Animal Care Health and Welfare Knowledge Organiser

How can we monitor animal Health?

- Conduct visual checks (non-qualified eg owner) look for behaviour change, mobility problems, food and water intake.
- Physical checks (qualified vet) blood pressure, weighing, claw trim, temperature, pulse rate.

- Should carry out observation only monitoring (just watching) for venomous, dangerous, aggressive or poisonous animals.
- We should monitor animal more when they are pregnant, recovering from surgery, have an illness or shown weight changes.

Signs of Stress:

- Changes in behaviour, signs of growling, hissing, baring of teeth
- Cowering, excessive panting, lip licking
- Avoiding eye contact, turning head away
- Loss of fur/coat, bald patches, damage to skin
- Excessive vocalisation.

Identification:

Why use identification methods?

- Movement of animals
- Tracing lost/stolen
- Breeding tracing eg knowing bloodlines
- Tracing diseases origin

Ear tagging

Tatoo

Branding

Microchipping

Signs of Good Health

- **Eyes** – bright, clear pupils
- **Coat** – clean and shiny
- **Food and water intake**
- **Posture** – checking balance, all limbs are used equally
- **Alert-** inquisitive, respond to sound
- **Urine** – clear and light straw colour, passed frequently
- **Breathing** – appropriate breathing rate
- **Ears** – no discharge, ability to hear
- **Faeces** – usual consistency for the species, passed frequently

Signs of Ill Heal

- **Eyes** – sunken, discharge, cloudy pupils, bloodshot
- **Faeces** – loose, colour change, blood
- **Food and water intake** – loss of appetite, increased thirst, rapid weight loss, unexplained weight gain
- **Posture** – reluctance to use limbs, hunched appearance
- **Urine** – dark coloured, blood or pus, smell
- **Coat** – dull, matted
- **Ears** – discharge, pain around ear canal
- **Breathing** – rapid or irregular breathing rate, shallow breaths

How can we prevent animals getting ill?

Physical Care- such as washing and grooming, combing and hair trimming, nail trimming.

Vaccination -protection against rabies, parvovirus, leptospirosis, canine hepatitis, kennel cough, canine parainfluenza (all for dogs!)

Worming, regular worming regime to prevent worms. Such as tapeworm.

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The 5 Animal Welfare Needs:

Suitable Environment – An animal must be able to live in an environment that suits its needs, this must be specific to the animal. For example, a fish's suitable environment is an aquarium to allow them to swim but a rabbits is a hutch/large run to allow them to hop. They must have a safe resting area.

Suitable Diet – An animal must be provided with a diet that suits its individual nutritional needs. For example, a dog's diet should be high in protein (meat) but a horse's diet high in fibre (hay).

Able to exhibit normal behaviour - An animal should be able to show their instinctive behaviour. For example, a dog should be able to sniff, run, roll, or a budgie should have room to fly properly.

House with or apart from others – An animal should live with or without others to suit their individual needs. Some animals must live on their own, for example bearded dragons. This replicates their lives in their wild environment of a desert. Whilst other animals such as guinea pigs must live with others.

Protected from pain, injury, suffering and disease – An animal has the right to access required vet care when needed. To not suffer in pain and be monitored regularly for minor changes in health.

Nutrition:

There are 7 food groups that animals require in different quantities depending on their needs:

- **Water**
- **Protein**
- **Fibre**
- **Carbohydrates**
- **Vitamins**
- **Minerals**
- **Fats**

Factors to consider when picking an animal's diet:

Correct quantity for the size and the age of animal.

How often they should be fed and at what times.

Changing feeding to suit life stages such as puppy versus older dog.

No access to toxic substances such as chocolate for dogs.

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Animal Housing Requirements

Dogs:

- Puppies require an area where they can rest with and without mother, lots of toys for development and feeding equipment that is accessible to them. They may need a heating lamp to regulate temperature. Materials should be puppy safe.

- Adults need an indoor and outdoor space. This allows them to rest but also to exercise to meet their natural behaviour needs. Toys are required for enrichment and a daily walk.

- Senior dogs need a comfortable rest area, where there are non-slip surfaces to prevent injury. They may require adaptations to suit their aging body such as raised bowls or orthopaedic beds. If able they should still have a daily walk.

Cats:

- Kittens require an area to rest with and without mother, lots of toys for cognitive/physical development. Ensure bowls are accessible and materials used are kitten safe.

