

## Appendix 1: List of zoonotic diseases found in this study

Disease	Source
Avian influenza	Web of Science, DALRRD Database, OIE database
Hepatitis E virus	Web of Science
Newcastle disease	Web of Science, DALRRD database, OIE database, All Eastern Cape veterinary laboratory records
Enterococcus	Web of Science
<i>Salmonella</i>	Web of Science
Colibacillosis	Web of Science, All Eastern Cape veterinary laboratory records
Cysticercosis	Web of Science, DALRRD database
Chlamydiosis	OIE database
Norovirus	Web of Science
Nocardiosis	Grahamstown laboratory records
Campylobacteriosis	Web of Science

## Appendix 2: Pig and poultry diseases reported in the National Database (DALRRD) from 1999 to 2019 (DAFF 2020)

Disease	Species	District	Date	Number of reported outbreaks
<i>Mycoplasma gallisepticum</i>	Avian	Harry Gwala*	1999	2
	Avian	Harry Gwala*	2000	4
	Avian	Alfred Nzo	2000	1
	Avian	O.R Tambo	2001	1
	Avian	Harry Gwala*	2001	2
Newcastle disease	Avian	Harry Gwala*	1999	4
	Avian	Harry Gwala*	2001	1
	Avian	Amathole	2002	2
	Avian	Buffalo City	2003	2
	Avian	Harry Gwala*	2004	1
	Avian	Alfred Nzo	2004	1
	Avian	Nelson Mandela Bay	2005	4
	Avian	Buffalo City	2005	5
	Avian	Chris Hani	2005	3
	Avian	Harry Gwala*	2005	3
	Avian	Sarah Baartman	2005	1
	Avian	Amathole	2005	1
	Avian	Amathole	2005	1
	Avian	Sarah Baartman	2006	4
	Avian	Nelson Mandela Bay	2006	5
	Avian	Buffalo City	2006	2
	Avian	Sarah Baartman	2006	1
	Avian	Chris Hani	2006	1

Avian	Chris Hani	2006	1
Avian	Chris Hani	2007	1
Avian	Buffalo City	2008	1
Avian	Alfred Nzo	2008	4
Avian	Chris Hani	2008	2
Avian	O.R Tambo	2008	2
Avian	Amathole	2008	1
Avian	Alfred Nzo	2009	11
Avian	Nelson Mandela Bay	2009	1
Avian	Buffalo City	2009	2
Avian	Buffalo City	2010	5
Avian	Nelson Mandela Bay	2010	1
Avian	Sarah Baartman	2010	2
Avian	Buffalo City	2011	1
Avian	Amathole	2012	1
Avian	O.R Tambo	2013	2
Avian	Chris Hani	2013	1
Avian	Amathole	2014	2
Avian	Sarah Baartman	2014	1
Avian	Amathole	2014	2
Avian	Chris Hani	2015	1
Avian	Chris Hani	2015	1
Avian	Alfred Nzo	2015	2
Avian	Amathole	2015	1
Avian	O.R Tambo	2015	1
Avian	Amathole	2015	1
Avian	Amathole	2016	4
Avian	Joe Gqabi	2016	1

