

## Appendix 4: MERS-CoV Case Investigation Form

*Note: This is an example form incorporating most of the fields contained in the NetEpi (database) form that has been prepared for national reporting. Central disease control agencies in individual jurisdictions should be consulted regarding their specific data collection requirements.*

<b>1</b>	Interview	Was the person interviewed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not applicable <hr/> - If Yes, date of interview:        /        /        (dd/mm/yyyy) <hr/> - If No, specify reason not interviewed (and if someone else was interviewed):
<b>2</b>	Case status	<input type="checkbox"/> Confirmed <input type="checkbox"/> Probable <input type="checkbox"/> Suspected <input type="checkbox"/> Excluded <hr/> Notification date:        /        / <hr/> Received date:        /        / <hr/> Notifier:
<b>3</b>	Patient contact details	Family name: _____ Given names: _____ Residential address: _____  <hr/> Phone number (home): _____ <hr/> Phone number (work): _____ <hr/> Phone number (mobile): _____
<b>4</b>	Address type	<input type="checkbox"/> Household <input type="checkbox"/> Aged-care facility <input type="checkbox"/> Educational Institution <input type="checkbox"/> Assisted <input type="checkbox"/> Military Barracks <input type="checkbox"/> Prison <input type="checkbox"/> Other <input type="checkbox"/> Unknown <hr/> If Other, please specify:
<b>5</b>	Gender	<input type="checkbox"/> Male <input type="checkbox"/> Female <input type="checkbox"/> Unknown
<b>6</b>	Date of birth	Date of birth:        /        /        (dd/mm/yyyy)
<b>7</b>	Country of birth	Country of birth: _____ If not born in Australia, date of first arrival in Australia:    /    /    (dd/mm/yyyy) <i>Note: if only year known, enter 01/01/[year]</i>
<b>8</b>	Indigenous Status	<input type="radio"/> Aboriginal origin <hr/> <input type="radio"/> Torres Strait Islander origin <hr/> <input type="radio"/> Both Aboriginal and Torres Strait Islander origin <hr/> <input type="radio"/> Not Aboriginal and Torres Strait Islander origin <hr/> <input type="radio"/> Not Stated / Unknown
<b>9</b>	Onset date of first symptoms	Did the person have symptoms? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <hr/> - If Yes, onset date:        /        /        (dd/mm/yyyy) <hr/> - Duration of symptoms: _____ (days)

<b>10</b>	Symptoms and clinical notes	Acute respiratory distress syndrome	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unknown
		Arthralgia	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unknown
		Conjunctivitis	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unknown
		Cough	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unknown
		Diarrhoea	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unknown
		Fatigue	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unknown
		Fever	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unknown
		- Highest temperature:	(°Celsius)		
		- Fever onset date:	/	/	(dd/mm/yyyy)
		- Feverish by self-report?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unknown
		Chills or rigors	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unknown
		Headache	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unknown
		Malaise	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unknown
		Myalgia	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unknown
		Nausea	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unknown
		Pneumonia	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unknown
		Pneumonitis	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unknown
		Rhinorrhoea	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unknown
		Shortness of breath	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unknown
		Sore throat	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unknown
		Vomiting	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unknown
		Other symptoms	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unknown
		- If Yes, specify symptoms:			
Clinical notes:					
<b>11</b>	Hospitalisation and treatment details	Was the person hospitalised?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unknown
		- Name of hospital:			
		- Hospital phone number:			
		- Date admitted:	/	/	(dd/mm/yyyy)
		- Date discharged:	/	/	(dd/mm/yyyy)
		Admitted to ICU/HDU?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unknown
		- Number of days in ICU/HDU:	(days)		
		Oxygen therapy required?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unknown
		Intubation required?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unknown
		Mechanical ventilation required?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unknown
		Hospital medical record/chart number:			

