3–4 Month Growth Plan for Male Sheep (3 Months Old Start)

|  |  |  |  |
| --- | --- | --- | --- |
| Age/Period | Medicine / Vaccine | Purpose | Notes |
| At purchase (3 months old) | **General Health Check + Deworming** | Remove internal parasites | Use Albendazole or Levamisole oral |
|  | **Vaccinate if not done:** PPR + ET | Protect against major diseases | Get vet advice; if unknown history, vaccinate |
|  | Vitamin B-Complex + Mineral mix | Support immune system and growth | Oral or injection as per product |
|  | Check FAMACHA score for anemia | Treat anemia if present | Use iron tonic if pale eyelids |
| Weekly to biweekly | Monitor feed intake & behavior | Early disease detection | Note any cough, diarrhea, or lethargy |
| Monthly | Deworm (rotate dewormers) | Control internal parasites | Follow dosing instructions |
|  | External parasite control | Mange, lice treatment if needed | Use Ivermectin injection or spray |
| At 5-6 months old (before sale) | Booster vaccine if due: PPR + ET | Maintain immunity | Optional but adds market value |
|  | Check body condition & weight | Ensure good health & weight gain | Aim for healthy, well-fed animals |
| Throughout Period | Provide clean water and balanced feed | Optimal growth and disease resistance | Include green fodder + concentrate |
|  | Electrolytes + Probiotics (if stressed) | Support digestion and hydration | Useful after transport or heat stress |

Summary for your ***newly purchased sheep*** with unknown history:

|  |  |  |
| --- | --- | --- |
| Step | Action | Timeline |
| 1 | Deworm with broad-spectrum anthelmintic | Day 1 after purchase |
| 2 | Vaccinate for PPR, ET, Tetanus (if needed) | Day 1 or as soon as possible |
| 3 | Booster vaccines (PPR, ET) | 3-4 weeks later |
| 4 | Regular health monitoring | Daily/weekly |

Recommended Time Gap Between Deworming and Vaccination

|  |  |  |  |
| --- | --- | --- | --- |
| Procedure 1 | Procedure 2 | Recommended Gap | Reason |
| Deworming (Albendazole, Levamisole, etc.) | Vaccination (PPR, ET, Tetanus) | **3 to 7 days after deworming** | Deworming clears parasites and improves immune response to vaccines |
| Vaccination | Deworming | **Wait at least 7 days after vaccination** | To avoid stress and immune interference |

**3–4 Month Growth Plan for Male Sheep (Starting at 3 Months Old)**

|  |  |  |  |
| --- | --- | --- | --- |
| Time Period | Activity / Treatment | Purpose | Notes & Recommendations |
| Day 1 (At Purchase) | Deworming (Albendazole, Levamisole, etc.) | Remove internal parasites | Do first; helps improve vaccine response |
|  | General Health Check & Quarantine | Prevent disease spread | Isolate for 10–14 days; monitor health |
| Day 4 or later | Vaccination: PPR, Enterotoxaemia (ET), Tetanus (if needed) | Immunization against major diseases | Wait at least 3 days after deworming before vaccinating |
| Day 10 onwards | Vitamin B-Complex + Mineral Mix | Support immune function and growth | Continue as per product instructions |
| Weekly | Monitor health & appetite | Early detection of illness | Check eyes (FAMACHA), behavior, feed intake |
| Every 3–4 weeks | Deworming (rotate dewormers) | Parasite control | Ensure 3+ weeks gap after vaccination |
|  | External Parasite Control (Ivermectin spray/injection) | Mange, lice control | Apply if signs appear or routinely if recommended |
| 3–4 Weeks After 1st Vaccine | Booster Vaccination (PPR, ET) | Maintain immunity | Vital for sustained protection |
| Daily | Feeding: Good quality fodder + concentrate + clean water | Support fast, healthy growth | Include protein-rich feeds and mineral supplements |
| Throughout Period | Maintain clean, dry, ventilated housing | Prevent infections & stress | Regular cleaning and manure removal |
|  | Record Keeping | Track treatments, weight, observations | Use a notebook or app for easy monitoring |
|  | Stress Management | Reduce disease risk | Avoid overcrowding and rough handling |

