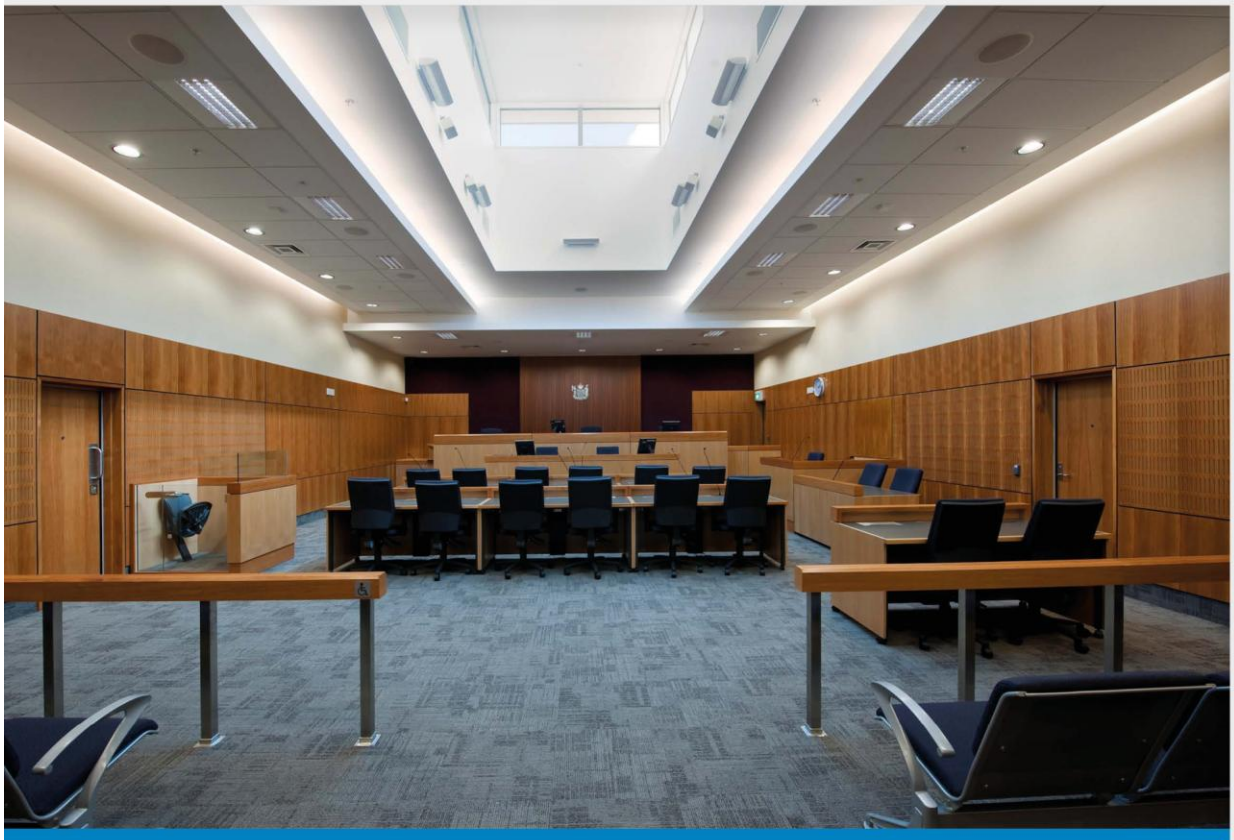
Recommendations recap

A summary of coronial recommendations and comments made between 1 July 2015 and 31 December 2015



OFFICE OF THE
CHIEF CORONER
OF NEW ZEALAND

Issue 10

Coroners have a duty to identify any lessons learned from the deaths referred to them that might help prevent such deaths occurring in the future. In order to publicise these lessons, the findings and recommendations of most cases are open to the public.

Recommendations Recap identifies and summarises all coronial recommendations that have been made over the relevant period. Where received, summaries of responses to recommendations from agencies and organisations are also included.

This edition of Recommendations Recap records recent coronial recommendations and comments stemming from inquiries into 75 fatalities. These final findings were released by a coroner between 01/07/2015 and 31/12/2015.

Edition 10 features a case study report on deaths from medication errors. The report contains statistics relating to these deaths, an outline of the issues involved, and other legal mechanisms and programmes aimed at reducing fatal medication errors. It also provides a summary of recommendations made by coroners following these deaths.

Disclaimer: The précis of coronial findings detailed within this publication have been produced by Research Counsel of the Office of the Chief Coroner, with the best efforts made to accurately summarise the circumstances, findings and recommendations made by the Coroner in each case. Despite this, it should be noted that they are not exact replications of coronial findings. The original finding should always be accessed if it is intended to refer to it formally.

Please also note that summaries of circumstances and recommendations following self-inflicted deaths may be edited so as to comply with restrictions on publication of particulars of those deaths, as per section 71 of the Coroners Act 2006. Similarly, the contents of summaries and recommendations may be edited to comply with any orders made under section 74 of the Act.

Contents

Recommendations

Adverse Effects or Reactions to Medical/ Surgical Care	
Case Number	**Catch Words**
CSU-2014-HAM-000402	Cardiac Event, Aortic Dissection, Diagnosis of Aortic Dissection
2015 NZCorC 61	**Link to Summary and Recommendations**
	http://www.nzlii.org/nz/cases/NZCorC/2015/61.html
	Response
	N/A

Aviation Accident	
Case Number	**Catch Words**
CSU-2012-ROT-000419	Pilot In Training, Sole Operation of Aircraft, Agricultural Topdressing, Whether Training Conformed to Civil Aviation Authority Requirements, Changes to Part 61 of Civil Aviation Rules
2015 NZCorC 124	**Link to Summary and Recommendations**
	http://www.nzlii.org/nz/cases/NZCorC/2015/124.html
	Response
	N/A

Care Facilities	
Case Number	**Catch Words**
CSU-2013-HAS-000069	Prader-Willi Syndrome, Overeating, Access to Keys, Training of Staff, Supervision
2015 NZCorC 65	**Link to Summary and Recommendations**
	http://www.nzlii.org/nz/cases/NZCorC/2015/65.html
	Response
	N/A

Child Deaths	
Case Number	**Catch Words**
CSU-2012-AUK-001584	Driveway Death, Two-Year Old, Hit by Reversing Car
2015 NZ CorC 72	**Link to Summary and Recommendations**
	http://www.nzlii.org/nz/cases/NZCorC/2015/72.html
	Response
	N/A
Case Number	**Catch Words**
CSU-2014-AUK-000396	Driveway Death, 23 Month Old, Hit By Reversing Car, Coroner Endorsement Of Safety Messages
2015 NZCorC 78	**Link to Summary and Recommendations**

