

# C0<sub>2</sub> Shortage – practical guidance



In light of the current shortage of CO<sub>2</sub> gas impacting the EU, including the agriculture industry, AHDB has developed five key considerations to help you prepare for and start contingency planning.

- 1) Speak to your processor and supply chain to establish the situation in your abattoir, if you have not already been informed
  - a. If required, clarify your contract to understand the repercussions of not sending your pigs in spec
- 2) Assess your means over six weeks in a worst-case scenario if pig movements are disrupted, stopped or rolled
- 3) Map out your plan for each stage on your unit on how you would manage if the supply chain is disrupted:

Stage of Production	Feed	Water	Housing	Bedding

- 4) Identify and agree what steps would be taken in an emergency, with:
  - a. Feed suppliers (confirming feed supplies, forward orders, and any adjustments required to keep in spec)
  - b. Neighbours (for alternative space/building availability as temporary housing)
  - c. Contractors (fallen stock management, bedding supplies/alternatives)
- 5) Ensure you are conforming to legal and assurance scheme requirements (space allowance, movement licences, etc.). Quick links include:
  - a. Defra [Code of Recommendations for the Welfare of Livestock](#)
  - b. Defra [Guidance Caring for pigs April 2013](#)
  - c. Red Tractor – [Pig Standards](#)
  - d. RSPCA – [Welfare standards for pigs](#)
  - e. Defra – [Register land you use to keep livestock](#)

For more details, please see the AHDB Pork contingency plan – practical guidance factsheet.

## Contingency plan – practical guidance

### Aim

- Ensure you and your staff know what actions will be taken before any issues arise, such as a supply chain breakdown
- Support the creation of a clear, documented emergency plan against a range of identified risks
- Provide practical advice on actions to be taken in the event of an emergency
- Ensure sustained health and welfare standards, including assurance scheme compliance

### General guidance

- Contact your processor to understand the current situation and any movement/contract changes.
- Contact your vet where appropriate for additional help, if required.
- Contact your assurance scheme, where appropriate, for further producer guidance.
- Contact your AHDB Knowledge Exchange team member for additional guidance and support.
- Ensure staff have access to and are familiar with all contingency plans.

## Contingency plan – risk of interruption to movements

The following table provides practical guidance and additional resources on the actions to be taken in the event of interruption to pig movements off farm, to be included in a documented emergency plan, as required by Red Tractor Pig Standards.

Scope of a Contingency Plan	Guidance	Additional Resources
1. What is the plan if the farm is closed for any given time? (1, 2, 3+ weeks)	<ul style="list-style-type: none"> <li>• Have an emergency contact list prepared (including 24-hour/emergency phone numbers for your vet, haulier, etc. and key farm information, eg location of an alternative water supply)</li> <li>• Ensure your farm is mapped out in terms of buildings and flow to help you consider how daily routines will be managed or altered</li> <li>• Contact your fallen stock contractor and consider dead stock management alternatives, if necessary</li> </ul>	<ul style="list-style-type: none"> <li>• <a href="#">Defra Emergencies on livestock farms</a></li> <li>• <a href="#">Action for productivity 15 Hospital and recovery pen management</a></li> <li>• <a href="#">PVS Casualty Pig Document</a></li> <li>• <a href="#">Red Tractor Euthanasia Work Instruction</a></li> <li>• <a href="#">RIA 27 Carcase Cooling field trial summary.pdf</a></li> </ul>
2. Is there any flex within existing buildings to allow tighter stocking?	<ul style="list-style-type: none"> <li>• Calculate the estimated growth within a pen to ensure compliance of stocking densities (including space, water and feed requirements)</li> <li>• Prepare external run areas so they can be expanded as piglets grow</li> </ul>	<ul style="list-style-type: none"> <li>• <a href="#">Defra Code of Recommendations for the Welfare of Livestock</a></li> <li>• <a href="#">Defra Guidance Caring for pigs April 2013</a></li> <li>• <a href="#">Red Tractor – Pig Standards</a></li> <li>• <a href="#">RSPCA – Welfare standards for pigs</a></li> <li>• <a href="#">WI 10 Shunt fostering.pdf</a></li> </ul>

