

Foulbrood Protocol 2026

In the UK, both **American Foulbrood (AFB)** and **European Foulbrood (EFB)** are statutory **notifiable diseases** under the Bee Diseases and Pests Control Order. This means you are legally required to report any suspicion of them immediately.

The actions taken are highly coordinated, involving a partnership between you and your Seasonal Bee Inspector.

1. Initial Reporting & Immediate Actions (The Standstill)

The moment you suspect either disease, the process begins:

- **Notify the National Bee Unit (NBU):** You must contact your local Bee Inspector or the NBU immediately (via BeeBase or email).
- **Voluntary Standstill:** While waiting for the inspector, you must put your apiary under an immediate standstill. Do not move any bees, hives, supers, comb, or equipment into or out of the apiary.
- **Reduce Entrances:** Immediately close down the hive entrances of any suspect colonies to a minimum to prevent robbing by stronger neighbour hives, which is a primary way foulbrood spreads locally.

2. The Official Inspection & Testing

An **Authorised Seasonal Bee Inspector** will visit your apiary to inspect the colonies.

- They will perform a visual check of your brood frames.
- They might use a **Lateral Flow Device (LFD)** kit right at the hive-side for an immediate preliminary diagnosis, though these are currently unavailable.
- They will take official samples to send to the laboratory for definitive molecular confirmation.
- An official statutory **Standstill Notice** will be issued, legally locking down the apiary.

3. Confirmed Action Plans: AFB vs. EFB

The mandatory treatment path depends entirely on which bacterium is confirmed.

If American Foulbrood (AFB) is Confirmed

Because *Paenibacillus larvae* forms incredibly resilient spores that can remain viable for over 50 years on equipment and resist chemical treatment, **there is no cure**. Control means elimination:

- **Destruction:** The colony and all internal hive elements (frames, comb, honey) must be destroyed.
- **The Burn Pit:** Under the inspector's direct supervision, a pit is dug, the bees are euthanised (usually at dusk using petrol fumes or similar approved methods), and the frames, comb, and bees are burned completely. If a burn pit cannot be dug, then diseased material is bagged up and taken to an APHA incinerator .
- **Hive Body Salvage:** Inert hive parts like wooden brood boxes, floors, and roofs can sometimes be salvaged rather than burned, but they must be thoroughly scorched with a blow-lamp under the inspector's guidance. Plastic and polystyrene parts are scraped and bleached.

If European Foulbrood (EFB) is Confirmed

Because *Melissococcus plutonius* does not form highly resistant spores, there is a chance to save the adult bees if the colony is strong enough. The inspector will choose an option based on colony health:

Shook Swarm (Preferred Method):

- If the colony has **6 or more frames of bees**, less than 25% visible infection, and is otherwise in good condition, they will undergo a shook swarm. The Bee inspectors will shake the adult bees onto completely clean, sterile foundation in a clean hive body, and the old infected brood frames/comb will be immediately burned.
- Feeding after a shook swarm is critical, but the **timing** of that first feed depends entirely on why you did the shook swarm in the first place.

The Feeding Rule: Timing is Everything. If you did it for disease management

- **Wait 48 to 72 hours before feeding.**
- **Why:** When you shake the bees, their honey crops are full of stores from the old infected comb. If you feed them immediately, they will store that old, potentially pathogen-heavy honey straight into the brand-new comb they build. By waiting up to 2 days, you force them to digest and consume that internal honey reservoir entirely for energy and wax production, breaking the disease cycle.

What and How Much to Feed

You want to simulate a heavy nectar flow to trigger intense wax production (lipolysis (breaking down sugars into wax)).

- **The Mix:** Use a heavy **1:1 sugar syrup** (1kg sugar to 1L water) in the spring/summer. It provides the quick hydration and energy needed for comb building.
- **The Volume:** Feed them generously. A strong colony can easily take down half a gallon (about 2 to 3 litres) in a few days. Keep the feeder topped up until at least 70-80% of the frames in the brood box are fully drawn out.

