

## **Reactors by Intervention Year**

### SE3131 reactive request

#### Methods

<u>Data requested</u>: The number of reactors disclosed in the Gloucester and Somerset intervention and comparison areas in the first 4 years of intervention.

The data exported from the database were the number of animals TB Tested on a herd in these areas, with a positive TB Skin/IFN test result and slaughtered as a TB reactor.

A reactor is defined as:

Test Result	Lesions found at Slaughterhouse	Culture	IR Type	Private Slaughter
Dangerous Contact (DC)	Visible Lesions (VL)			
Dangerous Contact (DC)		M.Bovis		
Inconclusive Reactor (IR)	Visible Lesions (VL)		1x	No
Inconclusive Reactor (IR)		M.Bovis	1x	No
Inconclusive Reactor (IR)			2x	
Reactor (R)				
Slaughterhouse Case (SL)		M.Bovis		

If an animal was tested twice on the same day e.g. Skin and Gamma test and both were positive, only the Skin test result was counted.

Reactors were counted for the intervention year based on their Test Date.

AreaID	Intervention Year	Area Name	Start Date	End Date
1	-3	Somerset	26/08/2010	25/08/2011
1	-2	Somerset	26/08/2011	25/08/2012
1	-1	Somerset	26/08/2012	25/08/2013
1	0	Somerset	26/08/2013	25/08/2014
1	1	Somerset	26/08/2014	25/08/2015
1	2	Somerset	26/08/2015	25/08/2016
1	3	Somerset	26/08/2016	25/08/2017
2	-3	Gloucestershire	03/09/2010	02/09/2011
2	-2	Gloucestershire	03/09/2011	02/09/2012
2	-1	Gloucestershire	03/09/2012	02/09/2013
2	0	Gloucestershire	03/09/2013	02/09/2014
2	1	Gloucestershire	03/09/2014	02/09/2015
2	2	Gloucestershire	03/09/2015	02/09/2016
2	3	Gloucestershire	03/09/2016	02/09/2017

#### Notes:

- The areas used for this work are the same as the Multivariable Analysis areas.
- The reactors described here refer to both OTF-S and OTF-W breakdowns.

### Results

<u>Table 1</u>: Skin reactors for Gloucestershire by intervention year.

Skin Reactors AreaCode	Intervention Year	1	2	3	Total
WG00	181	142	92	98	513
WG01	153	108	96	109	466
WG02	136	186	88	89	499
WG03	208	214	265	235	922
WG04	134	135	147	100	516
WG05	139	174	197	216	726
WG06	106	69	65	71	311
WG07	82	90	193	88	453
WG08	250	156	125	113	644
WG10	305	187	127	149	768
Total	1,694	1,461	1,395	1,268	5,818

<u>Table 2</u>: Skin reactors for Somerset by intervention year.

Skin Reactors	Intervention Year		2	2	Total
AreaCode		0 1	. 2	3	Total
WS00	192	146	136	93	567
WS01	57	98	147	292	594
WS02	146	174	178	111	609
WS03	352	470	575	547	1,944
WS04	127	116	223	222	688
WS05	266	331	349	311	1,257
WS07	80	81	108	208	477
WS08	90	93	99	75	357

Total	1,597	1,835	2,048	2,178	7,658
WS10	78	179	171	158	586
WS09	209	147	62	161	579

<u>Table 1</u>: IFN gamma reactors for Gloucestershire by intervention year.

Gamma Reactors	Intervention Year				
	0	1	2	2	Total
AreaCode	U		2	3	Total
WG00	0	0	0	0	0
WG01	0	0	0	0	0
WG02	0	0	0	0	0
WG03	5	0	37	7	49
WG04	0	0	0	0	0
WG05	0	1	0	0	1
WG06	0	11	0	0	11
WG07	0	0	0	0	0
WG08	0	0	0	0	0
WG10	0	0	21	0	21
Total	5	12	58	7	82

<u>Table 2</u>: IFN gamma reactors for Somerset by intervention year.

Gamma					
Reactors	Intervention Year				
AreaCode	0	1	2	3	Total
WS00	0	0	0	0	0
WS01	0	0	2	0	2
WS02	0	0	0	0	0
WS03	0	53	71	5	129
WS04	0	15	6	3	24
WS05	7	0	0	40	47
WS07	0	0	0	0	0
WS08	0	0	0	0	0
WS09	0	0	0	0	0
WS10	0	0	0	0	0
Total	7	68	79	48	202

# Summary table

	S	kin test reactors			
		Year of cu	ıll		
	First	Second	Third	Fourth	Total
WS	192	146	136	93	567
Comparison areas (average)	156.1	187.7	212.4	231.7	787.9
WG	181	142	92	98	513
Comparison areas	168.1	146.6	144.8	130.0	589.4

	IFN-gamma reactors					
	First	Second	Third	Fourth	Total	
WS Comparison areas	0	0	0	0	0	
(average)	0.5	1.2	5.8	0.7	8.2	
WG	0	0	0	0	0	
Comparison areas	0.7	6.8	7.9	4.8	20.2	