<p>3. Are there any buildings on the farm that can be brought into temporary use?</p>	<ul style="list-style-type: none"> <li>• Consider any spare livestock accommodation, including cattle sheds and cattle yards, corn stores/dryers, straw barns or tractor sheds</li> <li>• Any building or space used should be cleaned and disinfected before use</li> <li>• Use drum fans and adjust bedding to help achieve correct temperature and comfort</li> <li>• If using supplementary heat such as lamps, make sure there is sufficient separation distance from combustible materials; do not ignore electrical safety</li> <li>• Consider how pen requirements will differ for different size pigs (eg smaller pigs are less destructive, therefore require less robust pens)</li> <li>• If slatted accommodation, ensure that the slot size is correct for feet, to avoid damage/injury</li> <li>• Cover the slats with stock board/comfort mats and create a kennel area with a plywood or stock board roof</li> <li>• Ensure that pigs are handled with patience and care through temporary races and loading ramps as they adjust to new buildings</li> </ul>	<ul style="list-style-type: none"> <li>• <a href="#">WI 8 Handling and restraining pigs</a></li> <li>• <a href="#">Action for productivity 21 Ventilation</a></li> <li>• <a href="#">Action for productivity 37 Flooring</a></li> <li>• <a href="#">RIA 17 Slot reducers.pdf</a></li> <li>• <a href="#">RIA 18 Steel bar inserts.pdf</a></li> <li>• <a href="#">RIA 19 Slot closure inserts.pdf</a></li> </ul>
<p>4. What outside spaces can be used to accommodate pigs in a safe manner?</p>	<ul style="list-style-type: none"> <li>• Consider how temporary pens can be created outdoors using on-farm supplies, eg straw bales, stock fence, electric fencing, etc. – keep a spare supply on site</li> <li>• Straw bales or hurdles can be used for external run areas. If hurdles are used, they will need to be solid/infilled hurdles to prevent escapees</li> <li>• To create a straw yard, use straw bales, with sheets of plywood, stock board, painted tin or other sheet material over the top, if necessary, within a large pen/yard to provide smaller kennel areas. Provide plenty of straw bedding</li> <li>• Identify any concrete areas that can be hurdled off. Deep-bed the area to reduce moisture levels coming through from concrete</li> <li>• Ensure a dry area is chosen, not near to any drains. Check it is not likely to be affected by run-off from roofs or gutters from nearby buildings</li> <li>• Ensure environmental management strategies continue to be in place</li> </ul>	<ul style="list-style-type: none"> <li>• <a href="#">Action for productivity 32 Farrowing Paddock Management</a></li> <li>• <a href="#">Action for productivity 34 Gilt Management: integration outdoors</a></li> </ul>
<p>a. What shelter can be provided if pigs are kept outside?</p>	<ul style="list-style-type: none"> <li>• Use farrowing or dry sow arks as shelters</li> <li>• Keep kennel areas covered (for example, use roofing panels, stock board or ridge tenting)</li> <li>• Make sure that any panels allow correct ventilation to ensure a draught-free lying area</li> <li>• When using straw bales to construct the kennels, consider the bale shape/density/ quality and how closely they sit together, especially on uneven ground. Use net/mesh within the pens to prevent escape routes. Put the wire mesh on the inside, bend under the bales and use to fill gaps and attach/wire to bale strings</li> </ul>	<ul style="list-style-type: none"> <li>• <a href="#">WI 9 Farrowing arcs.pdf</a></li> </ul>