	http://www.nzlii.org/nz/cases/NZCorC/2015/78.html
	Response
	N/A
Case Number **CSU-2014-DUN-000075** **2015 NZCorC 96**	**Catch Words**
	Seven Year Old, In Truck Cab, Unsupervised, Neck Compressed By Electric Window, Accidental Death
	Link to Summary and Recommendations
	http://www.nzlii.org/nz/cases/NZCorC/2015/96.html
	Response
	N/A
Case Number **CSU-2014-WHG-000010** **2015 NZCorC 76**	**Catch Words**
	Seven Year Old, Beach, Sand Hole Collapse, Asphyxiated By Sand, Research Into Phenomenon, Publication Of Hazard
	Link to Summary and Recommendations
	http://www.nzlii.org/nz/cases/NZCorC/2015/76.html
	Response
	N/A
Deaths in Custody	
Case Number **CSU-2013-CCH-000690** **2015 NZCorC 104**	**Catch Words**
	Prison, Department of Corrections, Recommendation On Change Of Prison Cell Design
	Link to Summary and Recommendations
	http://www.nzlii.org/nz/cases/NZCorC/2015/104.html
	Response from the Department of Corrections
	Response pending
Diving, Scuba Diving, Snorkelling	
Case Number **CSU-2011-WHG-000085** **2015 NZCorC 80**	**Catch Words**
	Scuba Diving, Inexperienced Diver, Rapid Ascent Causing Gas Embolism, Whether Recommendations Required
	Link to Summary and Recommendations
	http://www.nzlii.org/nz/cases/NZCorC/2015/80.html
	Response
	N/A
Drugs/ Alcohol/ Substance Related	
Case Number **CSU-2013-AUK-000058** **2015 NZCorC 60**	**Catch Words**
	Acute Alcohol Intoxication, “Homebrew”, Teenager, Safe Alcohol Consumption
	Link to Summary and Recommendations
	http://www.nzlii.org/nz/cases/NZCorC/2015/60.html
	Response
	N/A

Fall	
Case Number **CSU-2013-WHG-000105** **2015 NZCorC 54**	**Catch Words** Fall From Rocks While Fishing, Ninety Mile Beach – "The Bluff", No Lifejacket, Adequacy of Signage and Public Rescue Equipment **Link to Summary and Recommendations** http://www.nzlii.org/nz/cases/NZCorC/2015/54.html **Response from WaterSafety New Zealand, Surf Life Saving New Zealand, Northern Regional Council and the Far North District Council** See above link for responses from the Far North District Council, the Northland Regional Council and Water Safety New Zealand. Response pending from Surf Live Saving New Zealand.
Case Number **CSU-2011-AUK-001468** **2015 NZCorC 66**	**Catch Words** Fall from ladder, fall at home, proper use of ladder, surgical emphysema, appropriate medical care **Link to Summary and Recommendations** http://www.nzlii.org/nz/cases/NZCorC/2015/66.html **Response** N/A
Fire-Related	
Case Number **CSU-2013-ROT-000209** **2015 NZCorC 129**	**Catch Words** Abandoned Warehouse, Organised Party, Petrol Generators, Improper Use of Petrol Generators, Young Persons **Link to Summary and Recommendations** http://www.nzlii.org/nz/cases/NZCorC/2015/129.html **Response** N/A
Health Care Issues	
Case Number **CSU-2014-AUK-000849** **2015 NZCorC 63**	**Catch Words** Auckland District Health Board, Hospital-Acquired Legionella Pneumonia, Anti-Legionella Measures Not Deployed Across All Hospital, Coroner Endorsed Internal Review **Link to Summary and Recommendations** http://www.nzlii.org/nz/cases/NZCorC/2015/63.html **Response from Auckland District Health Board** See above link
Case Number **CSU-2014-ROT-000407** **2015 NZ CorC 74**	**Catch Words** Pedestrian Hit By Motor Cycle, St John Ambulance, Helicopter Dispatch **Link to Summary and Recommendations** http://www.nzlii.org/nz/cases/NZCorC/2015/74.html **Response**

	N/A
Case Number **CSU-2013-AUK-000102** **2015 NZCorC 79**	**Catch Words** St John Ambulance, Prioritisation of Ambulance Dispatch, Determining Ambulance Priority, Delay Not Contributing To Death, Review Of Questions Asked By Dispatcher **Link to Summary and Recommendations** http://www.nzlii.org/nz/cases/NZCorC/2015/79.html **Response from the Order of St John** See above link
Case Number **CSU-2014-DUN-000437** **2015 NZCorC 93**	**Catch Words** Choking On Food, Appropriate Supervision, Adequacy of Medical Response, Endorsement of District Health Board Recommendations, Choking Awareness and Response **Link to Summary and Recommendations** http://www.nzlii.org/nz/cases/NZCorC/2015/93.html **Response** N/A
Case Number **CSU-2012-AUK-000207** **2015 NZCorC 98**	**Catch Words** Clozapine, Bowel Obstruction Caused By Side Effect Of Clozapine, Deceased Often Refused Medical Attention, Supported Accommodation, Lack of Monitoring of Bowel Movements, Missed Opportunities To Seek Assessment And Treatment, Clozapine Prescription Guidelines, Ensuring DHB Staff And Residential Facility Workers Aware Of Clozapine Side Effects. **Link to Summary and Recommendations** http://www.nzlii.org/nz/cases/NZCorC/2015/98.html **Response from the Waitemata District Health Board** See above link
Case Number **CSU-2013-CCH-000292** **2015 NZCorC 99**	**Catch Words** Strathallan Lifecare, Retirement Village, Medication Error, Metoprolol and Cilazapril, Subsequent Deterioration In Condition, Extent Of Contribution Of Medication Error To Death, Already Precarious State Of Health, Medication Error Contribution "Equivocal". **Link to Summary and Recommendations** http://www.nzlii.org/nz/cases/NZCorC/2015/99.html **Response from the Health Quality and Safety Commission New Zealand** See above link
Case Number **CSU-2012-AUK-001636** **2015 NZCorC 100**	**Catch Words** Rest Home, Medication Error, Long Standing Prescription For Simvastatin, Prescribed Ketoconazole, Combination Known To Cause Rhabdomyolysis, Pharmacist Would Have Seen Electronic Warning About Medication Combination, Not Communicated To Doctor Or Deceased, Pharmacy Council of New Zealand Code of Ethics 2011. **Link to Summary and Recommendations** http://www.nzlii.org/nz/cases/NZCorC/2015/100.html **Response** N/A
Case Number **CSU-2012-CCH-000128**	**Catch Words** Tetraplegic Patient, Canterbury District Health Board, Hospitalisation, Assessment of

2015 NZCorC 125	Patient, Failure to Properly Assess Declining Condition, Premature Discharge, Near Immediate Readmission, Comment Endorsing Changes Already Made by CDHB
	Link to Summary and Recommendations
	http://www.nzlii.org/nz/cases/NZCorC/2015/125.html
	Response
	N/A
Homicide/ Interpersonal Violence	
Case Number **CSU-2011-AUK-001532** **2015 NZCorC 95**	**Catch Words**
	Security Guard, Static Security Guard, Working First Shift, Victim of Attack, Adequacy of Training, Security Industry Standards, Codes of Practice
	Link to Summary and Recommendations
	http://www.nzlii.org/nz/cases/NZCorC/2015/95.html
	Responses from the New Zealand Qualifications Authority, The Skills Organisation, Ministry of Justice, and WorkSafe New Zealand
	See above link for responses from the New Zealand Qualifications Authority and The Skills Organisation. Responses pending from the Ministry of Justice and WorkSafe New Zealand.
Labour or Pregnancy Related	
Case Number **CSU-2012-AUK-000815** **2015 NZCorC 105**	**Catch Words**
	Newborn Death, Immediate Postnatal Period, Adequate Supervision By Medical Professionals Of "Skin to Skin Time", Voluntary Institution Of Guideline To Support This
	Link to Summary and Recommendations
	http://www.nzlii.org/nz/cases/NZCorC/2015/105.html
	Response
	N/A
Natural Causes	
Case Number **CSU-2014-AUK-001216** **2015 NZCorC 68**	**Catch Words**
	Epilepsy, Awareness of Danger, Education, Anti-Seizure Medication
	Link to Summary and Recommendations
	http://www.nzlii.org/nz/cases/NZCorC/2015/68.html
	Response
	N/A
Product-Related	
Case Number **CSU-2013-AUK-001441** **2015 NZCorC 119**	**Catch Words**
	22 Month Old Child, Trampoline, Safety Netting, Momentary Lack of Supervision, Design Standards for Trampolines, Utility of Safety Netting
	Link to Summary and Recommendations
	http://www.nzlii.org/nz/cases/NZCorC/2015/119.html
	Response

