Otherwise, if packing facilities exists, packing and selling of packed milk should be encouraged.
- Use long handle milk measuring ladle and touch it only after sanitizing hands if in-between you have touched anything else
- Keep a safe distance from other i.e. more than 6 feet and wear full sleeve clothe
- Remove the clothes immediately after coming home and wash them
- Take bath before interacting with any family member especially elderly and children
- Remove the shoes outside house and keep them separate
- Do not involve in milking or milk processing if feeling sick
- If possible go for online transaction and avoid cash payments
- Remove gloves and mask appropriately and discard them safely. Homemade masks should be washed daily before use
- Schedule milk delivery in such a way that there is minimum human contact, like delivering to an area once in two days
- Delivery of milk and milk products without human contact should be done by leaving the product at door or maintain a gap of at least 6 feet
- Contact with common touch points such as door bell, door handle etc. should be avoided and if touched hands should be sanitized thoroughly.
- At the sale counter, wear the mask and hand gloves and ask the customers to maintain social distance.
- If vehicle used for delivering milk or milk products entered an area marked as hotspot, it should be thoroughly clean before another use.
• Follow most recent guidelines by Ministry of Health and Family welfare to protect yourself from COVID-19

**Hygienic Practices for Dairy Processing Plant**

• No outsiders to be allowed in Office/Plant unless it is very urgent.
• Employees to avoid any meeting with outsider/trade partners unless it is very urgent/critical. In such case the meeting should be done in an isolated area outside the workplace premises.
• All Offices to have a Hand Sanitizer at the entry Gate.
• Washrooms should always have soaps.
• Office (Floors/Furniture’s/Equipment’s) to be properly sanitized twice a day with strong Phenyls and disinfectants.
• Work Area to avoid using air conditioner as far as possible, keep the workplace as much ventilated as one can by opening windows.
• Employees are advised to wear full sleeve clothes, head gears, gloves all the time.
• All Employees to wash their hands after 2-3 hours.
• All Employees to use tissue papers to pull door handles etc. Pushing a door can be done through elbow or body weight.
• Wearing of masks and other protective gears all the time should be ensured.
• All Employees should avoid physical contact via Handshakes etc and avoid touching their face.
• Face masks or covers should be removed without touching the outer surface and avoid touching mouth, face, nose and eyes before properly washing hands.
• Any Employee who has fever along with dry cough and facing shortness of breath should immediately be quarantined and referred to doctor.
• Staff commuting to work area in Public transport shall avoid the same.
• If using public transportation, maintain a social distance, wear a mask and sanitize the hands frequently and avoid touching the face.
• Disposal tissues should be used for sneezing or coughing and proper disposal of used tissues should be there and hands should be thoroughly washed before handling anything else.

**Conversion of surplus milk into value added products**

• In case of unutilized/surplus milk, following steps are suggested. Farmers may adopt the best suitable ways to utilize the unsold milk.
  - Whole Milk may be fermented using locally available starter cultures. It can be utilized for Ghee production and the by-product- Butter milk can also be packed and sold. The unsold butter milk may be fed to calves.
  - Cream can be separated and may be utilized for butter making (if facilities exists) otherwise use it for Ghee production. The by-product- Skim milk can be fermented for curd/lassie or may be used for flavored milk production or it may be fed to calves if remains unutilized or casein can be prepared to sale later on.
  - Milk may also be concentrated to make khoa and khoa-based dairy products.
- Kulfee or other frozen dairy products may also be prepared depending upon skills available with farming families.
- Curd may be prepared and sold.
- Khoa can be prepared by desiccating the milk, which can be sold as such or can be used to prepare the khoa-based dairy products.

**Preventive Measures during Meat Production**

- Wear clean protective clothes or aprons, head gears, mask, gum boots, shoe cover etc. while handling meat or meat products.
- If possible make arrangements for a sanitizing tunnel at entrance for personnel working inside the processing plant.
- Wash hands with soap for minimum 20 seconds and use suitable sanitizer (alcohol based with >70% alcohol) before starting work and repeatedly during work.
- Ensure access to production areas with working clothes only.
- As far as possible, maintain a safe distance of at least 6 feet from fellow worker.
- For hand washing there should be the provision of foot or elbow operated taps.
- Fresh wounds through knife cuts etc. must be covered by a water tight bandage.
- Do not touch your face, nose, mouth or eyes while working.
- If you have sneeze, do it in a disposable tissue paper or in upper area of your sleeves.
- Frequent cleaning and sanitization of common touch areas should be carried out.
- Clean and disinfect the knives used for meat cutting in hot water at the temperature of >82°C for few seconds.