- Adult cats need access to outdoor space or an extensive area for exercise indoors. This includes many toys such as scratch posts and platforms. This allows exhibiting of natural behaviours.

- Senior cats require non slip surfaces in their area, with a comfortable resting place and certain enrichment lowered to be suitable for their aging bodies such as climbing frames.

What factors should be considered when selecting housing for all animals?

- Suitability for life stage
- Type and number of animals to be housed
- Construction materials
- Ventilation
- How long animal will spend in housing
- Methods to reduce stress
- Cleaning routines to prevent disease

Rabbits:

- Young rabbits may need assistance to reach other areas of the cage, this can be done with ramps. They must also not be housed with other adult rabbits when they are young and vulnerable.

- Adult rabbits require a large enclosure with sufficient height that allows them to jump/stand up on their back legs. It must also be predator proof.

- Senior rabbits should have anti slip materials and have a warm, non-drafty area to rest.

Hamsters:

- Young hamsters need a warm bedding with temperatures that are warm (25c).

- Adult hamsters must have enough height in their enclosure to be able t create burrows/tunnels. They therefore require a bedding that allows this such as paper or aspen.

- Senior hamsters may need to have their housing all on one level.

Guinea Pigs:

- Young guinea pigs must have a safe and secure area to rest with the mother.

- Adult guinea pigs must have access to a large run or area to exercise that is fully predator proof.

- Senior guinea pigs need to have nonslip surfaces to prevent injury. They require a comfortable, thick bed to rest.

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Exercise and Enrichment – What should we consider?

Appropriate frequency - dogs require more exercise than hamsters for example.

Reasons for exercise – allowing an animal to play, develop cognitively, social interaction and improve physical and mental health.

Enrichment – every animal needs suitable enrichment. A cat would need a scratching post or a rabbit needs a tunnel.

Type and length of exercise – type should suit age of animal, fitness levels and not push them beyond their capabilities.

Insurance for Animals

What in insurance?
Insurance is where you pay a fee each month to a company which protects you for if an accident or injury happens to your animal. The company will then help to cover your vets fees or other costs.

What does it cover?
Unexpected events, serious injuries, illness, death. For example, your dog may get loose, be run over and need surgery for a broken leg. The insurance will then cover most of the costs.

Why should I have it?
Insurance works at protection, vet fees can be very high, and it means that you have the financial assistance when they may be a life-or-death scenario.

Preventative care – to protect animals from harm

Physical care – washing, grooming, combing, trimming nails.

Vaccinations – rabies, parvovirus, leptospirosis, canine hepatitis, canine parainfluenza (all by injection), kennel cough (sprayed up nose)

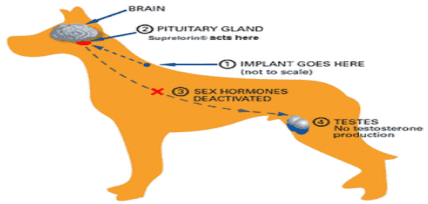
Worming – worming regime, symptoms of tapeworm and roundworm such as weight loss and diarrhoea , prevention of worms – regularly disinfecting items.

All about Neutering

Neutering is the process of removing an animal's reproductive organs.

The reasons for neutering an animal are shown below:

- Prevent over breeding
- Health concerns
- Poor behaviour or aggression
- In line with certificate of exemption rules



The process is called spaying for female animals. There are 2 types:

Traditional – where the female animal is fully cut open to remove all the uterus and ovaries. This costs less, but it a bigger surgery so there is a greater risk of complications like an infection.

Laparoscopic – where small holes are made to remove just the ovaries. This costs more but is less invasive and therefore less chance of problems after surgery.

The process is called Castrating for male animals. There are 2 types:

Surgery– where both testes are removed. This is permanent and the most common method.

Chemical – where a chip is inserted into the dog's neck which stops the production of the male sec hormones testosterone. This is non-permanent so a good option for dog showers.

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Training Animals

House Training

it is important to train your animal to not do accidents in the house from a young age.

Obedience

Animals used in organisations such as the police must be highly trained to be obedient and obey commands to complete complex tasks.

Classical Conditioning

Associating a stimuli (object) with a conditioned response:

For example, a dog will naturally salivate and get excited in response to seeing or smelling their food coming.