	Avian	Sarah Baartman	2016	3		Avian	Harry Gwala*	2001	1
	Avian	O.R Tambo	2017	1		Avian	Alfred Nzo	2002	1
Gumboro	Avian	Sarah Baartman	2002	1	Classical swine fever	Swine	Chris Hani	2005	4
	Avian	Amathole	2009	1		Swine	Amathole	2005	2
Fowl cholera	Avian	Amathole	2010	1		Swine	Joe Gqabi	2005	2
	Avian	Joe Gqabi	2010	1		Swine	Buffalo City	2005	30
Avian infectious bronchitis	Avian	Nelson Mandela Bay	2005	1		Swine	Sarah Baartman	2005	3
	Avian	Amathole	2011	1		Swine	Chris Hani	2005	10
Fowl pox	Avian	Harry Gwala*	1999	2		Swine	Nelson Mandela Bay	2005	6
	Avian	Harry Gwala*	2000	1		Swine	Chris Hani	2005	9
	Avian	Joe Gqabi	2000	1		Swine	Amathole	2005	2
	Avian	Harry Gwala*	2002	4		Swine	Amathole	2005	3
	Avian	Amathole	2002	3		Swine	Chris Hani	2006	5
	Avian	Joe Gqabi	2003	1		Swine	Buffalo City	2006	12
	Avian	Amathole	2003	1		Swine	Sarah Baartman	2006	1
	Avian	Alfred Nzo	2003	1		Swine	Nelson Mandela Bay	2006	6
	Avian	Joe Gqabi	2009	2		Swine	Amathole	2006	1
	Avian	O.R Tambo	2010	1		Swine	Chris Hani	2006	3
	Avian	Amathole	2016	1	Swine erysipelas	Swine	Chris Hani	2008	1
Coccidiosis	Avian	Harry Gwala*	1999	4		Swine	Alfred Nzo	2013	1
	Avian	Joe Gqabi	1999	1	Cysticercosis ( <i>Cysticercus cellulosae</i> )	Swine	Buffalo City	2002	1
	Avian	O.R Tambo	1999	1		Swine	Alfred Nzo	2003	2
	Avian	O.R Tambo	1999	1		Swine	Harry Gwala*	2003	1
	Avian	O.R Tambo	2000	3	Coccidiosis	Swine	Amathole	2012	1
	Avian	Alfred Nzo	2000	2					
	Avian	Harry Gwala*	2000	1					
	Avian	Harry Gwala*	2001	3					
	Avian	Buffalo City	2001	1					
	Avian	Harry Gwala*	2002	2					
	Avian	Alfred Nzo	2002	1					
	Avian	Amathole	2002	1					
	Avian	Amathole	2003	2					
	Avian	O.R Tambo	2004	1					
	Avian	Harry Gwala*	2004	1					
	Avian	Amathole	2006	2					
	Avian	Amathole	2007	1					
	Avian	Sarah Baartman	2007	1					
	Avian	O.R Tambo	2007	1					
	Avian	Amathole	2010	1					
	Avian	Amathole	2011	3					
	Avian	Amathole	2011	1					
	Avian	Buffalo City	2011	1					
	Avian	Amathole	2018	1					
Salmonella enteritidis	Avian	Sarah Baartman	2017	1					
Avian infectious laryngotracheitis	Avian	O.R Tambo	2008	1					
Avian leukosis	Avian	Harry Gwala*	1999	4					
	Avian	Harry Gwala*	2000	3					

\* – Umzimkhulu found in the national database is a town in Harry Gwala District Municipality (KwaZulu-Natal). Until 1 March 2006, the town was part of an exclave of the Eastern Cape Province.

**Appendix 3: Pig and poultry diseases reported in the WAHID interface from 2005 to 2020 (OIE 2020a)**

Disease	Species	Year	Month
Fowl pox	Avian	2005	Jan–June
Avian infectious bronchitis	Avian	2005	Jan–June
	Avian	2007	Jul–Dec
	Avian	2010	Jan–July
	Avian	2011	Jan–Dec
	Avian	2013	Jan–Jun
	Avian	2014	Jul–Dec
	Avian	2016	Jan–Dec
Newcastle disease	Avian	2005–2009	Jan–Dec
	Avian	2010	Jan–Jun
	Avian	2018	Jan–Jun
LPAI (poultry)	Avian	2007	Jan–Jun
	Avian	2013	Jul–Dec
	Avian	2014	Jan–Jun
	Avian	2016	Jan–Jun
	Avian	2017	Jan–Jun
	Avian	2018	Jan–Dec
HPAI	Avian	2006	Jan–Dec
	Avian	2011	Jan–Dec
	Avian	2012	Jan–Dec
	Avian	2013	Jan–Jun
	Avian	2017–2018	Jan–Dec
Gumboro	Avian	2009	Jul–Dec
	Avian	2016	Jul–Dec
Mycoplasmosis	Avian	2005	Jul–Dec
Fowl cholera	Avian	2006	Jan–Jun
	Avian	2010	Jul–Dec
Classical swine fever	Swine	2005	Jul–Dec
	Swine	2006	Jan–Dec
	Swine	2007	Jul–Dec
African swine fever*	Swine	2020	Jan–Jun