	N/A
Recreational/Leisure Activities	
Case Number **CSU-2014-CCH-000543** **2015 NZ CorC 73**	**Catch Words** 4WD, River Crossing, Drowning, Appropriate Training For Safe River Crossings **Link to Summary and Recommendations** http://www.nzlii.org/nz/cases/NZCorC/2015/73.html **Response** N/A
Case Number **CSU-2014-DUN-000181** **2015 NZCorC 91**	**Catch Words** Milford Track, Tramping, River Crossing, Tourists, Appropriate Signage, Provision of Information to Trampers **Link to Summary and Recommendations** http://www.nzlii.org/nz/cases/NZCorC/2015/91.html **Response from the Department of Conservation** See above link
Case Number **CSU-2015-DUN-000138** **2015 NZCorC 108**	**Catch Words** Mt Aspiring National Park, Gillespie Pass, Tramping, Separated Trampers, Bad Weather, Comment on Actions of Trampers **Link to Summary and Recommendations** http://www.nzlii.org/nz/cases/NZCorC/2015/108.html **Response** N/A
Case Number **CSU-2014-DUN-000321** **2015 NZCorC 116**	**Catch Words** Jet Boating, Waiau River, "Mini" Jet Boats, Stability Issues, Boat Design, Awareness of Design and Stability Issues **Link to Summary and Recommendations** http://www.nzlii.org/nz/cases/NZCorC/2015/116.html **Response from Jet Boating New Zealand** See above link
Self-Inflicted	
Case Number **CSU-2012-CCH-000248** **2015 NZCorC 77**	**Catch Words** Varenicline, Smoking Cessation Medication, No Direct Causal Link Found Between Varenicline And Deceased's Death **Link to Summary and Recommendations** http://www.nzlii.org/nz/cases/NZCorC/2015/77.html **Response** N/A
Case Number **CSU-2014-HAM-000487** **2015 NZCorC 82**	**Catch Words** Young Person, Expression Of Suicidal Intent To Friends, Assistance In Seeking Help, Key to Life Charitable Trust, School Policies **Link to Summary and Recommendations**

	http://www.nzlii.org/nz/cases/NZCorC/2015/82.html
	Response
	Responses incorporated in findings
Case Number **CSU-2014-DUN-000436** **2015 NZCorC 94**	**Catch Words**
	Dunedin Emergency Psychiatric Services, Mental Health (Compulsory Assessment and Treatment) Act 1992, Secure Unit, Escape Through Unsecured Window, Recommendations Relating To Unit Security
	Link to Summary and Recommendations
	http://www.nzlii.org/nz/cases/NZCorC/2015/94.html
	Response from the Southern District Health Board
	See above link
Case Number **CSU-2014-CCH-000119** **2015 NZCorC 101**	**Catch Words**
	Mental Health (Compulsory Assessment and Treatment) Act 1992, Care of Persons Detained, "Dual Sign Off" Process for Absent Without Leave Police Notification Forms, Police Response To Absent Without Leave Notifications
	Link to Summary and Recommendations
	http://www.nzlii.org/nz/cases/NZCorC/2015/101.html
	Responses from the Canterbury District Health Board and the New Zealand Police
	See above link
Case Number **CSU-2013-AUK-000773** **2015 NZCorC 106**	**Catch Words**
	Waitemata District Health Board, Comment Relating To Learning From Death, Whether District Health Board Should Institute Policy
	Link to Summary and Recommendations
	http://www.nzlii.org/nz/cases/NZCorC/2015/106.html
	Response
	N/A
Sudden Unexpected Death in Infancy (SUDI)	
Case Number **CSU-2013-AUK-000937** **2015 NZ CorC 70**	**Catch Words**
	Unsafe Sleeping Environment, Co-Sleeping, Double Bed
	Link to Summary and Recommendations
	http://www.nzlii.org/nz/cases/NZCorC/2015/70.html
	Response
	N/A
Case Number **CSU-2013-AUK-001061** **2015 NZCorC 75**	**Catch Words**
	Unsafe Sleeping Environment, Co-Sleeping, Bed-Sharing
	Link to Summary and Recommendations
	http://www.nzlii.org/nz/cases/NZCorC/2015/75.html
	Response
	N/A
Case Number **CSU-2013-AUK-001072** **2015 NZ CorC 71**	**Catch Words**
	Unsafe Sleeping Environment, Bed-Sharing, Co-Sleeping, Maternal Smoking
	Link to Summary and Recommendations

	http://www.nzlii.org/nz/cases/NZCorC/2015/71.html
	Response
	N/A
Case Number **CSU-2014-AUK-000019** **2015 NZ CorC 107**	**Catch Words**
	Unsafe Sleeping Environment, Bed Sharing, Unascertained
	Link to Summary and Recommendations
	http://www.nzlii.org/nz/cases/NZCorC/2015/107.html
	Response
	N/A
Case Number **CSU-2014-AUK-000099** **2015 NZ CorC 121**	**Catch Words**
	Unsafe Sleeping Environment, Bed Sharing, Cause Of Death Unascertained
	Link to Summary and Recommendations
	http://www.nzlii.org/nz/cases/NZCorC/2015/121.html
	Response
	N/A
Case Number **CSU-2013-AUK-000246** **2015 NZCorC 120**	**Catch Words**
	Unsafe Sleeping Environment, SUDI, Bed Sharing, Comments Endorsing Ministry of Health Safe Sleep Practices
	Link to Summary and Recommendations
	http://www.nzlii.org/nz/cases/NZCorC/2015/120.html
	Response
	N/A
Case Number **CSU-2015-AUK-000094** **2015 NZCorC 114**	**Catch Words**
	Unsafe Sleeping Environment, SUDI, Blanket Covering Infant, Comments Endorsing Ministry of Health Safe Sleep Practices
	Link to Summary and Recommendations
	http://www.nzlii.org/nz/cases/NZCorC/2015/114.html
	Response
	N/A
Transport Related	
Case Number **CSU-2013-AUK-001494** **2015 NZCorC 53**	**Catch Words**
	Motor Vehicle Collision with Train, Uncontrolled Crossing, Visibility of Trains
	Link to Summary and Recommendations
	http://www.nzlii.org/nz/cases/NZCorC/2015/53.html
	Response from Kiwi Rail and Auckland Transport
	See above link for response from Kiwi Rail Response pending from Auckland Transport
Case Number **CSU-2013-WHG-000116** **2015 NZCorC 56**	**Catch Words**
	Motor Vehicle Crash, Alcohol Related
	Link to Summary and Recommendations
	http://www.nzlii.org/nz/cases/NZCorC/2015/56.html
	Response from the Far North District Council