12	Admitting doctor details	Is admitting doctor same as treating doctor? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <hr/> - If Yes, enter details in the Treating Doctor section below. - If No, record Admitting Doctor's name: - Phone number / pager
13	Outcome of illness	What was the outcome of the case? <input type="checkbox"/> Alive <input type="checkbox"/> Died <hr/> - If Died, date of death:                 /         /                 (dd/mm/yyyy) - Cause of death due to MERS-CoV infection? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown - If death due to other cause, specify:
14	Occupation (during period of interest)	During the period of interest, did the person work in any of the following high risk occupations (settings)? <input type="checkbox"/> Healthcare <input type="checkbox"/> Aged-care facility <input type="checkbox"/> Educational facility <input type="checkbox"/> Assisted Living <input type="checkbox"/> Military institution <input type="checkbox"/> Correctional facility <input type="checkbox"/> No high risk occupation <input type="checkbox"/> Other <input type="checkbox"/> Unknown  - If Other, specify:  - If No high risk occupation – Skip to next question  Date last attended this work:                 /         /                 (dd/mm/yyyy) <hr/> Was the infection acquired in the workplace? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <hr/> Description of occupation: <hr/> Employer/facility name <hr/> Employer/facility street address <hr/> Employer/facility suburb/ town <hr/> Employer/facility state <hr/> Employer/facility postcode <hr/> Employer/facility phone number <hr/> Employer/facility fax number <hr/> Contact name <hr/> Contact email address
15	Contact with a known or possible case (during period of interest)	Did the case have contact with a known or possible MERS-CoV case? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown  - If Yes, specify:  Date of last contact:                 /         /                 (dd/mm/yyyy)
16	Treating Doctor details	<b><u>Enter the Treating Doctor's details.</u></b> Name: <hr/> Practice name (if any): <hr/> Street address: <hr/> Suburb / town:   State:                 Postcode: <hr/> Phone number:   Fax number: <hr/> Email address: <hr/> Case's medical record/chart number:

17	Pre-existing conditions and medical history	<p>Cardiac disease (not simple hypertension) <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown</p> <p>Chronic lung disease <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown</p> <p>Diabetes <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown</p> <p>Haemoglobinopathy <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown</p> <p>Immunosuppressive condition <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown</p> <p>Liver disease <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown</p> <p>Metabolic disease <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown</p> <p>Neurological disorder <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown</p> <p>Obesity <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown</p> <p>Renal disease <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown</p> <p>- If Yes, are they on dialysis? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown</p> <p>Other medical condition? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown</p> <p>- If Yes, specify:</p>										
		<hr/> <p>Is the person currently pregnant or was she pregnant during the illness?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown</p> <p>If Yes, number of weeks gestation at onset of symptoms: (weeks)</p> <hr/> <p>- Pre-existing medications and conditions notes:</p>										
		<hr/> <p>Are they a current smoker? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown</p> <p>If Yes, number of pack years: (pack/yrs.)</p> <hr/> <p>- Do they drink alcohol? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown</p> <p>If Yes, average number of standard drinks per week: (SD/week)</p>										
18	<p>Travel in the Middle East and contact with other cases</p> <p>* Check the current case definition for a list of affected countries.</p>	<p>During the period of interest, did the case travel to the Middle East? *</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown</p> <p><i>Note: Transiting through an international airport (&lt;24 hours stay, remaining within the Airport) in the Middle East is not considered to be risk factor for infection.</i></p> <p><b>If NO → Proceed directly to Question 22: Human Exposures</b></p> <hr/> <p>Did they participate in any Pilgrimages or festivals whilst in the Middle East during the 14 days prior to onset? (e.g. the Hajj or Umrah)</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown</p> <p>- If Yes, give details of what, when and where:</p>										
19	<p>Locations visited during incubation period (during period of interest)</p>	<p>During the period of interest, did they visit any of the following venues or locations in the Middle East?</p> <table border="0"> <tr> <td><input type="checkbox"/> Farm</td> <td><input type="checkbox"/> Swamp marsh</td> </tr> <tr> <td><input type="checkbox"/> Zoo/petting zoo</td> <td><input type="checkbox"/> Camping</td> </tr> <tr> <td><input type="checkbox"/> Abattoir</td> <td><input type="checkbox"/> Hunting</td> </tr> <tr> <td><input type="checkbox"/> Animal market</td> <td><input type="checkbox"/> Stockyards</td> </tr> <tr> <td><input type="checkbox"/> River/lake</td> <td><input type="checkbox"/> Agricultural show</td> </tr> </table>	<input type="checkbox"/> Farm	<input type="checkbox"/> Swamp marsh	<input type="checkbox"/> Zoo/petting zoo	<input type="checkbox"/> Camping	<input type="checkbox"/> Abattoir	<input type="checkbox"/> Hunting	<input type="checkbox"/> Animal market	<input type="checkbox"/> Stockyards	<input type="checkbox"/> River/lake	<input type="checkbox"/> Agricultural show
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<input type="checkbox"/> Animal market	<input type="checkbox"/> Stockyards											
<input type="checkbox"/> River/lake	<input type="checkbox"/> Agricultural show											