**Protective Measures in Meat Processing Plants**

- Meat processing facilities must meet the basic hygienic standards in order to ensure and maintain clean and hygienic working conditions.
- Regular thermal screening of workers with contact less equipment and those showing temperature >99°C, should not be allowed to enter the premises.
- Personnel must be taught to maintain all the time a minimum gap of 6 feet or above.
- Ideally meat cutting/deboning should be carried out in acclimatized rooms (10-15°C) with low air humidity.
- Personnel must be educated how to sneeze and cough if they have such sensation. They must be taught to close their face within the ankles of the forearm and after covering the face, they must cough or sneeze if they have such sensation.
- There should be visible notices pasted promoting hand hygiene and physical distancing.
- Physical barriers between workers working in a processing line can be installed
- High temperature cooking (pressure cooking preferable) regimen should be followed.
- Do not hose down floor and wall areas or equipment next to meat processing operations or final products with a power hose. (Risk of contamination by aerosol/droplets).
- Never take meat pieces, which accidentally had contact with the floor or other contaminated surfaces, back onto working tables or into meat processing machines.
- Containers for raw meat, semi or fully processed meat products must not be placed directly on the floor.
• Meat and meat products should be properly packaged in sanitized packaging material and meat should not be sold without packaging.
• For raw meat and cooked meat, different sterile cutting boards and different sterile knives must be used.
• The personnel involved in processing must wash their hands between handling different items such as knives, raw and cooked meat, mixing bowls, spoons etc.
• All the equipments and instruments in the meat processing plant must be sanitized after every shift. Wash surfaces with detergent and water at 60°C and then sanitize by applying very hot potable water (75°C) for at least 2 minutes. Then disinfect surfaces with suitable disinfectant. For this chlorine or quaternary ammonium compounds based sanitizers can be used.
• All the meat storing places such as refrigerator and freezer must be properly cleaned and disinfected using suitable sanitizers.
• Frequent mopping of the floors must be done once in four hours.
• All the meat processing equipment, cooking utensils, equipment, knives, cutting boards, working tables must be sanitized every 4 hours.
• Only a single person must be allowed to operate in a single section. Assigning multiple people for same job must be avoided.
• No ready-to-eat meat product should be kept open and it should be immediately packaged or properly covered before packaging.
• Toilets and washrooms should be cleaned after every shift with detergent and water followed by disinfecting with 1% hypochlorite solution or equivalent.

Preventive measures for Selling point/Retailing

• Regulate number of customers who enter the retail store to avoid overcrowding.
• Make barrier to stop consumers to enter into the shop.
• Use floor markings to facilitate compliance with the social distancing advice of 1 meter, in the external public areas where customers may need to queue.
• Provide hand wash/soap and hand sanitizer with possibly disposable paper towel.
• Make regular announcements to remind customers for maintaining physical distances and hand washing.
• Encourage the use of cashless/contactless payments. In case of credit/debit card machine is used, machine should be sanitized with 70% alcohol after each use.
• Consider delivery services and taking orders online or by telephone in advance.
• If doing home delivery, refrain from touching doorbell or knobs and encourage contactless delivery.
• Flexi glass barriers at tills or counters can be used as an additional protective measure for staff.

Guidelines for Meat Consumers

• There is no report that a person can be infected from COVID-19 by eating animal origin products. Meat and meat products made from them are considered to be safe for consumption.
• However, it is good to wash hands and surfaces, separate raw meat from other foods, cook to the right temperature, and refrigerate foods promptly when handling or preparing foods.
• Use single use bags for food items or groceries and discard bags afterward.
• Use alcohol based hand sanitizers while going out for purchase.
• Clean packed food items with packet using detergent solution.
• As common healthcare precaution, all kinds of meat should be thoroughly washed before processing.
• Any meat or poultry should undergo a thorough cooking process (preferably pressure cooking or internal temperature >75°C) to kill most germs and illness-causing microbes including coronavirus.
• Even in hotspots of COVID-19, meat products can be consumed safely if cooked thoroughly and the person cooking has handled it properly.