<p>b. Plan for risk of extreme weather</p>	<ul style="list-style-type: none"> <li>• Ensure measures are taken to avoid heat stress</li> <li>• Make sure arrangements for transport consider the impact of extreme conditions, especially on long hauls</li> </ul>	<ul style="list-style-type: none"> <li>• <a href="#">Defra- Solving the Problem of Heat Stress (PB1316)</a></li> <li>• <a href="#">Action for productivity 3 Heat stress (indoors)</a></li> <li>• <a href="#">Action for productivity 4 Heat stress (outdoors)</a></li> <li>• <a href="#">Action for productivity 39 Heat stress in boars</a></li> </ul>
<p>5. Is there an available supply for temporary accommodation?</p>	<ul style="list-style-type: none"> <li>• Have a four-week supply on hand for emergencies of bedding and feed, including extra gates and straw bales to extend space</li> </ul>	
<p>a. Bedding</p>	<ul style="list-style-type: none"> <li>• Ensure bedding provided is dry and of acceptable quality</li> <li>• Know where you will source alternative bedding if pigs are emergency housed and/or if straw is scarce (for example, shredded paper, plain wood chips, or rape straw, if available)</li> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• <a href="#">Action for productivity 2 Strawing Up</a></li> <li>• <a href="#">15 KT Bulletin Bedding options for the English pig industry.pdf</a></li> <li>• <a href="#">AHDB Bedding Materials Directory</a></li> <li>• <a href="#">The Scottish Farmer – Looking at bedding alternatives</a></li> </ul>
<p>b. Feeders and feed</p>	<ul style="list-style-type: none"> <li>• Contact feed supplier as soon as risk is identified to ensure continued supply and forward orders are made</li> <li>• Contact your nutritionist/feed supplier to consider alternatives to feed rations/diets (super stock diets may be used), based on availability and pig requirements</li> <li>• Make sure pigs are not limited feed to avoid going over weight or that drastic changes to feed are made</li> <li>• Calculate the extra amount of feed you will require during the movement restriction. Include potential wastage in your calculations</li> <li>• Fix light-weight troughs to floor so feed/water is not wasted</li> <li>• Ensure that the feeders are protected from rain and locate them towards the front of the lying area so they are adjacent to the drinkers in the exterior dunging area</li> <li>• Provide feed in hoppers or troughs, sited to allow ready and easy access (by pigs and you) especially in the first few days after moving</li> <li>• If no hoppers or troughs are available the bases can be cut off plastic drums to provide troughs approximately 4–6" deep. Plastic or metal sheep troughs can be used for this purpose. (Any container used for feed/water must be adequately cleaned before use)</li> <li>• Initially, do not feed the piglets ad lib, instead provide feed in the troughs or hoppers several times a day. Ensure that the troughs are kept as clean as possible and clean if fouled, etc. Try, where possible, to avoid floor feeding to reduce waste and fouling</li> </ul>	<ul style="list-style-type: none"> <li>• <a href="#">Action for productivity 8 Feed &amp; Straw management</a></li> <li>• <a href="#">Action for productivity 18 Efficient feed usage</a></li> <li>• <a href="#">9 KT Bulletin Feed efficiency.pdf</a></li> <li>• <a href="#">12 KT Bulletin Reduce feed waste.pdf</a></li> <li>• <a href="#">13 KT Bulletin Alternative feeds.pdf</a></li> <li>• <a href="#">14 KT Bulletin Reduce feed costs.pdf</a></li> <li>• <a href="#">18 KT Bulletin Feeding healthy vs challenged pig.pdf</a></li> </ul>