20	Animal exposures (during period of interest)	<p><i>Consider any contact with live or dead animals that they have had including visiting places where animals are kept, even if they didn't have direct contact with them.</i></p> <hr/> <p>Did they have close contact with camels? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown</p> <p>- If Yes, specify:</p> <p>Did they have close contact with domestic (including household pets) or wild animals? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown</p> <p>- If Yes, were any of these animals sick or dead? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown</p> <p>o If Yes, specify:</p> <hr/> <p>Were they aware of any other animal/excreta that are not usually present? (e.g. bats, rodents, stray cats/dog, foxes, reptiles, etc.) <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown</p> <p>- If Yes, specify:</p> <hr/> <p>Did they visit a market selling live animals? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown</p> <p>- If Yes, specify:</p> <hr/> <p>Did they visit any other venue at which live animals were present (e.g. farm, race course, zoo or falconry events)? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown</p> <p>- If Yes, specify:</p>
21	Food exposures (during period of interest)	<p>During the period of interest, where did they normally get their food? (Specify kinds of food and locations)</p> <hr/> <p>Did they get their food from any other locations, or did they eat any new types of food? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown</p> <p>- If Yes, describe:</p> <hr/> <p>Have they eaten any foods or drunk any beverages that they think could have been unsafe or caused them to become ill? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown</p> <p>- If Yes, describe:</p> <hr/> <p>Did they eat any of the following:</p> <p>Camel meat, camel milk or camel urine? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown</p> <p>Raw fruits or vegetables? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown</p> <p>Uncooked meat or eggs <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown</p> <p>Raw/unpasteurised milk or milk products? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown</p> <p>Dried fruits or nuts <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown</p> <hr/> <p>Did they slaughter an animal or handle raw meat (e.g. in preparation for a meal or religious offering)? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown</p> <p>- If Yes, describe:</p> <hr/> <p>Did they take any traditional medicines or use any home remedies? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown</p> <p>- If Yes, give details:</p>

22	<p>Human exposures</p> <p><i>Contact with people who were ill during the period of interest</i></p> <p><b>Note: not restricted to Middle East contacts</b></p>	<p>During the period of interest, did they have contact with anyone who might have had a contagious illness while they were still sick? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown</p> <p>- If Yes, give details:</p> <hr/> <p>Have they had contact with persons who are in close contact with animals because of their work? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown</p> <p>- If Yes, give details:</p> <hr/> <p>Have they had contact with a person who had a respiratory illness/diarrhoea/vomiting? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown</p> <p>- If Yes, give details:</p> <hr/> <p>Did they visit or care for any sick person? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown</p> <p>- If Yes, give details:</p> <p>- If Yes, did they have any contact with the sick person's bodily fluids, such as urine, blood, sputum or faeces? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown</p> <p>o If Yes, give details:</p>
23	<p>Healthcare and hospital presentation</p> <p><i>These questions should be answered about healthcare and hospital presentation in the 14 days prior to onset</i></p> <p><i>Includes Australian and overseas presentations</i></p>	<p>Did the case present to hospital? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown</p> <p>- If Yes, date of presentation to hospital:            /    /    (dd/mm/yyyy)</p> <p>- Was the hospital presentation for MERS related symptoms? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown</p> <p>o If No, give details of what, when and where:</p> <hr/> <p>Did the case visit any other healthcare facilities during the period of interest? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown</p> <p>- If Yes, give date of presentation:            /    /    (dd/mm/yyyy)</p> <hr/> <p>Was the healthcare visit for MERS-CoV symptoms? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown</p> <p>- If No, give details of what, when and where:</p>
24	<p>Case Found by</p>	<p><input type="checkbox"/> Clinical Presentation</p> <p><input type="checkbox"/> Contact tracing/epidemiological investigation</p> <p><input type="checkbox"/> Screening</p> <p><input type="checkbox"/> Clinical and epidemiology</p> <p><input type="checkbox"/> Other: Specify:</p>