Precautions during Egg production/ Gathering/ Transportation

• Any egg handler who is unwell should not be at work. If they have symptoms, they should follow government advice and stay at home.
• Use head gear, mask, shoe cover/gumboots, disposable gloves etc. while collecting, packaging, transporting and selling the eggs.
• Regular thermal screening should be done for egg handlers.
• Social distancing of 1 meter shall be advised to the staff during working.
• Limit the number of staff to maintain social distances.
• Anyone handling eggs should wash their hands often with soap and water for at least 20 seconds.
• Egg should be cleaned using potable detergent water or egg soap water (pH 11.0) like egg wash powder, an alkaline chlorinated foam control powder.
• After washing, eggs should be sanitized using chlorine based sanitizer (50-200ppm).
• Eggs should be transported in a closed container and no other items should be permitted for transportation in the same vehicle and vehicle should be regularly disinfected before loading and after unloading.
• Frequently clean and disinfect objects and surfaces that are touched regularly by staff or customers. 1% hypochlorite solution could be used for mopping contact surfaces and for metallic surfaces alcohol based sanitizers can be used.
• Provide additional pop-up hand washing stations or facilities if possible, providing soap, water and hand sanitizer.

Precautions at Egg Selling Point/ Retailing

• Regulate number of customers who enter the retail store to avoid overcrowding.
• Make barrier to stop consumers to enter into the shop.
• Use floor markings to facilitate compliance with the social distancing advice of 6 feet, in the external public areas where customers may need to queue.
• Provide hand wash/soap and hand sanitizer with possibly disposable paper towel.
• Make regular announcements to remind customers for maintaining physical distances and hand washing.
• Encourage the use of cashless/contactless payments where possible.
• Consider delivery services and taking orders online or by telephone in advance.

Precautions for Egg Consumers

• Wash your hands after handling egg packaging, after removing eggs from the packaging, before you prepare and before you eat.
• Egg may be washed in warm water (but not hot), lightly wipe it clean, rinse under cool running water, gently dry and refrigerate or use immediately.
• Disposable egg tray or cartoon shall be used for shell egg packaging, trays should not be reused and disposed of properly.
• Anyone handling, preparing and serving food should always follow safe food handling procedures, such as washing hands and surfaces often.
• The 4 key steps of food safety should follow—clean, separate, cook, and chill.

Frequently Asked Queries

• What causes COVID-19?
  • COVID-19 is caused by the Coronavirus named as SARS-CoV-2
  • The virus may also be referred to as “the COVID-19 virus” or “the virus responsible for COVID-19”.
  • CoV infections are common in animals and humans.
  • Some strains of CoV are zoonotic, meaning they can be transmitted between animals and humans, but many strains are not zoonotic.
  • In humans, CoV can cause illness ranging from the common cold to more severe diseases such as Middle East Respiratory Syndrome (caused by MERS-CoV), and Severe Acute Respiratory Syndrome (caused by SARS-CoV).

• Are animals responsible for COVID-19 in people?
  • The predominant route of transmission of COVID-19 is from human to human.
  • Current evidence suggests that the COVID-19 virus emerged from an animal source.

• Can animals be infected with COVID-19 virus?
  • Now that COVID-19 virus infections are widely distributed in the human population there is a possibility for some animals to become infected through close contact with infected humans.
  • Infection of animals with COVID-19 virus may have implications for animal health and welfare, and for wildlife conservation.
  • Several dogs and cats (domestic cats and a tiger) have tested positive to COVID-19 virus following close contact with infected humans.
• To date, preliminary findings from studies suggest that poultry and pigs, are not susceptible to SARS-CoV-2 infection.
• Currently, there is no evidence to suggest that animals infected by humans are playing a role in the spread of COVID-19.
• Human outbreaks are driven by person to person contact.

• What do we know about COVID-19 virus and companion animals?
  • The current spread of COVID-19 is a result of human to human transmission.
  • To date, there is no evidence that companion animals play a significant a role in spreading the disease.
  • Therefore, there is no justification in taking measures against companion animals which may compromise their welfare.