	See above link
Case Number **CSU-2014-AUK-000851** **2015 NZCorC 64**	**Catch Words** Motorbike Crash, Alcohol, Fatigue, Visibility, Dark Tinted Visor **Link to Summary and Recommendations** http://www.nzlii.org/nz/cases/NZCorC/2015/64.html **Response** N/A
Case Number **CSU-2014-AUK-000698** **2015 NZ CorC 67**	**Catch Words** Tractor, Crushing, Drivers Foot Caught in the Hydraulic Hoses **Link to Summary and Recommendations** http://www.nzlii.org/nz/cases/NZCorC/2015/67.html **Response** N/A
Case Number **CSU-2013-WHG-000155** **2015 NZ CorC 69**	**Catch Words** Pedestrian, Alcohol and Drugs, Visibility, Street Lighting **Link to Summary and Recommendations** http://www.nzlii.org/nz/cases/NZCorC/2015/69.html **Response** N/A
Case Number **CSU-2015-HAM-000099** **2015 NZ CorC 59**	**Catch Words** Motor Vehicle Crash, Partial Seizure, Driver Licensing **Link to Summary and Recommendations** http://www.nzlii.org/nz/cases/NZCorC/2015/59.html **Response from New Zealand Transport Agency** See above link
Case Number **CSU-2015-HAM-000002** **2015 NZ CorC 58**	**Catch Words** Passenger, Motor Vehicle Crash, Partial Seizure **Link to Summary and Recommendations** http://www.nzlii.org/nz/cases/NZCorC/2015/58.html **Response from New Zealand Transport Agency** See above link
Case Number **CSU-2013-AUK-000139** **2015 NZCorC 81**	**Catch Words** Motor Vehicle Crash, Motorcycle v Car, Motorcyclist Crossed Centre Line, Tight Corner, Adequacy of Signage **Link to Summary and Recommendations** http://www.nzlii.org/nz/cases/NZCorC/2015/81.html **Response from Far North District Council** No response received
Case Number **CSU-2015-HAM-000092** **2015 NZ CorC 83**	**Catch Words** Motorcycle Crash, Rock Outcrop, Roadside Safety, Recommendation Related To Removal of Rock Outcrop **Link to Summary and Recommendations** http://www.nzlii.org/nz/cases/NZCorC/2015/83.html

	Response from New Zealand Transport Agency
	See above link
Case Number	**Catch Words**
CSU-2014-ROT-000422	Motorcycle Crash, Excessive Speed
2015 NZ CorC 84	**Link to Summary and Recommendations**
	http://www.nzlii.org/nz/cases/NZCorC/2015/84.html
	Response from New Zealand Transport Agency
	Response Pending
Case Number	**Catch Words**
CSU-2013-PNO-000609	Motorcycle Crash, Collision, Adequacy Of Signage, Curve Delineation
2015 NZ CorC 85	**Link to Summary and Recommendations**
	http://www.nzlii.org/nz/cases/NZCorC/2015/85.html
	Response from the Tasman District Council
	See above link
Case Number	**Catch Words**
CSU-2014-CCH-000268	Motor Vehicle Crash, Overseas Driver, Failure To Stop At Stop Sign, Use of Rumble Strips to Alert Drivers, Use of Rumble Strips Prior to Intersections
CSU-2014-CCH-000269	
CSU-2014-CCH-000270	**Link to Summary and Recommendations**
2015 NZCorC 88	http://www.nzlii.org/nz/cases/NZCorC/2015/88.html
2015 NZCorC 89	http://www.nzlii.org/nz/cases/NZCorC/2015/89.html
2015 NZ CorC 90	http://www.nzlii.org/nz/cases/NZCorC/2015/90.html
	Response from the Canterbury Regional Transport Committee
	See above links
Case Number	**Catch Words**
CSU-2015-HAS-000109	Multi-Purpose Utility Vehicle, Alcohol, Seatbelt, Crushing
2015 NZ CorC 109	**Link to Summary and Recommendations**
	http://www.nzlii.org/nz/cases/NZCorC/2015/109.html
	Response
	N/A
Case Number	**Catch Words**
CSU-2014-DUN-000429	Motor Vehicle Crash, Intersection of State Highway 8A and State Highway 6, Tourist Driver, Failure To Give Way, No Fatigue or Alcohol, Visiting Drivers Safety Programme
CSU-2014-DUN-000430	
CSU-2014-DUN-000431	**Link to Summary and Recommendations**
2015 NZ CorC 110	http://www.nzlii.org/nz/cases/NZCorC/2015/110.html
2015 NZ CorC 111	http://www.nzlii.org/nz/cases/NZCorC/2015/111.html
2015 NZ CorC 112	http://www.nzlii.org/nz/cases/NZCorC/2015/112.html
	Response from the New Zealand Transport Agency
	See above link
Case Number	**Catch Words**
CSU-2014-CCH-000588	Motor Vehicle Crash, State Highway 6, Buller Gorge, Uphill Overtaking Manoeuvre, Collision With Oncoming Car, Misjudgement, Recommendation For Double Yellow Lines (No Overtaking)
2015 NZCorC 113	
	Link to Summary and Recommendations
	http://www.nzlii.org/nz/cases/NZCorC/2015/113.html

	Response from the New Zealand Transport Agency
	See above link
Case Number	**Catch Words**
CSU-2014-WGN-000262 **CSU-2014-WGN-000263** **2015 NZCorC 117** **2015 NZCorC 118**	Motor Vehicle Crash, Western Lake Road – Featherston, Road Design, Recommendation For Remedial Work, South Wairarapa District Council
	Link to Summary and Recommendations
	http://www.nzlii.org/nz/cases/NZCorC/2015/117.html http://www.nzlii.org/nz/cases/NZCorC/2015/118.html
	Response from the South Wairarapa District Council
	No response received
Case Number	**Catch Words**
CSU-2015-CCH-000003 **CSU-2015-CCH-000004** **2015 NZCorC 122** **2015 NZCorC 123**	Motor Vehicle Crash, Tourist Driver, Bridge Railing
	Link to Summary and Recommendations
	http://www.nzlii.org/nz/cases/NZCorC/2015/122.html http://www.nzlii.org/nz/cases/NZCorC/2015/123.html
	Response from the New Zealand Transport Agency
	NZTA response incorporated in findings
Case Number	**Catch Words**
CSU-2014-AUK-000063 **2015 NZCorC 127**	Bicycle vs Truck Collision, Cyclist Ran Red Light, Bicycle Maintenance, Inability To Brake, Cyclist Education Programmes
	Link to Summary and Recommendations
	http://www.nzlii.org/nz/cases/NZCorC/2015/127.html
	Response
	N/A
Case Number	**Catch Words**
CSU-2013-CCH-000666 **2015 NZCorC 128**	Motorcycle Crash, State Highway 6, Mechanical Fault, Improperly Certified, Low Volume Vehicle Technical Association, Changes To Certification Processes Instituted
	Link to Summary and Recommendations
	http://www.nzlii.org/nz/cases/NZCorC/2015/128.html
	Response
	N/A
Water-Related (General)	
Case Number	**Catch Words**
CSU-2014-DUN-000015 **2015 NZCorC 55**	Drowning, Fishing Boat, Suitability of Lifejackets
	Link to Summary and Recommendations
	http://www.nzlii.org/nz/cases/NZCorC/2015/55.html
	Response
	N/A
Case Number	**Catch Words**
CSU-2014-WHG-000044 **2015 NZCorC 86**	Surf Life Saving New Zealand, Drowning, Swimming, Ocean
	Link to Summary and Recommendations
	http://www.nzlii.org/nz/cases/NZCorC/2015/86.html

