

Table 1. Mean values of the variables measured during the 60-min test

	Pretest	Test
Heart rate (beats min ⁻¹)	78 ± 10	159 ± 15*
Systolic blood pressure (mmHg)	118 ± 10	155 ± 12*
Diastolic blood pressure (mmHg)	78 ± 10	100 ± 12*
Stroke volume (L min ⁻¹)	5.5 ± 0.5	6.5 ± 0.5
Cardiac output (L min ⁻¹)	32.5 ± 3.5	40.5 ± 3.5*
Oxygen consumption (L min ⁻¹)	20.5 ± 2.5	25.5 ± 2.5*
Ventilatory equivalent (L min ⁻¹)	25.5 ± 2.5	30.5 ± 2.5*
Respiratory quotient	0.85 ± 0.05	0.85 ± 0.05
Energy expenditure (kcal min ⁻¹)	1050 ± 150	1250 ± 150*
Lactate concentration (mmol L ⁻¹)	1.0 ± 0.2	2.5 ± 0.3*
Blood glucose concentration (mmol L ⁻¹)	5.5 ± 0.5	5.0 ± 0.5
Free fatty acid concentration (mmol L ⁻¹)	0.5 ± 0.1	0.8 ± 0.1*
Cortisol concentration (nmol L ⁻¹)	100 ± 20	150 ± 20*
Salivary cortisol concentration (nmol L ⁻¹)	50 ± 10	100 ± 10*
Plasma renin activity (ng mL ⁻¹ h ⁻¹)	0.5 ± 0.1	0.8 ± 0.1*
Aldosterone concentration (pmol L ⁻¹)	10 ± 2	15 ± 2*
Angiotensin II concentration (pg mL ⁻¹)	5 ± 1	10 ± 1*
Angiotensinogen concentration (μg mL ⁻¹)	100 ± 20	100 ± 20
Angiotensin-converting enzyme activity (U mL ⁻¹)	100 ± 20	100 ± 20
Renal plasma flow (mL min ⁻¹)	1000 ± 100	1000 ± 100
GFR (mL min ⁻¹)	100 ± 10	100 ± 10
Proteinuria (mg day ⁻¹)	10 ± 2	10 ± 2
Glucose excretion (mg day ⁻¹)	10 ± 2	10 ± 2
Insulin sensitivity index (mU L ⁻¹ min ⁻¹)	100 ± 20	100 ± 20
Hypothalamic-pituitary-adrenal axis activation	No	Yes

*Significantly different from pretest values ($P < 0.05$).

Date assessment was carried out: 10 December 2012

Date of next review: 10 December 2013

Activity or area	What are the hazards?	Who might be harmed and how?	What are you already doing?	What further action is necessary?	Who needs to carry out the action?	When is the action needed by?	Done
<u>Slurry:</u> Slurry mixing	Slurry in slatted tanks. Gases released during mixing.	Farmer/operator/other Death by drowning or gas asphyxiation. Injury/death from methane explosion	Removing 4 slats. Pallets covering openings. Avoid smoking or ignition source.	Have help at hand. Purchase 'safety gang slat'. Remove cattle and comply with 30 min. rule.	Farmer	Before February 2013	
<u>Animals:</u> Calving in confinement (at yard)	Attacked by cow	Farmer/other. Injury or death if crushed or trampled by cow during or after calving	Have a suitable calving pen	Install head/neck restraint and confining gate	Farmer	Before calving starts in March 2013	
<u>Falls:</u> Cleaning or repairing guttering	Falling from height	Farmer/other Injury or death when falling onto hard surface	Using extending ladder with concrete block as base support.	Purchase ladder stand-off bracket to stabilise ladder and step clear of gutter. Make simple ladder foot/base	Farmer	ASAP	
<u>Equipment:</u> All PTO driven equipment	Exposed moving parts	Farmer/operator/other Serious injury or death from entanglement	Repairing or replacing guards when damaged.	More pro-active on greasing and maintaining PTO shafts and guard bearing rings	Farmer/operator	Weekly or before each use	