<p>c. Water and drinkers</p>	<ul style="list-style-type: none"> <li>• Check plentiful supply of easily accessible clean water is available at all times to ensure pigs do not become dehydrated and to avoid aggression</li> <li>• Temporary water supplies can be provided by fitting nipple drinkers into plastic drums (at the correct height)</li> <li>• Consider also providing water in troughs for the first 3–5 days</li> <li>• Site all drinkers so that any spillage/overflow does not soil the lying area</li> <li>• Check your backup supply is sufficient – especially in extreme weather</li> <li>• Ensure water supply sources are aware of the situation to ensure priority usage</li> </ul>	<ul style="list-style-type: none"> <li>• <a href="#">Action for productivity 16 Water Supply</a></li> <li>• <a href="#">20 KT Bulletin Water Usage Tips on saving a precious resource.pdf</a></li> <li>• <a href="#">RIA 14 Water consumption.pdf</a></li> </ul>
<p>6. Can manure and effluent be controlled within temporary accommodation?</p>	<ul style="list-style-type: none"> <li>• Review your farm Manure Management Plan before spreading, and amend as necessary</li> <li>• Seek support as soon as possible if your farm is reaching less than 4-months' slurry capacity</li> </ul>	<ul style="list-style-type: none"> <li>• <a href="#">Red Tractor Manure Management Plan</a></li> <li>• <a href="#">RIA 15 Reducing phosphorous.pdf</a></li> <li>• <a href="#">RIA 16 Reducing phosphorous - sows.pdf</a></li> </ul>
<p>7. If pigs can legally be moved off farm:</p>	<ul style="list-style-type: none"> <li>• Ensure transporters have an emergency plan, especially if longer journeys are required</li> <li>• Make extra checks if pigs are being moved greater distances or in extreme weather</li> <li>• Review health and safety plans, and record as appropriate</li> <li>• Make sure plans consider biosecurity best practice</li> </ul>	<ul style="list-style-type: none"> <li>• <a href="#">Red Tractor Livestock Transport – Long Journey Emergency Contingency Plan</a></li> <li>• <a href="#">Action for productivity 43 Lorry biosecurity</a></li> <li>• <a href="#">Action for productivity 13 Biosecurity</a></li> <li>• <a href="#">WI 7 Loading and unloading pigs</a></li> </ul>
<p>a. Is there any available slaughter outlet for pigs, even at a financial loss?</p>	<ul style="list-style-type: none"> <li>• Check with your abattoir if they are able to take pigs <b>before</b> movement is booked on the pig movement system eAML2</li> <li>• Understand your contract and allowances in emergencies regarding overweight pigs</li> <li>• Identify how pigs will be chosen for slaughter if your abattoir has limited capacity</li> <li>• Remember, finishers may be more stressed if temporarily moved out just before slaughter</li> </ul>	<ul style="list-style-type: none"> <li>• <a href="#">Action for productivity 7 Factors affecting killing-out percentage</a></li> <li>• <a href="#">21 KT Bulletin Slaughter weight decisions April 2016.pdf</a></li> </ul>
<p>b. Is there capacity available at a different farm, even at a financial loss?</p>	<ul style="list-style-type: none"> <li>• If movements are to county parish holding numbers (CPHs) already registered with RPA for pigs, they can be set up as a normal farm-to-farm movement. Standstill would be triggered on the destination farm</li> <li>• If pigs are moved to neighbouring farms that may have empty cattle barns or fields, the producer should apply for a temporary CPH (tCPH). This is sent to Defra for processing. With the tCPH, standstill regulations would not be triggered for the farm owner, as part of the tCPH requirements are that animals should be kept separate (see appendix on the form). Once the producer has been given a tCPH, they can register it on Pig Hub/eAML2 as one of their holdings and set up movements onto or off it in the usual way</li> </ul>	<ul style="list-style-type: none"> <li>• <a href="#">Defra- Register land you use to keep livestock</a></li> </ul>

	<ul style="list-style-type: none"> <li>If pigs are currently being moved within a pyramid (with or without setting moves up on eAML2), they should still be able to move to those locations. However, the producer would not be able to move finishers back to nursery sites to alleviate overcrowding.</li> </ul>	
c. Can 8kg or 30kg pigs be moved off farm, rather than being retained for finishing?	<ul style="list-style-type: none"> <li>Speak to the NPA to see if they know of producers with spare capacity</li> </ul>	<ul style="list-style-type: none"> <li><a href="#">Action for productivity 35 Gilt Management: Isolation and acclimatisation</a></li> <li><a href="#">Action for productivity 42 Strategic de-stocking</a></li> </ul>

Additional plans should also be in place for power/fuel supply failures, fire, activist activity, or disease outbreak. The Red Tractor Standard requires that you identify these potential risks to your farm and to document the actions to be taken for each risk.

Further resources to support your wider contingency planning include:

- Red Tractor [Emergency Plan](#) and Guidance for Disaster Recovery



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Recovery comms to p

- Defra [Farm fires: Protecting farm animal welfare](#)
- AHDB PEDv [Standard Operating Procedures](#) and PHWC [Pig Industry PED Contingency Plan](#)

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