	Response from Surf Life Saving New Zealand and St John Ambulance
	See above link
Case Number	**Catch Words**
CSU-2013-WHG-000134	Fishing off rocks, Swept away, Drowning
2015 NZCorC 87	**Link to Summary and Recommendations**
	http://www.nzlii.org/nz/cases/NZCorC/2015/87.html
	Response
	N/A
Case Number	**Catch Words**
CSU-2014-CCH-000662	Drowning, Commercial Fishing Vessel, No Life Jacket, Unwitnessed Fall, Immediate Rescue Attempts Unsuccessful
2015 NZCorC 97	**Link to Summary and Recommendations**
	http://www.nzlii.org/nz/cases/NZCorC/2015/97.html
	Response
	N/A
Case Number	**Catch Words**
CSU-2014-DUN-000439	Drowning, White baiting, No Life Jacket
2015 N CorC 103	**Link to Summary and Recommendations**
	http://www.nzlii.org/nz/cases/NZCorC/2015/103.html
	Response
	N/A
Case Number	**Catch Words**
CSU-2012-CCH-000046	Swimming, Paparua Intake Reserve, Trapped In Sluice Gate, Drowning, Adequacy of Signage, Safety Measures Installed, Comments About Dangers of Swimming Near Man-Made Structures
2015 NZCorC 115	**Link to Summary and Recommendations**
	http://www.nzlii.org/nz/cases/NZCorC/2015/115.html
	Response
	N/A
Case Number	**Catch Words**
CSU-2014-WHG-000292	Drowning, Crab Fishing, Dangerous Conditions, Education
2015 NZCorC 126	**Link to Summary and Recommendations**
	http://www.nzlii.org/nz/cases/NZCorC/2015/126.html
	Response
	N/A
Work-Related (Other)	
Case Number	**Catch Words**
CSU-2014-CCH-000356	Tree Felling, Chainsaw, Proper Equipment, Experience, Escape Route Blocked
2015 NZCorC 92	**Link to Summary and Recommendations**
	http://www.nzlii.org/nz/cases/NZCorC/2015/92.html
	Response
	N/A

Case Number	Catch Words
CSU-2013-CCH-000668	Truck And Trailer vs Ute, House Towed By Trailer, Crossed Centre Line, Review of Relevant Land Transport Rules, Recommendations For Amendment
2015 NZCorC 102	**Link to Summary and Recommendations**
	http://www.nzlii.org/nz/cases/NZCorC/2015/102.html
	Response from the New Zealand Transport Agency
	See above link

Case Study: Fatal Medication Errors

This case study looks at deaths resulting from fatal medication errors.

Fatal medication errors at a glance

A medication error has been defined as "any unintentional error in the prescribing, dispensing, administration or monitoring of a medicine while under the control of a healthcare professional, patient or consumer."[1]

The Health Quality and Safety Commission collects data on adverse events reported by District Health Boards. These figures rely on reported events so the actual number of medication errors may be higher. It is important to note that these figures of adverse events are not all fatalities – but also include incidents causing serious harm to patients.

Year (1 July-30 June)	Number of medication-related[2] adverse events reported
2007/08	21
2008/09	15
2009/10	17
2010/11	25
2011/12	18
2012/13	18
2013/14	30
2014/15	23

Source: HQSC Adverse Event Reports available: http://www.hqsc.govt.nz/our-programmes/adverse-events/serious-adverse-events-reports/

Background

In this case study, the cases presented are instances where someone other than the deceased is responsible for the wrong medication being taken. That is, the study did not collect cases where the deceased misread or misunderstood the correct instructions about dosage.

[1] DL Kunac, MV Tatley & ME Seddon "A new web-based Medication Error Reporting Programme (MERP) to supplement pharmacovigilance in New Zealand – findings from a pilot study in primary care" 127:1401 NZMJ 69 (29 August 2014) at 69 citing European Medicines Agency and Heads of Medicines Agencies "Guideline on good pharmacovigilance practices (GVP): Module VI – Management and reporting of adverse reactions to medicinal products" (2012, European Medicines Agency) available at http://www.ema.europa.eu/docs/en_GB/document_library/Scientific_guideline/2012/06/WC500129135.pdf.

[2] Defined by HQSC as "incidents involving prescribing, dispensing or administration of medication" – see 2014/15 Report at 5.

Nor does it include cases where the deceased took correctly prescribed medications in an irresponsible way or where the deceased died from the effects of correctly or reasonably prescribed medication that had an unforeseen adverse effect.

In addition, cases recorded are where a medication error was the subject of a finding, even if it was not found to be a causative factor in the death.

Assembled below are 14 coronial findings involving medication errors where coroners have made recommendations or comments. The focus of this document is coronial recommendations so it does not include cases involving medication errors where a coroner has chosen not to make recommendations or comments.

The Coroner's role in investigating and preventing fatal medication errors

The Coroners Act 2006 – Decision whether to open and conduct an inquiry

When a coroner decides whether or not to open and conduct an inquiry, he or she must determine whether or not the death appears to have been natural; whether it is a result of the actions or inactions of any other person; the existence of any allegations, rumours, suspicions, or public concern; and the extent to which publicising the circumstances of the death may be likely to reduce the chances of the occurrence of other deaths in similar circumstances.[3]

A coroner may make specific public recommendations or comments about a death in order to reduce the chances of other deaths occurring in similar circumstances. Deaths through medication errors will usually be an apt subject matter for a coroner's inquiry. The fact-finding role of the coroner can determine what happened and the recommendatory role can effect systemic changes to prevent future deaths.

In some instances a coroner will open but not complete inquiries into deaths through medication errors. This may only happen if the coroner is satisfied that the purposes of any coronial inquiry have been adequately established in respect of the death concerned in the course of criminal proceedings or other investigations.[4] In the context of medication errors the other investigatory agency that most commonly examines fatal medication errors is the Health and Disability Commissioner (see below).

Themes in coronial recommendations and comments on medication error

Human error

The opportunity for human error is always present in dispensing medication and while this will likely never be entirely eliminated, coroners have recommended changes to systems to reduce the likelihood of mistakes.

Themes from a review of cases involving human error include:

- sensible and proactive measures to avoid medication errors are still vulnerable to human error. In one case,[5] where a rest home used personalised medication blister packs – a common method of reducing medication errors – a rest home employee accidentally gave a resident a blister pack meant for another resident.

[3] Other considerations are the desire of any members of the immediate family of the person, who is or appears to be the person concerned, that an inquiry should be conducted; and any other matters the coroner thinks fit.
[4] Coroners Act 2006, s 70.
[5] Borgen [2014] NZCorC 66.

- reviewing the methods and extent to which prescriptions are recorded to ensure that correct units of measurement are recorded.[6] In some instances the correct drug is given to the correct patient at the correct time – all that is in error is the dosage.[7]

Strong systems need to be universal when patients attend multiple health providers

It is not uncommon for patients to be treated in several locations – perhaps initially a hospital, with general practitioner follow-up care; or elderly patients spending time in hospital before returning to their rest home. Coronial cases have highlighted the importance of ensuring that information about medication is available in clear and correct forms to all persons involved in a patient's care.