However, they have no initial relationship to their food bowl. As they are fed with the bowl they begin to associate the bowl with the food.

Therefore, when just the bowl is picked up, they will have a physical response to it (salivate and jump around), because they have become conditioned to relate the bowl to the food.

The unconditioned stimulus could be any item such a lead, keys, bowl.

Operant Conditioning

Learning from a behaviour through 4 different scenarios:

1. **Positive Reinforcement**

Positive reinforcement means the addition of something, like a treat. If a dog gets a treat when he sits, he'll be more likely to sit.

2. Negative Reinforcement

In this case, the dog's behaviour causes something uncomfortable to go away. For instance, when a trainer wants a dog that is lying down to sit up, the trainer will pull the dog's leash to an upward position, tightening the collar and creating minor discomfort. When the dog sits, the trainer slacks the leash, and the discomfort goes away.

3.Positive Punishment

Again, here the word positive means the addition of something; in this case, it's the addition of a consequence. For instance, if a dog jumps on the owner and the owner pushes the dog away with an unpleasant sensation like a knee push to the dog's chest, the dog will associate the discomfort with the action of jumping up, and be less likely to do so in the future.

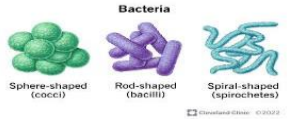
4.Negative Punishment

As with negative reinforcement, the word negative means the removal of something. In the case of punishment, it's the removal of a good thing. If a dog jumps on the owner and the owner steps back, removing himself and his attention, the dog will associate the loss of his owner's attention with that particular action, and he'll be less likely to repeat it in the future.

Pathogens

Bacteria

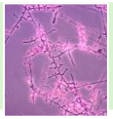
Unicellular, no nucleus, needs a host.
Different types: Spherical (cocci), rod (bacilli), spiral (spirilla).



Disease	Symptoms	Prevention	Treatment
Salmonella	Diarrhoea, fever, abdominal cramps, chills, headache, nausea/vomiting.	Good hygiene (hands, food storage & preparation, etc)	Antibiotics?, probiotics
Campylobacter	Diarrhoea (possibly bloody), fever, cramping, abdominal pain.	Good hygiene (hands, food storage & preparation, etc)	Antibiotics?
Leptospirosis	Diarrhoea, fever, headache, nausea / vomiting, aches and pains, red eyes, loss of appetite.	Use waterproof PPE near water/soil contaminated with urine (e.g. rodent)	Antibiotics
Septicaemia	Fever/hypothermia, low blood pressure, rapid pulse, skin rash.	Wound treatment, healthy lifestyle, vaccination available.	Antibiotics (i.v. if severe)
Bronchitis	Low fever, runny nose, congestion, wheezing, cough with yellow /green mucus.	Avoid respiratory viral infection (e.g. influenza vaccines)	Antibiotics

Fungi

Live in the environment, do not need a host. Example: Yeast.