**SUMMER SEASON DISEASES (March to June)**

|  |  |  |  |
| --- | --- | --- | --- |
| Disease Name | Cause/Agent | Key Symptoms | Prevention/Treatment |
| PPR (Goat Plague) | PPR virus (Morbillivirus) | Fever, nasal/mouth ulcers, diarrhea, high mortality | Vaccinate annually, isolate, fluids + antibiotics |
| Sheep Pox | Capripoxvirus | Skin nodules, fever, eye/nose discharge | Sheep pox vaccine, isolate infected sheep |
| Orf (Contagious Ecthyma) | Parapox virus | Scabs on lips, nose, teats | Antiseptic cream, live vaccine if endemic |
| Heat Stress / Stroke | High temperatures | Panting, open-mouth breathing, collapse | Provide shade, cool water, reduce travel |
| Fly Strike (Myiasis) | Blowfly larvae | Wounds with maggots, foul smell | Shearing, wound care, Cypermethrin spray |
| Ringworm (Fungal) | Trichophyton spp. | Circular hair loss, dry crusts | Antifungal creams, isolate, hygiene |

**MONSOON SEASON DISEASES (July to October)**

|  |  |  |  |
| --- | --- | --- | --- |
| Disease Name | Cause/Agent | Key Symptoms | Prevention/Treatment |
| Foot Rot | Dichelobacter nodosus + moisture | Lameness, foul hoof smell | Zinc sulfate footbath, hoof trimming |
| Blue Tongue | Orbivirus (biting midges) | Face edema, lameness, tongue swelling | Vector control, isolate, symptomatic treatment |
| Haemorrhagic Septicaemia | Pasteurella multocida | Swollen neck, fever, sudden death | HS vaccine pre-monsoon, Oxytetracycline |
| Coccidiosis | Eimeria spp. (protozoa) | Bloody diarrhea, dehydration in young animals | Sulfa drugs, Amprolium, good hygiene |
| Liver Fluke (Fasciolosis) | Fasciola hepatica/gigantica | Bottle jaw, poor growth, pale mucosa | Triclabendazole, avoid wet grazing areas |
| External Parasites | Ticks, mites, lice | Itching, wounds, hair loss | Regular spraying (Cypermethrin, Ivermectin) |
| Anthrax *(in endemic areas)* | Bacillus anthracis | Sudden death, blood from openings | Annual vaccine, strict biosecurity |

**WINTER SEASON DISEASES (November to February)**

|  |  |  |  |
| --- | --- | --- | --- |
| Disease Name | Cause/Agent | Key Symptoms | Prevention/Treatment |
| Pneumonia | Bacterial or viral (Pasteurella) | Coughing, fever, nasal discharge | Keep warm, antibiotics (Oxytetracycline) |
| Listeriosis | Listeria monocytogenes | Head tilt, circling, fever | Penicillin, anti-inflammatories, avoid spoiled silage |
| Pregnancy Toxaemia | Energy deficiency (in late gestation) | Weakness, no appetite, tremors | High-energy feed, propylene glycol, glucose injection |
| White Muscle Disease | Vit E / Selenium deficiency | Weak lambs, muscle tremors | Selenium + Vit E injection in late pregnancy |
| Cold Stress in Lambs | Hypothermia | Shivering, weakness, death | Provide warm bedding, heat lamp, ensure colostrum |
| Tetanus *(post-shearing, castration)* | Clostridium tetani | Muscle rigidity, convulsions | Tetanus toxoid vaccine, use sterile tools |

**ALL-SEASON / ROUND-THE-YEAR DISEASES**

|  |  |  |  |
| --- | --- | --- | --- |
| Disease Name | Cause/Agent | Key Symptoms | Prevention/Treatment |
| Enterotoxaemia (Pulpy Kidney) | Clostridium perfringens Type D | Sudden death, convulsions, diarrhea | ET vaccine, avoid sudden diet change |
| Worm Infestations (Roundworms, Tapeworms) | Parasites | Weight loss, pot belly, diarrhea, bottle jaw | Deworming (Closantel, Albendazole), FEC testing |
| Mastitis | Bacteria (Staph/Strep) | Swollen udder, hot/painful, clotted milk | Antibiotics, NSAIDs, clean housing |
| Urinary Calculi | Mineral imbalance | Difficulty urinating, pain, bloat | Ammonium chloride, clean water, Ca:P balance |
| Caseous Lymphadenitis (CLA) | Corynebacterium pseudotuberculosis | Swollen pus-filled lymph nodes | Isolate, lance abscess, penicillin |
| Scrapie | Prion disease | Itching, loss of coordination, weight loss | No treatment, cull affected, report to vet authority |
| Johne’s Disease | Mycobacterium paratuberculosis | Chronic diarrhea, wasting, no response to treatment | No cure, test & cull, hygiene |
| Pink Eye (Keratoconjunctivitis) | Chlamydia / Mycoplasma | Eye discharge, redness, blindness | Oxytetracycline eye drops, isolate |
| Zinc / Copper Deficiency | Nutritional | Scaly skin, wool fall, poor appetite | Add mineral mixture in feed |
| Actinobacillosis / Wooden Tongue | Actinobacillus lignieresii | Swollen tongue, drooling, difficulty chewing | Sodium iodide, penicillin |