The cases also show how strong safety systems in one facility sometimes don't exist in a second. The result is that warnings or messages about medication that the first facility logs aren't seen, or are overlooked, by the second facility. For example, in one case Coroner Marshall commented that, at the time of the death, "warnings entered by a hospital [were] not automatically available to general practitioners or others who are not part of the [electronic Medical Warning System]. In the general practice arena the system relies on someone reading the [hospital's electronic discharge summary], recognising that it contains a warning and then entering the warning into the patient's record."[8]

In another case,[9] Coroner Shortland dealt with a general practitioner who attended a patient at a rest home and wrote a prescription while there, away from his electronic prescription system. This meant there was no opportunity to see the automated warning message that the prescription system would normally display.

Systems to detect medication errors are also important

In several of the cases, medication errors have taken time to detect. As most medication errors are caused by unintentional oversight, having systems in place to detect errors – such as medication reconciliation or the monitoring of drug levels in a patient's system – are crucial.

In one case the ability to monitor the levels of a drug in a patient's system after an overdose was identified was restricted when the testing facilities were closed because it was the Easter break.[10] In another case a patient was administered 10 times the prescribed dose of morphine.[11] This was only detected 2 days later. The coroner's recommendations in that case were (in part) aimed at ensuring patient medication charts were reviewed regularly to detect such errors.

Other investigations into medication errors

Internal review procedures

Medication errors in District Health Board-run facilities that result in death or are reaching a threshold of seriousness are subjected to some form of serious adverse event review by the relevant DHB. Private operators often also hold internal reviews. The internal review documents often form part of the evidence in a coronial inquiry. As part of their

[6] Copping [2009] NZCorC 81.
[7] Knight [2009] NZCorC 159.
[8] Erithe [2014] NZCorC 122.
[9] Yao [2015] NZCorC 100.
[10] Brocks [2013] NZCorC 106.
[11] Copping [2009] NZCorC 81.

role to make recommendations or comments to reduce the chances of death occurring in similar circumstances, coroners are often interested in the measures a facility has put in place to prevent a recurrence.

The Health and Disability Commissioner

The Health and Disability Commissioner (HDC) may investigate medication errors if a person lays a complaint. In some cases, a coroner may exercise his or her power under s 70 of the Act to conclude a coronial inquiry on the basis that the investigation has established the matters a coroner would normally seek to establish. HDC investigations focus on breaches of patients' rights under the Code of Health and Disability Consumers' Rights. More information about the Health and Disability Commissioner can be found at www.hdc.org.nz

Professional disciplinary proceedings

Professional disciplinary proceedings may result from especially serious or egregious medication errors. The HDC may refer breaches of rights to the Director of Proceedings for consideration for prosecution in the Health Practitioners Disciplinary Tribunal or Human Rights Review Tribunal.

More information about the Health Practitioners Disciplinary Tribunal can be found here at www.hpdt.org.nz

Key organisations

Health Quality and Safety Commission

The Health Quality and Safety Commission (HQSC) operates a National Medication Safety Programme. Its stated aim is "to greatly reduce the number of New Zealanders harmed each year by medication errors in our hospitals, general practices, aged care facilities and across the entire health and disability sector."[12]

The programme undertakes projects aimed at a range of measures including supporting the standardisation of medication charts so as to reduce errors, and the use of "Tall Man" lettering – whereby some letters in medication names are capitalised so as to emphasise differences in similar medications.

The programme also publishes a newsletter called "Medication Safety Watch" which includes information about safe medication dispensing, medication errors, and coronial inquiries or inquests on such errors. More information about the programme can be found at www.hqsc.govt.nz/our-programmes/medication-safety/

University of Otago – Pharmacovigilance Centre

The University of Otago's Pharmacovigilance Centre operates a Medication Error Reporting Programme (MERP). The programme collects and analyses reports of medication errors that occur in primary care (as opposed to a hospital setting where there has already been considerable study and effort put into reducing medication errors). It provides an online form to report medication errors. More information and the online form can be found at www.nzphvc.otago.ac.nz/merp

Further reading

AF Merry and CS Webster "Medication error in New Zealand – time to act" (2008) 121:1272 NZMJ 7

[12] http://www.hqsc.govt.nz/our-programmes/medication-safety/

Best Practice Advocacy Centre "Avoiding medication errors in children: a practical guide for healthcare professionals" (2010) Best Practice Journal 29 available at http://www.bpac.org.nz/BPJ/2010/July/docs/BPJ_29_errors_guide_pages_8-18.pdf

Recommendations made by New Zealand coroners

CASE Douglas [2014] NZCorC 115

CASE NUMBER CSU-2012-DUN-000286

DATE OF FINDING 8 August 2014

CIRCUMSTANCES

Kenneth Jeffrey Douglas of Dunedin died on 13 July 2012 at Dunedin Hospital of the effects of an overdose of methotrexate medication.

Mr Douglas had rheumatoid arthritis. He was prescribed methotrexate for this condition. Methotrexate should only be taken weekly. More frequent dosages result in overdoses which produce serious side effects. Mr Douglas' doctors monitored his response to methotrexate and decided to lower his dosage. Mr Douglas' general practitioner (GP) wrote out a prescription for a lower dosage but accidentally stated on the prescription that the dosage was to be taken daily, instead of weekly. The pharmacy that issued Mr Douglas his prescription did not pick up this error either.

Mr Douglas had been told by his doctors that his dosage was being reduced. He also had previously had access to information telling him that methotrexate was a weekly medication. Nevertheless Mr Douglas followed his prescription and took his methotrexate daily and began suffering serious side effects.

Eventually Mr Douglas was hospitalised when a doctor realised the prescription error. Mr Douglas died in hospital from the effects of a methotrexate overdose.

RECOMMENDATIONS AND COMMENTS

The coroner identified lost opportunities at the stages of prescription processing, prescription dispensing, and patient counselling where the pharmacist could have picked up the error. Both the GP and the pharmacist's computer software for prescriptions had the potential for systemic improvements – for example, the GP's software required the user to manually specify whether a dosage was daily or weekly despite methotrexate invariably being prescribed weekly.

The medical centre where the GP worked, the Southern District Health Board, the pharmacy that dispensed the methotrexate, and the Pharmacy Council all undertook comprehensive reviews of the circumstances leading up to Mr Douglas' death and the coroner was satisfied that they had made changes to prevent similar deaths in the future.

The coroner made the following recommendations to the Royal New Zealand College of General Practitioners:

I. That Doctors specify the day of the week medication is to be taken where the medication is to be taken weekly.

II. That all medication alerts available on Medical Practice software be activated.

The coroner made the following recommendations to the Ministry of Health Medicines Control:

III. That when auditing pharmacies a check be made to ensure standard operating procedures include a step requiring software alerts to be activated and a physical check be made to ensure this has been followed.

CASE Te Weehi [2013] NZCorC 72

CASE NUMBER CSU-2011-DUN-000009

DATE OF FINDING 9 May 2013

CIRCUMSTANCES

Nihe Pahau Paku ("Eru") Te Weehi, late of Ranfurly died on 5 November 2011 at Dunedin Public Hospital of multi-organ failure and lactic acidosis in association with overdose of hypoglaecemic drugs, aged myocardial infarcts, severe emphysema, alcoholic cardiomyopathy and liver steatosis.

Mr Te Weehi was on a range of medications, which were dispensed to him in 'blister packs'. His pharmacist mistakenly supplied him with a blister pack filled with not his own medication, but that from another customer. Mr Te Weehi took this medication in the manner that had been prescribed. In the following days his condition deteriorated and he collapsed. He was taken to Dunedin Public Hospital, were he was diagnosed as having had an acute cardiac event. He continued to decline and died in hospital.