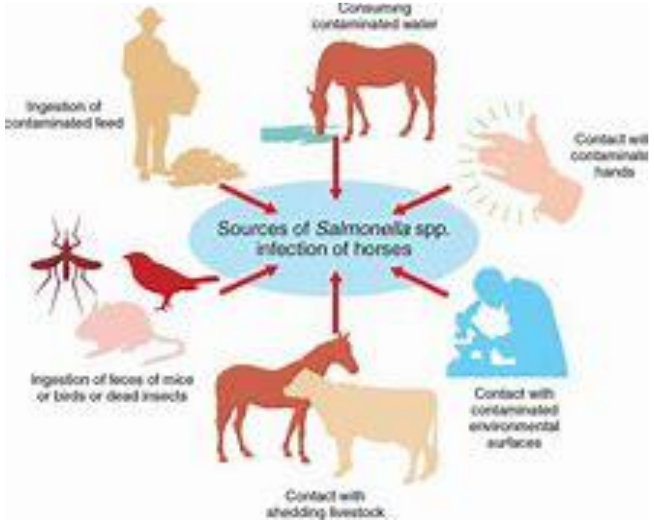


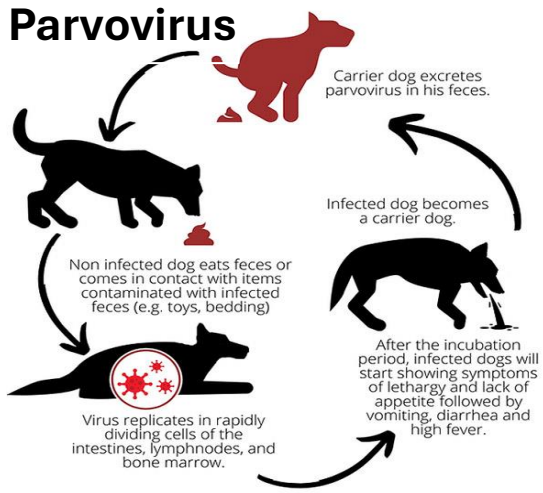
Disease	Symptoms	Prevention	Treatment
Ringworm	Circular patches of raised, red, crusty skin, fur loss, dandruff, itchiness.	Hygiene, PPE.	Coat clipping, Anti-fungal shampoo /oral medication.

Viruses

Multiplies in host, requires a host.
Different shapes due to protein coat (e.g. flu, ebola).

Disease	Symptoms	Prevention	Treatment
Parvovirus	Diarrhoea (often bloody), fever / hypothermia, lethargy, lost appetite, vomiting, abdominal pain, bloating.	Vaccination.	IV fluids, electrolyte management
Rabies	Behaviour changes (aggressive/overly friendly), salivation, progressive paralysis.	Vaccination (if travelling).	No treatment. Euthanasia?
Feline leukaemia virus (NOT cancer but can cause it).	Diarrhoea, vomiting, fever, seizures, behaviour changes, lost appetite, weight loss, poor coat condition, pale mucus membranes, eye conditions.	Vaccination, keep away from infectious cats.	No cure. Supportive therapies: immune health, nutrition, hydration, etc.





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Parasites

Organisms living in (***endoparasites***) or on (***ectoparasites***) a host, feeding off and harming them.

Disease	Symptoms	Prevention	Treatment
Tapeworm	Diarrhoea, poor growth, worms in faeces/vomit, poor condition.	Control fleas that pass on eggs.	Anti-worm medication.
Roundworm	Diarrhoea, vomiting, weight loss, poor coat, potbelly.	Good hygiene, rapid disposal of faeces.	Anti-worm medication.
Flea	Itching, over-grooming, bald patches, 'Flea dirt' (droppings).	Regular treatment, cleaning.	Topical, collars. oral.
Tick	Poor condition, anaemia, vector-borne specific disease.	Regular inspection	Removal, drugs.
Mite	Itchy, hair loss, weight loss.	Treat animal, bedding.	Medicated shampoo / dip.
Lyme disease (bacterium via ticks)	Lameness, fever, anorexia, lethargy, swollen, painful joints, kidney & cardiac issues.	As for ticks. Also avoid hotspots.	Antibiotics, supportive & immunosuppressive therapy.

Zoonotic & Notifiable Disease

Zoonotic diseases are those spread from animal to humans

Disease	How it is spread
Salmonella (bacterium)	Bacteria spread in faeces. Transmitted by handling / eating contaminated foods.
Ringworm (fungus)	Direct contact, so touching animals or animals grooming one another.
Leptospirosis (bacterium)	In water or soil contaminated by rat or cow urine.

Notifiable diseases <u>MUST</u> be reported to the Animal and Plant Health Agency (APHA) under the Animal Health Act 1981.

- Diseases covered include: Bovine TB, rabies, bird flu, Newcastle disease.
- Reasons for reporting:
  - Stop spread
  - Avoid national epidemic
  - Protect public health
  - Reduce impact on food production and supply, farming and the tourist industry

Disease spread – diseases can be transmitted through airbourne droplets such as when an animal sneezes. It could be in the soil or contaminating their water source. Disease could be spread by direct contact nose to nose when grooming or licking. It is vital to reduce and check these routes when a disease appears to prevent further spread.

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Holiday Care Options:

Reputable pet-sitting services- You can use the internet to search for pet sitters with good reviews and approved by the council.

Approved boarding kennels – You can use an official kennel, these are licensed by council, staff must have training qualifications, they must follow good hygiene and welfare conditions, and they must check for vaccinations.

Notifiable diseases:

What are they? Certain diseases are considered notifiable. This means when they are suspected you must inform the government some examples are TB or bird flu. They are commonly diseases that could prove a big threat if not contained.

Why must they be reported?