• What precautionary measures should be taken when companion or other animals have close contact with humans sick or suspected with COVID-19?
  • Currently, there is no evidence that companion animals are playing a significant epidemiological role in this human disease. However, because animals and people can sometimes share diseases (known as zoonotic diseases), it is still recommended that people who are sick with COVID-19) limit contact with companion and other animals.
  • When handling and caring for animals, basic hygiene measures should always be implemented.
  • This includes hand washing before and after being around or handling animals, their food, or supplies, as well as avoiding kissing, licking or sharing food.
  • When possible, people who are sick with COVID-19 should avoid close contact with their pets and have another member of their household care for their animals.
  • If they must look after their pet, they should maintain good hygiene practices and wear a face mask if possible.
  • Animals belonging to owners infected with COVID-19 should be kept indoors as much as possible and contact with those pets should be avoided as much as possible.


(Source: OIE, World Organization for Animal Health)

Myths & Facts about COVID-19

<table>
<thead>
<tr>
<th>Myths</th>
<th>Facts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does exposing yourself to the Sun or to temperatures higher than 25°C prevents the Coronavirus disease (COVID-19)</td>
<td>NO Exposing yourself to the Sun or to temperatures higher than 25°C degrees DOES NOT prevent the coronavirus disease (COVID-19)</td>
</tr>
<tr>
<td></td>
<td>You can catch COVID-19, no matter how sunny or hot the weather is.</td>
</tr>
<tr>
<td></td>
<td>Countries with hot weather have reported cases of COVID-19.</td>
</tr>
<tr>
<td></td>
<td>To protect yourself, make sure you clean your hands frequently and</td>
</tr>
<tr>
<td></td>
<td>thoroughly and avoid touching your eyes, mouth, and nose.</td>
</tr>
<tr>
<td>Question</td>
<td>Answer</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>Does catching the new Coronavirus mean you will have it for life?</td>
<td>NO</td>
</tr>
<tr>
<td>Catching the new Coronavirus DOES NOT mean you will have it for life.</td>
<td></td>
</tr>
<tr>
<td>You can recover from the Coronavirus disease (COVID-19).</td>
<td></td>
</tr>
<tr>
<td>Most of the people who catch COVID-19 can recover and eliminate the virus from their bodies.</td>
<td></td>
</tr>
<tr>
<td>If you catch the disease, make sure you treat your symptoms. If you have cough, fever, and difficulty breathing, seek medical care early – but call your health facility by telephone first. Most patients recover thanks to supportive care.</td>
<td></td>
</tr>
<tr>
<td>Does being able to hold breath for 10 seconds or more without coughing or feeling discomfort mean you are free from the coronavirus disease (COVID-19) or any other lung disease?</td>
<td>NO</td>
</tr>
<tr>
<td>Being able to hold your breath for 10 seconds or more without coughing or feeling discomfort DOES NOT mean you are free from the coronavirus disease (COVID-19) or any other lung disease.</td>
<td></td>
</tr>
<tr>
<td>The most common symptoms of COVID-19 are dry cough, tiredness and fever. Some people may develop more severe forms of the disease, such as pneumonia.</td>
<td></td>
</tr>
<tr>
<td>The best way to confirm if you have the virus producing COVID-19 disease is with a laboratory test. You cannot confirm it with this breathing exercise, which can even be dangerous.</td>
<td></td>
</tr>
<tr>
<td>Does Drinking alcohol protect you against COVID-19?</td>
<td>NO</td>
</tr>
<tr>
<td>Drinking alcohol DOES NOT protect you against COVID-19 and can be dangerous</td>
<td></td>
</tr>
<tr>
<td>Frequent or excessive alcohol consumption can increase your risk of health problems.</td>
<td></td>
</tr>
<tr>
<td>Can COVID-19 virus be transmitted in areas with hot and humid climates?</td>
<td>YES</td>
</tr>
<tr>
<td>COVID-19 virus CAN BE TRANSMITTED in areas with hot and humid climates</td>
<td></td>
</tr>
<tr>
<td>From the evidence so far, the COVID-19 virus can be transmitted in ALL AREAS, including areas with hot and humid weather.</td>
<td></td>
</tr>
<tr>
<td>Regardless of climate, adopt protective measures if you live in, or travel to an area reporting COVID-19. The best way to protect yourself against COVID-19 is by frequently cleaning your hands. By doing this you eliminate viruses that may be on your hands and avoid infection that could occur by then touching your eyes, mouth, and nose.</td>
<td></td>
</tr>
<tr>
<td>Can Cold weather and snow kill the new Coronavirus?</td>
<td>NO</td>
</tr>
<tr>
<td>Cold weather and snow CANNOT kill the new coronavirus.</td>
<td></td>
</tr>
<tr>
<td>There is no reason to believe that cold weather can kill the new coronavirus or other diseases. The normal human body temperature remains around 36.5°C to 37°C, regardless of the external temperature or weather.</td>
<td></td>
</tr>
<tr>
<td>The most effective way to protect yourself against the new coronavirus is by frequently cleaning your hands with alcohol-based hand rub or washing them with soap and water.</td>
<td></td>
</tr>
<tr>
<td>Can taking a hot bath prevent the new coronavirus disease?</td>
<td>NO</td>
</tr>
<tr>
<td>Taking a hot bath DOES NOT prevent the new coronavirus disease.</td>
<td></td>
</tr>
<tr>
<td>Taking a hot bath will not prevent you from catching COVID-19. Your normal body temperature remains around 36.5°C to 37°C, regardless of the</td>
<td></td>
</tr>
</tbody>
</table>
temperature of your bath or shower. Actually, taking a hot bath with extremely hot water can be harmful, as it can burn you. The best way to protect yourself against COVID-19 is by frequently cleaning your hands. By doing this you eliminate viruses that may be on your hands and avoid infection that could occur by then touching your eyes, mouth, and nose.