⚠ Important Caution: Be very careful with entrance sizes when feeding a newly shook swarm. Because the colony is disorganized for the first few days and lacks a established brood nest to defend, the smell of syrup can easily trigger **robbing** from stronger nearby hives. Reduce the hive entrance down to a single bee-space until they've settled and drawn a bit of comb.

Destruction:

- If the colony is weak (fewer than 6 frames of bees), heavily infected (greater than 25% of open brood showing symptoms), or has had a recurrence of EFB within the last 12 months, the inspector will order full destruction by fire, exactly like the AFB protocol.

4. Post-Treatment Cleared Status

Once the intervention is complete, the lockdown isn't immediately lifted.

- **Follow-Up Inspections:** The inspector will return a **minimum of 6 weeks** after the treatment to inspect the remaining colonies in the apiary and look at any stored equipment.
- **Lifting the Notice:** If no further signs of disease are found, the statutory Standstill Notice is officially withdrawn.
- **Next Season Check:** The inspector will typically schedule a priority return visit the following spring/summer season to guarantee the apiary remains completely clear.

A Note on Bee Disease Insurance (BDI): If you are registered with BeeBase and pay your BDI premiums (often managed through your local Beekeeping Association), you may be eligible for financial compensation to help offset the cost of the replacement frames, foundation, and equipment destroyed during an official intervention.

5. Can you Harvest the Honey?

You can harvest the honey from a colony found to have **European Foulbrood (EFB)**, but there are strict biosecurity protocols and logistical rules you must follow.

Because EFB (*Melissococcus plutonius*) is a bacterium that affects only bee larvae, the honey itself is perfectly safe for human consumption and does not present any health risk to us.

However, because honey from an infected hive is highly contaminated with EFB bacteria, it poses a massive risk of spreading the disease to other colonies if handled incorrectly. The National Bee Unit (NBU) rules specify exactly how this must be managed:

1. Navigating the Statutory Standstill Notice

When EFB is officially confirmed, your apiary is put under a legal **Standstill Notice**.

- **You cannot move supers away from the apiary** without explicit permission from your apiary.
- If you want to harvest the honey, the inspector will discuss and issue a Movement Licence if they are sure the beekeeper can remove, extract and get the supers back for frame destruction and box sterilisation within the 10 day timescale in a biosecure way..

2. Extraction and Processing Controls

If you are permitted to extract the honey, you must treat the process with clinical cleanliness to prevent a local outbreak:

- **Bee-Proof Extraction:** You must extract the honey in a completely **bee-proof room**. If a single foraging bee from your own apiary (or a neighbour's) gets into your extraction space and tastes the honey, they will carry EFB straight back to a healthy colony.
- **No Open Feeding:** You must never feed this honey back to bees.
- **Airtight Storage:** The finished honey must be placed into secure, sealed containers immediately.
- **Sterilise Equipment:** Every piece of equipment that touches the honey or frames (uncapping forks, extractors, settling tanks, counters, and your suit/gloves) must be thoroughly cleaned and washed down immediately after use.

3. Handling the Empty Super Frames (The Biohazard)

What you do with the "wet" supers after extraction depends entirely on the treatment path your inspector has ordered for the colony:

If the Hive is Being Destroyed

If the infection is heavy (greater than 25%) or the colony is weak (fewer than 6 frames of bees), the inspector will order the destruction of the hive. While you might be allowed to take honey from the supers before the burn, the empty frames and comb themselves **must be burned** in the pit along with the brood frames to eliminate the bacteria.

If the Hive Undergoes a Shook Swarm

If the colony is strong enough for a shook swarm, the adult bees are shaken onto fresh foundation, and the old *brood* frames are burned.

- **The Super Problem:** The empty super frames you just extracted are highly contaminated. You **cannot** put them back on the treated hive or store them loosely where bees might explore them.
- **Quarantine:** They must be kept under strict quarantine at the colony level.
- **Sterilisation:** To safely reuse the wooden super boxes they must be sterilised by scorching thoroughly with a blow-lamp.