This can reduce the chance of spread, avoid a national epidemic, protect public health, reduce impact on the farming and tourist industry.

Animal & Plant Health Agency

What happens once they are reported?

A team can help the establishment such as a farm with TB to control the disease. They can offer advice, further testing, create a control zone area and carry out tracing of movements of animals.

Methods to stop the spread of disease:

Vet assistance – get vet treatment for sick animals and monitor all other animals for onset of disease

Hygiene protocols – Increase hand washing, wear ppe, wash all equipment, disinfect areas animal has been, foot dips or separate areas for ill and not ill animals.

Animal movements – Prevent new animals arriving or current animals leaving the establishment such as the kennels or farm.

Dispose of waste correctly- ensure correct disposal of deceased animals or waste objects such as contaminated faeces.

Isolation - Immediately isolate infected animal to prevent spread to others.

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Treatment and Welfare:

Guidelines on medicines – always check dose prescribed to animal to prevent overdose, store drugs out of reach of children and ensure to record when they have been administered.

Treatment methods – Can apply creams to skin for certain diseases such as ring worm, or use injection into muscle. Can also use in feed medication such as treating coccidiosis in chickens. This method is less stressful and easier for a large group.

Animals can be used by schools and colleges to teach **educational** courses.

Animals can be owned by the public for **companionship** and therapy, this prevents loneliness and gives a purpose.

Animal uses in society

Animals can be used in **scientific labs** for research into diseases.

Animals can be kept in zoos for **conservation or for displays for public enjoyment**.

Animals can be used for their skills such as police sniffer dogs or deaf **assistance dogs.**

Animals can be used for **production,** food such as milk and meat or materials such as wool and leather.

Animal Organisations – Many organisations exists to promote the welfare of animals and prevent them from harm and suffering. You must be able to name the below:

Welfare charities and organisations

Dogs Trust
Cats protection
Blue Cross
RSPCA
World horse welfare

Assistance organisations

Dogs for good
Guide dogs
Hearing dogs
Autism dogs charity
Mountain rescue

Conservation organisations

World wild fund (WWF)
Wildlife conservation society
RSPB
National trust
ZSL – lets work for wildlife

Government organisations

DEFRA
National animal welfare trust
Animal welfare foundation

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Animals in Transport Act:

A UK legislation designed to ensure the welfare of animals during transport. This law aims to prevent suffering and to ensure that animals are transported in a safe and humane manner, in accordance with the principles of the **Animal Welfare Act 2006**

- Animals must be fit to travel. If an animal is injured, ill, or in any way unfit for transport, it must not be moved.
- Vehicles used for transporting animals must be designed and equipped to ensure the welfare of animals. They must be well-ventilated, free of hazards, and secure to prevent injury.
- There are specific rules regarding the length of time animals can be transported. Long-distance journeys (typically over 8 hours) require rest stops, feeding, watering, and the opportunity to stretch, depending on the species being transported.

Animal legislations

Legislations are in place to protect animals. There can be fines/prosecution for not adhering to them. You must know the following ones:

Animal welfare act 2006:

The **Animal Welfare Act 2006** is a key piece of UK legislation that aims to ensure the well-being of animals by making their owners and keepers responsible for their care.

It sets out the duty of care required to prevent harm to animals and provides a framework for addressing issues like cruelty and neglect.

Key Points of the Animal Welfare Act 2006 for BTEC Animal Care:

The Act places a **duty of care** on pet owners and anyone responsible for an animal (e.g., animal shelters, farmers). This means they must provide for the animal's **basic needs**:

- Suitable diet
- A suitable environment.
- Able to exhibit natural behaviours
- Housed with or apart
- Protection from pain, suffering, injury, and disease.

Animals (Scientific Procedures) Act 1986:

The main purpose of ASPA is to control the use of animals in scientific research and procedures. This includes research in biomedical science, product safety testing (such as cosmetics or chemicals), and educational purposes.The Act aims to ensure that animals used in scientific research are treated ethically and humanely, with a focus on minimizing pain, distress, and suffering.

The 3Rs Principle

- The Act incorporates the **3Rs** principle, which requires researchers to:
  - **Replace** animals with alternative methods or techniques where possible.
  - **Reduce** the number of animals used in experiments to the minimum required to obtain scientifically valid results.
  - **Refine** procedures to minimize animal suffering and improve their welfare during experiments.