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
</table>
| Can the new coronavirus be transmitted through mosquito bites?           | NO  
The new coronavirus CANNOT be transmitted through mosquito bites. To date there has been no information nor evidence to suggest that the new coronavirus could be transmitted by mosquitoes. The new coronavirus is a respiratory virus which spreads primarily through droplets generated when an infected person coughs or sneezes, or through droplets of saliva or discharge from the nose. To protect yourself, clean your hands frequently with an alcohol-based hand rub or wash them with soap and water. Also, avoid close contact with anyone who is coughing and sneezing. |
<p>| Are hand dryers effective in killing the new coronavirus?                | NO  Hand dryers are NOT EFFECTIVE in killing the 2019-nCoV. To protect yourself against the new coronavirus, you should frequently clean your hands with an alcohol-based hand rub or wash them with soap and water. Once your hands are cleaned, you should dry them thoroughly by using paper towels or a warm air dryer. |
| Can an ultraviolet disinfection lamp kill the new coronavirus?           | NO  UV lamps should not be used to sterilize hands or other areas of skin as UV radiation can cause skin irritation |
| How effective are thermal scanners in detecting people infected with the new coronavirus? | Thermal scanners are EFFECTIVE in detecting people who have developed a fever (i.e. have a higher than normal body temperature) because of infection with the new coronavirus. HOWEVER, they CANNOT DETECT people who are infected but are not yet sick with fever. This is because it takes between 2 and 10 days before people who are infected become sick and develop a fever. |
| Can spraying alcohol or chlorine all over your body kill the new coronavirus? | NO  Spraying alcohol or chlorine all over your body WILL NOT KILL VIRUSES that have already entered your body. Spraying such substances can be HARMFUL to clothes or mucous membranes (i.e. eyes, mouth). Be aware that both alcohol and chlorine can be useful to disinfect surfaces, but they need to be used under appropriate recommendations |
| Do vaccines against pneumonia protect you against the new coronavirus?   | NO  Vaccines against pneumonia, such as pneumococcal vaccine and Haemophilus influenza type B (Hib) vaccine, DO NOT PROVIDE protection against the new coronavirus. The virus is so new and different that it needs its own vaccine. Researchers are trying to develop a vaccine against 2019-nCoV, and WHO is supporting their efforts. Although these vaccines are not effective against 2019-nCoV, vaccination against respiratory illnesses is highly recommended to protect your health. |
| Can regularly rinsing your nose with saline help prevent infection with the new | NO. There is NO EVIDENCE that regularly rinsing the nose with saline has protected people from infection with the new coronavirus. There is some limited evidence that regularly rinsing nose with saline can |</p>
<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coronavirus?</td>
<td>help people recover more quickly from the common cold. However, regularly rinsing the nose has not been shown to prevent respiratory infections.</td>
</tr>
<tr>
<td>Can eating garlic help prevent infection with the new coronavirus?</td>
<td>Although Garlic is a healthy food that may have some antimicrobial properties. However, there is NO EVIDENCE from the current outbreak that eating garlic has protected people from the new coronavirus.</td>