**Major infectious diseases like:**

* PPR, Sheep Pox, Blue Tongue, Pneumonia, Enterotoxaemia
* Coccidiosis, Foot Rot, HS, Anthrax
* Orf, Scrapie, Johne’s, CLA

**✅ All important nutritional/metabolic issues:**

* Pregnancy Toxaemia, White Muscle Disease, Swayback
* Copper/Zinc Deficiency, Urinary Calculi

**✅ Parasitic and skin-related:**

* Liver Fluke, Haemonchus, Fly Strike, Mange, Lice, Ringworm

**✅ Reproductive problems:**

* Mastitis, Navel Ill, Weak Lamb Syndrome, Abortion (partial)

**ADDITIONS: Missed or Rare but Important Sheep Diseases in India**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Disease Name | Season | Cause/Agent | Key Symptoms | Prevention / Notes |
| Toxoplasmosis | All-season | Toxoplasma gondii (protozoa) | Abortion, stillbirth, weak lambs | Clean feed, no cat access near pregnant sheep |
| Brucellosis (Sheep) | All-season | Brucella melitensis | Abortion storms, infertility | Regular testing, culling infected animals |
| Chlamydial Abortion (EAE) | Winter-Spring | Chlamydia abortus | Late-term abortion, retained placenta | Biosecurity, vaccination in endemic regions |
| Sarcoptic Mange | Winter | Sarcoptes scabiei mite | Intense itching, scabs, skin thickening | Ivermectin injectable |
| Oestrus Ovis (Nasal Bot Fly) | Monsoon | Fly larvae in nasal passages | Nasal discharge, sneezing, breathing difficulty | Ivermectin/closantel, control fly populations |
| Contagious Caprine Pleuropneumonia (CCPP) | Winter | Mycoplasma (may spread to sheep) | Respiratory distress, high fever | Rare in sheep but cross-risk in mixed flocks |
| Anaplasmosis *(emerging)* | Summer–Monsoon | Tick-borne bacteria (Anaplasma spp.) | Fever, jaundice, weakness | Tick control, oxytetracycline treatment |
| Caseous Pneumonia | Cold Season | Mannheimia haemolytica | Severe cough, high mortality in lambs | Keep lambing shed warm, avoid sudden chilling |
| Selenium Toxicity *(rare)* | Any (overdose) | Over-supplementation | Hair loss, lameness, cracked hooves | Controlled mineral feeding |

|  |  |  |
| --- | --- | --- |
| Topic | Why Important | Prevention/Treatment |
| Poisoning (Plant/Feed) | Accidental ingestion (e.g. castor, urea) | Avoid toxic plants, educate laborers |
| Stress-related Deaths | Transport, sudden feed changes | Use electrolytes, allow rest, gradual feed shift |
| Hernias / Prolapse | Seen in lambing or due to injury | Surgical correction if severe |
| Wool Break / Poor Coat | Nutritional or mineral imbalance | Balanced diet, deworming |

## 

## Final Summary of What’s Now Fully Included:

* 🦠 **Viral**: PPR, Sheep Pox, Orf, Blue Tongue, CCPP
* 🧫 **Bacterial**: HS, Pneumonia, Anthrax, CLA, Mastitis, Brucellosis
* 🧬 **Protozoal**: Coccidiosis, Toxoplasmosis, Anaplasmosis
* 🪱 **Parasitic**: Internal worms, Liver Fluke, Nasal bot, Lice, Mange
* 🥩 **Nutritional/Metabolic**: Toxaemia, Deficiencies, Bloat, Scours
* 🧟 **Zoonotic risk**: Brucellosis, Orf, Anthrax
* 🧪 **Reproductive**: Abortion diseases (EAE, Toxo, Brucella)
* 🌿 **Other**: Heat stress, fly strike, skin infections, poisoning.