Mr Te Weehi's medication had been picked up by a friend of his who was not aware of the differences in the two sets of medication. Mr Te Weehi noticed that the blister pack and prescribing advice were different, but nonetheless took the medication as prescribed.

The medication was a "repeat" automatically prepared by the pharmacy when it was noted the previous prescription had run out. The person who put the blister packs together failed to check the name on the medication list was the same as the plastic container it had been put in.

Two of the drugs erroneously taken were designed to treat type two diabetes; a serious side effect of each is lactic acidosis. This contributed to Mr Te Weehi's death, although it isn't possible to determine to what extent.

Mr Te Weehi had severe alcoholic cardiomyopathy that had progressed rapidly over the three months preceding his death. Though the erroneously dispensed medication was a factor in his death, his general health was already severely compromised.

RECOMMENDATIONS AND COMMENTS

The coroner made the following comments:

I. Although not strictly a circumstances of the death, I express concern as to the method adopted by the pharmacist and by the GP in arranging for "repeats" of prescribed medication. There may have been shortcomings in the notification of, and the dispensing of, the "repeats" between the GP and the pharmacist but this was not the cause of the identified problem. I am totally satisfied with the training, experience and professionalism of the doctors and the pharmacists but the death of Eru Te Weehi has identified shortcomings in the systems which have been implemented.

II. In my view, it would be appropriate for a triple check for "repeats" of prescription medication.

III. A patient must take responsibility for his / her health and should, him/herself, diary and track and ensure that the prescriptions are up to date. This may be more difficult in the case of a patient who is provided with medication in blister packs rather than a patient who merely sees the number of tablets in a bottle reduce over time, but patients ought to protect their own health and recognise their own needs.

IV. The practice of a GP ought also to diary and monitor patient prescriptions. A review system, perhaps requiring a patient to present again to the practice, would be easily instituted. The GP or practice nurse or practice

manager should therefore ensure that a formal request, in a written prescription, is forwarded to the dispensing pharmacy so that the continuity of medication is not broken.

V. The pharmacy should have a system whereby, particularly in the cases where medication is delivered in the form of blister packs, a "bring-up" system is activated as a prescription is running out; this would create a prompt for a further prescription to be generated.

VI. It is accepted that, in cases of urgency, a telephone call between trusted professionals, who are known to one another, may be sufficient but such shortcuts ought always to be followed, as soon as possible, by appropriate documentation. The prescribing GP must record on the patient file, a note of what was prescribed and when, and similarly the pharmacy must create a written record of what was prescribed, for whom the medication was prescribed, and when it was prescribed. The pharmacy has the continuing obligation of then recording the dispensing of the medication.

The coroner made the following recommendations:

I. It is recommended that a copy of this Finding be forwarded to the Pharmacy Council of New Zealand, to Medsafe and to Pharmac in order that the lessons learned from the death of Eru Te Weehi may result in the establishment of more appropriate protocols for the prescribing of medication and for the dispensing of prescribed medication and for the adoption of more suitable aids to the dispensing.

CASE Brocks [2013] NZCorC 106

CASE NUMBER CSU-2011-DUN-000181

DATE OF FINDING 31 July 2013

CIRCUMSTANCES

Wilhelmus Antonius Brocks late of Wyndam died on 2 May 2011 at Southland Hospital of an intracranial haemorrhage.

Mr Brocks was admitted to hospital on 16 April 2011 following three weeks of breathlessness and coughing. He had a history of heart problems, and had had a pacemaker fitted in November 2010. He was diagnosed with chronic obstructive airways disease and a probable heart attack. He was prescribed aspirin to thin his blood as he was already on warfarin. Continual tests showed his warfarin levels to be on track. Later a house officer erroneously prescribed an additional dose of warfarin, and there was no subsequent monitoring of his warfarin levels. By 20 April he had stabilised, and was considered appropriate for discharge. Post discharge a family member noticed that his warfarin dose had increased. On 27 April he went to his GP, and the next day had a blood test, which revealed a concerningly elevated level of warfarin. He was immediately given a dose of vitamin K to lower his warfarin level, but his condition deteriorated over the evening and he was once again admitted to hospital in the early hours of 29 April. He had very high blood pressure and a significant brain bleed. He received ongoing treatment and his condition showed some improvement, but on 2 May he went into cardiac arrest and could not be revived.

The error in warfarin prescription occurred despite checks in place in the hospital. It was a result of a misunderstanding created by the use of ambiguous abbreviations in hospital notations.

Though the elevated warfarin level might have caused a bleed, or worsened the consequences of one, there is a realistic probability that haemorrhage Mr Brocks experienced was not a primary consequence of the elevated warfarin. The most likely effect of the increased warfarin dose was a greater volume of bleeding.

There was a delay in the testing of his warfarin level after his discharge and the incorrect dosage was discovered over the Easter break when no labs were open, and after his GP consultation Mr Brocks decided to delay his blood test a day for personal reasons.

The Hospital conducted a Root Cause Analysis and found several areas of concern and made recommendations accordingly.

RECOMMENDATIONS AND COMMENTS

The coroner made the following comments:

I. The circumstances of the death of Mr Brocks did identify the lack of a continuous blood testing service in Southland. It appears as if there was no laboratory available to conduct an INR test for blood samples taken over an Easter period. Southland, by convention, takes as its provincial holiday the Tuesday following Easter Monday. There is a five day hiatus in laboratory testing. The Southern District Health Board and its contractors should consider the establishment of even a limited, after working hours, blood testing service so there will be no further delays of the nature and of the duration for those encountered in the circumstances now being considered.

The coroner made the following recommendations:

I. That a copy of this Finding be considered by the Southern District Health Board and that my comments insofar as they are accepted be adopted along with the recommendations of the root cause analysis report with which I agree.

CASE Perham [2013] NZCorC 191

CASE NUMBER CSU-2012-CCH-000090

DATE OF FINDING 11 December 2013

CIRCUMSTANCES

Charles William Perham (Mr Perham), who was known during his life as Buck William Egan, of Witherlea, Blenheim died on either 1 or 2 February 2012 at his home of cardiac arrhythmia, secondary to methadone and amitriptyline use.

Mr Perham had been prescribed methadone for chronic pain for several years. In 2010 it was decided to withdraw one of his other medications and retrial amitriptyline to further aid the management of his pain and chronic insomnia. In November 2011, following a period of dizzy spells Mr Perham was admitted to hospital. During this time it was noted that he became very sedate after his methadone dose and Addiction Services were consulted. They reduced his dose of methadone, and though they considered a three month course of amitriptyline, ultimately it was decided to stop his prescription for that drug. However, the existing weekly prescription was never cancelled at the pharmacy. From that point his clinical notes contained the decision to stop the amitriptyline, however Mr Perham continued receive and take the medication until his death. He was found by his son on the morning of 2 February 2012, seemingly asleep, however, it was found that Mr Perham had in fact passed away.

Though evidence of liver disease was found at post mortem, it was not at a stage that one would expect to be fatal, however, the drugs methadone and amitriptyline that were found in his system are ones that are associated with cardiac arrhythmias. Together they would have had an additive effect

His amitriptyline was stopped to reduce the risk of cardiac rhythm disturbance, and it is not possible to say that had it been ceased he would not have died. The Nelson Marlborough District Health Board (NMDHB) have since amended their guidelines – *Methadone Opioid Substitution Therapy for Treatment of Dependence (Addiction)* making it a responsibility of Addiction Services to liaise with the community pharmacy to advise that a patient had been admitted to hospital, and then on discharge arrange the reinstatement of their supply of medication through the pharmacy, in accordance with the updated medication regime.