</tr>
<tr>
<td>Does the new coronavirus affect older people, or are younger people also susceptible?</td>
<td>People of all ages can be infected by the new coronavirus (2019-nCoV). Older people, and people with pre-existing medical conditions (such as asthma, diabetes, heart disease) appear to be MORE VULNERABLE to becoming severely ill with the virus. WHO advises people of all ages to take steps to protect themselves from the virus, for example by following good hand hygiene and good respiratory hygiene.</td>
</tr>
<tr>
<td>Are antibiotics effective in preventing and treating the new coronavirus?</td>
<td>NO ANTIBIOTICS DO NOT WORK AGAINST VIRUSES, only bacteria. The new coronavirus (2019-nCoV) is a virus and, therefore, antibiotics should not be used as a means of prevention or treatment. However, if you are hospitalized for the 2019-nCoV, you may receive antibiotics because bacterial co-infection is possible.</td>
</tr>
<tr>
<td>Are there any specific medicines to prevent or treat the new coronavirus?</td>
<td>To date, there is NO SPECIFIC MEDICINE RECOMMENDED to prevent or treat the new Coronavirus (2019-nCoV). However, those infected with the virus should receive appropriate care to relieve and treat symptoms, and those with severe illness should receive optimized supportive care. Some specific treatments are under investigation, and will be tested through clinical trials. WHO is helping to accelerate research and development efforts with a range of partners.</td>
</tr>
<tr>
<td>Can COVID-19 spread through 5G Mobile Networks?</td>
<td>NO 5G mobile networks DO NOT spread COVID-19 Viruses cannot travel on radio waves, mobile networks. COVID-19 is spreading in many countries that do not have 5G mobile towers. COVID-19 is spread through respiratory droplets when an infected person coughs, sneezes or speaks. People can also be infected by touching a contaminated surface and then their eyes, mouth or nose.</td>
</tr>
<tr>
<td>Coronavirus is spread by pets</td>
<td>There is NO EVIDENCE that companion animals or pets such as cats and dogs have been infected or have spread 2019-nCoV or novel coronavirus.</td>
</tr>
<tr>
<td>Coronavirus is spread from animal meat</td>
<td>The new coronavirus is a RESPIRATORY VIRUS which spreads primarily through contact with an infected person through respiratory droplets generated when a person, for example, coughs or sneezes, or through droplets of saliva or discharge from the nose.</td>
</tr>
<tr>
<td>Humans become infected with the 2019-nCoV from an animal source</td>
<td>Several known coronaviruses are circulating in animals that have not yet infected humans. It is likely that an animal source from a live animal market in China was responsible for some of the infection.</td>
</tr>
<tr>
<td>Having flu or cold means a person has coronavirus</td>
<td>People infected with coronavirus, the flu, or a cold typically may develop similar symptoms like breathing issue, fever, cough and runny nose. Therefore, opting for a laboratory tests is best to confirm if someone has 2019-nCoV. In fact, WHO has recommended people who have cough, fever and difficulty breathing should seek medical care early. Such people must give details to the doctors if they had travelled anywhere, or if they were in close contact with someone who had 2019-nCoV symptoms.</td>
</tr>
</tbody>
</table>
Unsafe to receive a package from China or any other place where the virus has been identified