|  |  |  |
| --- | --- | --- |
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| Stress-related Deaths | Transport, sudden feed changes | Use electrolytes, allow rest, gradual feed shift |
| Hernias / Prolapse | Seen in lambing or due to injury | Surgical correction if severe |
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## DISEASE IDENTIFICATION – CLINICAL SIGNS & LIKELY CAUSES

|  |  |  |
| --- | --- | --- |
| Observed Symptom | Likely Diseases | Next Steps |
| Pale gums / jaw swelling | Haemonchosis, Liver fluke | Deworm with Closantel, FAMACHA check |
| Bloody diarrhea | Coccidiosis, Enteritis | Sulfa drugs, isolate, maintain hygiene |
| Nasal discharge + mouth sores | PPR, Sheep Pox, Blue Tongue | Vaccination check, antibiotics for secondary infections |
| Lameness + foul hoof smell | Foot Rot, Scald | Trim, footbath (zinc sulfate), antibiotics |
| Scabs on mouth/udder | Orf | Antiseptic cream, isolate, vaccinate flock if available |
| Hard jaw swelling | Lumpy jaw (Actinomycosis), Wooden tongue | Penicillin, iodine injections |
| Circle walking, head tilt | Listeriosis | Penicillin, anti-inflammatory, isolate |
| Coughing, panting | Pneumonia, Ovine Pulmonary Adenomatosis | Oxytetracycline, shelter from cold |
| Red urine, jaundice | Copper toxicity, Babesiosis | Supportive care, vet advice urgently |
| Weak lambs at birth | Swayback, Selenium/Vit E deficiency, Poor nutrition | Selenium + Vit E injection, mineral mix before lambing |

**MASTER LIST: ALL COMMON SHEEP DISEASES IN INDIA**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Disease Name | Cause/Agent | Symptoms | Treatment | Prevention/Control |
| Enterotoxaemia (Pulpy Kidney) | *Clostridium perfringens* Type D | Sudden death, diarrhea, convulsions, abdominal pain | Antitoxin, fluids, supportive care | **ET Vaccine**, avoid high starch diets suddenly |
| PPR (Goat Plague) | PPR Virus (Morbillivirus) | High fever, nasal discharge, ulcers, diarrhea, high mortality | Symptomatic, fluids, antibiotics for secondary infection | **Annual PPR vaccination** |
| Sheep Pox | Capripoxvirus | Fever, skin nodules, nasal/eye discharge | Symptomatic, antibiotics for secondary infections | **Sheep pox vaccine annually** |
| Foot Rot | *Dichelobacter nodosus*, *Fusobacterium* | Lameness, foul smell, swollen hooves | Zinc sulfate footbath, antibiotics | Trim hooves, footbath regularly, clean shed |
| Haemorrhagic Septicaemia (HS) | *Pasteurella multocida* | Neck swelling, fever, breathing distress | Oxytetracycline, Enrofloxacin | **Vaccinate pre-monsoon** |
| Anthrax | *Bacillus anthracis* | Sudden death, bloody discharge | Notify authority, burn/bury carcass | **Annual vaccine in endemic areas** |
| Blue Tongue | Orbivirus (via midge bites) | Swollen tongue, face edema, nasal discharge, lameness | Fluids, antibiotics | Avoid midge exposure, possible vaccine in endemic zones |
| Bottle Jaw (Barber Pole Worm) | *Haemonchus contortus* | Swelling under jaw, anemia, pale gums | Deworming: Closantel, Albendazole | Strategic deworming, pasture rotation |
| Coccidiosis | *Eimeria* spp. (Protozoa) | Bloody diarrhea, dehydration, weight loss | Sulfa drugs (Sulfadimidine), Amprolium | Clean housing, avoid overcrowding |
| External Parasites | Ticks, mites, lice | Itching, wool loss, wounds | Ivermectin, sprays (Cypermethrin) | Regular grooming, spray shed walls |
| Liver Fluke (Fasciolosis) | *Fasciola hepatica/gigantica* | Bottle jaw, poor weight, anemia | Triclabendazole, Closantel | Avoid marshy grazing, routine deworming |
| Tapeworms (Moniezia) | *Moniezia* spp. | Pot belly, diarrhea, poor growth | Albendazole, Niclosamide | Pasture management, routine deworming |
| Tetanus | *Clostridium tetani* | Muscle stiffness, convulsions, lockjaw | Antitoxin, penicillin | **Tetanus toxoid vaccine**, sterile tools |
| Mastitis | Bacteria (Staph, Strep) | Swollen udder, hot/painful, clotted milk | Antibiotics, NSAIDs | Clean housing, hygiene during milking |
| Pregnancy Toxaemia | Energy deficiency (late pregnancy) | Lethargy, hypoglycemia, ketones in urine | Propylene glycol, glucose, correct diet | Feed high-energy in late gestation |
| Orf (Contagious Ecthyma) | Parapox virus | Scabby sores around mouth, udder | Antiseptic creams, isolate infected | Live vaccine (optional), wear gloves |
| Lamb Scours (Neonatal Diarrhea) | Bacteria, virus, poor hygiene | Diarrhea in lambs, dehydration | Electrolytes, antibiotics, warmth | Ensure colostrum, clean lambing pens |
| Urinary Calculi | Phosphorus excess, low Ca:P ratio | Difficulty urinating, bloat, pain | Surgery, ammonium chloride | Balanced minerals, salt + water access |
| Ringworm (Fungal) | *Trichophyton*, *Microsporum* | Hairless itchy patches, scaly skin | Antifungal creams (Ketoconazole) | Isolate, disinfect, dry housing |
| Pinkeye | Chlamydia, Mycoplasma | Eye redness, discharge, corneal opacity | Oxytetracycline eye drops, injectable antibiotics | Control flies, isolate cases |
| Caseous Lymphadenitis (CLA) | *Corynebacterium pseudotuberculosis* | Swollen lymph nodes with pus | Lance abscesses, penicillin | Clean shearing, cull chronic carriers |
| Listeriosis | *Listeria monocytogenes* | Circling, abortion, facial droop | Penicillin, fluids | Avoid spoiled silage, hygiene |
| Scrapie | Prion disease | Itching, loss of coordination, weight loss | No treatment – notifiable disease | Cull affected, use disease-free stock |
| Actinobacillosis (Wooden Tongue) | *Actinobacillus lignieresii* | Swollen tongue, drooling | Sodium iodide, penicillin | Avoid coarse feed, manage oral injuries |
| Rickets (Lambs) | Vit D, Phosphorus deficiency | Bowed legs, poor growth | Vit D + calcium supplements | Sunlight, mineral mix in feed |
| Swayback | Copper deficiency (pregnant ewes) | Weak lambs, poor coordination | Copper supplementation | Give mineral mix pre-lambing |
| Zinc Deficiency | Micronutrient deficiency | Hair loss, scaly skin, poor appetite | Zinc oxide orally | Add zinc in mineral mixture |
| Fly Strike (Myiasis) | Blowfly larvae | Maggots in wounds, foul odor | Remove maggots, apply insecticide | Shearing, wound management, fly control |
| Johne’s Disease | *Mycobacterium avium paratuberculosis* | Chronic wasting, diarrhea | No cure, test and cull | Avoid infected purchases, sanitation |
| Ovine Pulmonary Adenomatosis | Retrovirus | Progressive respiratory distress | No treatment | Remove infected from breeding |