\* – Disease reported to OIE but not found in the national database

**Appendix 4: Pig and poultry diseases retrieved from Grahamstown veterinary laboratory records**

Disease	Species	Year	Month
Aspergillosis	Avian	2012	Sep
Nocardiosis	Avian	2012	Nov
Roundworms	Avian	2012	Nov–Dec
<i>E. coli</i>	Swine	2012	Nov
Chicken pox	Avian	2013	Jan
Bacterial septicaemia	Avian	2013	Feb–Sep
Colisepticaemia	Avian	2013	Feb
Stunted growth syndrome	Avian	2013	Mar
Colibacillosis	Avian	2013	May–Nov
<i>Staphylococcus epidermidis</i>	Avian	2013	May
Bacterial pneumonia	Avian	2013	Jul
Klebsiella	Avian	2013	Sep
Newcastle disease	Avian	2013	Dec
Colibacillosis	Avian	2014	Jan–Dec
Colibacillosis	Swine	2014	Jan–Oct
<i>Mycoplasma</i>	Avian	2014	Mar
Roundworms	Avian	2014	Mar–Aug
Roundworms	Avian	2014	Apr–Sep
Hypothermia	Avian	2014	Apr
Pasteurellosis	Swine	2014	Apr
Roundworms	Swine	2014	Apr
Bacterial septicaemia	Avian	2014	Jul
Newcastle disease	Avian	2014	Aug–Nov
Perforating ulcer and peritonitis	Swine	2014	Sep
<i>E. coli</i>	Avian	2014	Sep
Aspergillosis	Avian	2014	Jan
Gastric ulcer	Swine	2014	Nov
Newcastle disease	Avian	2015	Mar
Bacterial pneumonia	Avian	2015	May
<i>E. coli</i>	Avian	2015	May
Pneumonia	Swine	2015	Sep
Colibacillosis	Avian	2016	Jan
Coccidiosis	Avian	2016	Jan
Pneumonia	Swine	2016	Sep
Roundworms	Swine	2016	Sep
Ascites	Avian	2016	Oct
Colibacillosis	Swine	2016	Oct
<i>E. coli</i>	Swine	2016	Oct
Anaemia and babesiosis	Swine	2016	Oct
Coccidiosis	Swine	2017	Jan
Asphyxiation	Swine	2017	Mar
Pneumonia and necrotic enteropathy	Swine	2017	May
Colibacillosis	Avian	2017	Jul
Coccidiosis	Avian	2017	Jun
<i>E. coli</i>	Avian	2017	Jul
Internal parasite infestation	Avian	2018	Jun

### **Appendix 5: Pig and poultry diseases retrieved from Queenstown veterinary laboratory records**

Disease	Species	Year	Month
<i>E. coli</i>	Avian	2018	March
<i>E. coli</i>	Porcine	2018	March
Pulmonary hypertension syndrome	Avian	2018	March
Avirulent ND	Avian	2018	April
Coccidiosis	Avian	2018	April
Infectious coryza	Avian	2018	April

### **Appendix 6: Pig and poultry diseases retrieved from Middelburg veterinary laboratory records**

Disease	Species	Year	Month
Newcastle disease	Avian	2007	Aug
	Avian	2014	Sep
	Avian	2015	Jun-Aug
<i>E. coli</i>	Avian	2009	-
Enterobacteria	Avian	2009	-
Chicken pox	Avian	2017	June
Chron. Resp. disease	Avian	2017	June
Colibacillosis	Avian	2018	Aug
Peritonitis	Avian	2019	Apr
Parvovirus	Porcine	2007	Jul
<i>Erysipelothrix</i>	Porcine	2007	Aug
<i>Klebsiella pneumonia</i>	Porcine	2009	Oct-Nov
Colibacillosis	Porcine	2009	Sep
Skin condition	Porcine	2009	Sep
Pneumonia	Porcine	2010	Oct
Thymus Lymphoma	Porcine	2014	May
<i>C. perfringens</i> . type A	Porcine	2016	Dec
SMEDI <sup>1</sup>	Porcine	2018	Feb

### **Appendix 7: List of databases from Web of Science used in the study:**

WOS: Web of Science Core Collection

BCI: Biosis Citation Index

CABI: CAB Abstracts® & Global Health®

CCC: Current Contents Connect

DCI: Data Citation Index

DIIDW: Derwent Innovations Index

FSTA: Food Science and Technology Abstract

KJD: Korean Journal Database

MEDLINE

RSCI: Russian Science Citation Index

SciELO: SciELO Citation Index