NO, this a hoax. People receiving packages are not at risk of contracting the new coronavirus. Such viruses don't survive for too long on objects, such as letters or packages, according to the WHO.

Source: World Health Organisation (www.who.int)

Where to find Information for COVID 19 related issues?

<table>
<thead>
<tr>
<th>Subject Areas</th>
<th>Information Sources</th>
<th>Information Available</th>
</tr>
</thead>
</table>
| General information including symptoms of COVID-19 | World Health Organization (WHO) | • WHO declared Novel Coronavirus Disease (COVID-19) outbreak as a pandemic and reiterated the call for countries to take immediate actions and scale up response to treat, detect and reduce transmission to save people’s lives.  
• The WHO provides information about the daily updated information (like “India Situation Report”), basic protective measures against the new coronavirus for the public as (when and how to use mask, Wash your hands frequently, Maintain social distancing, Avoid touching eyes, nose and mouth, Practice respiratory hygiene, If you have fever, cough and difficulty breathing, seek medical care early, COVID-19 Home care) and questions related to several myth busters |
|               | Ministry of Health and Family Welfare, GOI | • Describes different issues related to COVID 19 like Guidelines to be followed on detection of suspect/confirmed COVID-19 case in a non COVID Health Facility, Advisory against spraying of disinfectant on people for COVID-19 management etc. |
|               | Government of India website for COVID-19 | • Describes the measures taken by govt of India to fight against COVID 19 as well as the helplines number, whatsup number and facebook page regarding COVID 19 and information for general public to use of necessary medicines for COVID 19, use of reusable face cover/mask, myth busters etc. [https://www.mygov.in/covid-19/](https://www.mygov.in/covid-19/) |
| Issues related to Livestock | World organization for animal health (OIE) | • Describes about the type of virus of COVID 19, its hosts and other issues like are animals responsible for COVID 19 in people?  
• Can animals be infected with COVID 19 virus, what do we know about COVID 19 virus and companion animals and  
• What precautionary measures should be taken when companion or other animals have close contact with humans sick or suspected with COVID-19? |
|               | ICAR | • Describes what Dos and Don’t we have to follow during COVID 19  
• Provides advisory for the agricultural and allied activities exempted from lockdown like regulation of Veterinary hospitals, agencies engaged in procurement of agriculture |
products, including MSP operations, ‘Mandis’ operated by the Agriculture Produce Market Committee or as notified by the State Government

- Farming operations by farmers and farm workers in the field, Custom hiring centres (CHC) related to farm machinery, Manufacturing and packaging units of Fertilizers, Pesticides and Seeds, Intra and inter-state movement of harvesting and sowing related machines like combined harvester and other agriculture/ horticulture implements etc.

<table>
<thead>
<tr>
<th>Animal Husbandry departments</th>
<th>DAHD describes about the Management of Safe ecosystem in the wake of COVID 19 pandemic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>✓ Preventive measures for containment of COVID 19</td>
</tr>
<tr>
<td></td>
<td>✓ attending offices during lock down,</td>
</tr>
<tr>
<td></td>
<td>✓ all the States should identify animals in the Coronavirus isolated households, if any, especially pet animals like dogs and cats, other animals like cows, buffalo etc. quarantine these animals at the site itself till the period of isolation for the family members ends,</td>
</tr>
<tr>
<td></td>
<td>✓ Ensure isolation/ separation of sick and healthy animals and prepare for arrangements for keeping, feeding and watering of animals suffering from contagious diseases,</td>
</tr>
<tr>
<td></td>
<td>✓ Identify volunteers and other resources for feeding fodder and water to the quarantined animals along with the local self Government institutions etc.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tracking of COVID 19</th>
<th>Aarogya Setu App</th>
<th>The COVID-19 tracker app currently supports 11 languages, including Hindi and English and requires Bluetooth and Location access to function.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>To use the Aarogya Setu app, users would first need to register with their mobile number.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Aarogya Setu app essentially helps users in identifying whether they are at risk of coronavirus infection, by checking if they have been in contact with a COVID-19 infected individual, even unknowingly.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Issues related to Farmers</th>
<th>PM Kisan</th>
<th>In view of the Covid-19 crisis, to provide relief to farmers affected due to the lockdown, the Central government will transfer in the first week of April the first installment of Rs 2,000 to each of 8.69 crore beneficiaries under the PM-KISAN scheme.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kisan Rath App</td>
<td></td>
<td>This app is in eight languages and available on android phones.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>It provides information regarding how farmers can send their produce to grain market and whole sellers.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Farmer can search primary and secondary transportation to send their produce to grain market.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Primary transportation means transportation of produce</td>
</tr>
</tbody>
</table>
to grain market, AFO collection centre and ware houses etc.
- Secondary transportation means transportation of agriculture produce from grain market to within states and out of state at processing units and whole sellers.


For further information:

E-mail: directorivri@gmail.com, Web Site: www.ivri.nic.in

Facebook: https://www.facebook.com/IVRI.Izatnagar