**Quarantine Protocol Checklist** you can use when introducing new sheep to your farm. You can print it out or adapt it for daily record-keeping:

**Sheep Quarantine Protocol Checklist:**

|  |  |  |  |
| --- | --- | --- | --- |
| Item | Details / Action | Date/Initials | Comments |
| Date of Arrival |  |  |  |
| Quarantine Period Start |  |  | Minimum 21 days |
| Quarantine Period End |  |  |  |
| Location of Quarantine Pen |  |  | Isolated from main flock |
| Initial Physical Exam | Check for visible illness, wounds, discharge |  |  |
| Body Temperature Check | Record daily |  | Normal ~39°C (102.2°F) |
| Vaccinations Administered | PPR / Sheep Pox / Enterotoxaemia / Foot Rot, etc. |  | Specify date and vaccine |
| Deworming Given | Date & medicine |  | Repeat after 2–3 weeks if needed |
| External Parasite Treatment | Spray / injectable (ticks, lice, mites) |  | Date & type |
| Feed Provided | Consistent diet, type of feed |  | Separate feed from main flock |
| Water Provided | Fresh and clean water daily |  | Separate watering system |
| Daily Health Observations | Appetite, behavior, feces consistency, coughing, etc. |  | Note any abnormalities |
| Record Any Treatments Given | Antibiotics, anti-inflammatory, supportive care |  | Include date and dosage |
| Biosecurity Measures Followed | Staff hygiene, equipment disinfection |  | Confirmed / notes |
| Final Health Check Before Release | Vet examination if possible |  | Healthy to join main flock? |
| Date of Integration with Main Flock |  |  |  |