RECOMMENDATIONS AND COMMENTS

The coroner made the following recommendations:

To: The Nelson Marlborough District Health Board:

I. That the guidelines should stipulate that hospital clinicians must contact the Addiction Service either by email or fax on that day the patient is discharged, confirming the patient's medication regime

II. That the guidelines should make reference to the fact that the Addiction Service doctors may in fact be cancelling, not simply reinstating, medication previously prescribed.

CASE Erithe [2014] NZCorC 122

CASE NUMBER CSU-2013-AUK-000576

DATE OF FINDING 25 November 2014

CIRCUMSTANCES

Hamiore Erithe, also known as Thomas Manuel, of Otara died on 23 May 2013 at Middlemore Hospital, Auckland, of a haemorrhage following an adverse drug reaction.

In January 2012 Mr Manuel was prescribed quinine sulphate for muscle cramps. Mr Manuel had an adverse reaction to the quinine. His hospital electronic discharge summary (EDS) included a warning of the adverse reaction. At his healthcare centre, a warning was manually added to Mr Manuel's electronic clinical notes and clinical file.

In May 2013 Mr Manuel requested medication for leg cramps from a GP. He was prescribed quinine. Mr Manuel suffered an adverse reaction to the quinine and died.

RECOMMENDATIONS AND COMMENTS

The coroner made the following comments:

I. [The GP] cannot explain how he missed the warnings in Mr Manuel's file. His failure to note them resulted in the adverse reaction and Mr Manuel's death. [The GP] refers to the size of Mr Manuel's patient file and the 20 minute consultation when Mr Manuel only mentioned his leg cramps at the end of the consultation. That may be so, but the fact there is a medical warning in place is obvious on the patient palette and would also have appeared when [the GP] wrote the prescription. It is important for clinicians to be familiar with the patient management system and to be alert to such warnings. [The GP] has initiated some peer review to ensure the safety of his clinical practice.

II. I intend to send a copy of these Findings to the Medical Council of New Zealand (which is responsible for setting standards and guidelines for doctors) and to Medtech so both organisations can consider whether other steps can be taken to prevent the occurrence of other deaths in circumstances similar to those in which

Mr Manuel's death occurred. The Findings will also be sent to the Ministry of Health (MOH) to assist in its ongoing development of the Medical Warnings System (MWS) (see the recommendation below).

III. Some of the comments I have made may be considered adverse to [the GP]. Pursuant to section 58 of the Coroners Act, a draft of those comments was sent to [the GP] and his counsel and he was given an opportunity to comment on them.

The coroner made the following recommendations:

I. Clearly it is in a patient's best interest if clinicians, pharmacists and paramedics are aware that the patient has a medical warning. Currently, warnings entered by a Hospital are not automatically available to general practitioners or others who are not part of the MWS. In the general practice arena the system relies on someone reading the EDS, recognising that it contains a warning and then entering the warning into the patient's record. The Ministry of Health is doing some work in this area.

II. The Ministry of Health, as part of its upgrade of the MWS and roll out of the National Health Index, should continue efforts to ensure that medical warnings are made available to general practices, pharmacies and paramedics.

CASE Knight [2009] NZCorC 159

CASE NUMBER CSU-2009-HAS-000095

DATE OF FINDING 7 October 2009

CIRCUMSTANCES

Iwa Te Waimaria Knight, aged 65, died at Gisborne Hospital on 21 April 2009 of haemorrhagic shock and multi-organ failure. Mrs Knight had a history of numerous severe medical problems and had been prescribed a variety of medications which were administered by nursing staff at Dunblane Rest Home, one of which was Warfarin, an anti-coagulant.

Good anti-coagulation control is important to minimise the risk of bleeding and INR (International Normalised Ratio) levels for prothrombin time (a measure of how quickly blood clots) need to be regularly checked so that Warfarin doses may be adjusted as necessary to achieve a safe level of INR . The higher the INR, the longer it takes for blood to clot and the risk of bleeding and bleeding-related events increases. Some of the factors that may increase INR levels are the use of other medications and diet (e.g. eating green leafy vegetables and broccoli).

Incorrect dosage of Warfarin will significantly affect the INR level. The most common INR target range for someone on Warfarin is between 2.0 and 4.0. In Mrs Knight's case the target was between 2.0 and 3.0 and preferably around 2.5. INRs above 4.0 are associated with high rates of bleeding in the elderly. On admission to hospital in a collapsed state Mrs Knight was found to have an INR reading of 10.5. Whilst hospital staff managed to correct the INR level by administering Vitamin K to reduce it, Mrs Knight's condition continued to deteriorate and she died. This case has highlighted deficiencies in the Medication Security and Medication Administration Policy at Dunblane Rest Home.

RECOMMENDATIONS AND COMMENTS

The coroner made the following recommendations:

To: Tairawhiti District Health Board / Oceania Group re Dunblane Rest Home

I. That Medication Security and Medication Administration Policy at Dunblane Rest Home should be reviewed and that training should be given to all staff relating to the security and proper administration of medication. This includes (but is not limited to):
   a. That medication prescribed for a patient is to be administered solely to that patient (and not administered to other patients).
   b. That there be proper recording of receipt and administration of medication and processes to highlight misapplication or misappropriation of medicine.

II. That Tairawhiti District Health Board should complete an urgent audit of the medication security and administration procedures at Dunblane Rest Home, and undertake other audits at other appropriate times.

III. The requests from staff at Dunblane Rest Home to pharmacies for the issuing of repeat medication should be communicated and recorded in writing.

CASE Haase [2014] NZCorC 146

CASE NUMBER CSU-2013-CCH-000631

DATE OF FINDING 18 September 2014

CIRCUMSTANCES

Geoffrey Haase of Christchurch died on 8 November 2013 at Christchurch of complications of metastatic prostate cancer.

On 7 November 2013 Mr Haase was admitted to the Nurse Maude Hospice suffering end-stage metastatic carcinoma of the prostate. He was administered oxycodone for pain relief by a subcutaneous syringe driver, prescribed and supervised by staff at the hospice. Staff tasked with the care of Mr Haase misread the dosage of medication charted by the doctor and, instead of a dose of 2.5 milligrams being administered, 25 milligrams was given. Mr Haase's condition deteriorated and he died.

An internal investigation was undertaken by the hospice along with a review of its systems. The Coroner commissioned an independent expert report from Professor Evan Begg, Emeritus Professor in Clinical Pharmacology/Medicine to assist his inquiry. Professor Begg considered it probable that the administration of a single dose, ten times that of the prescribed dose, may have brought forward the demise by short period of time. It was accepted that the condition of Mr Haase was terminal and it can only be said that his inevitable death was hastened. It is possible that the overdose lessened the distress of Mr Haase during his final hours.

RECOMMENDATIONS AND COMMENTS

I. Nurse Maude, in its internal review, created a number of recommendations. A number of subjective and objective recommendations have been made to avoid the possibility of a repeat of the events. Some of the recommendations are easily stated but are difficult to achieve.
   a. All nurses to review their practice during busy shifts.
   b. All nurses to review their practice when dispensing medications.
   c. Review how a handover takes place.
   d. Review medication education.
   e. Review handover sheet.

II. Comment is also made about heavy workload and times of high acuity. Such events are more difficult to manage. Concentration ought to be focused on making the task of the dispensing nurse and the checking nurse easier and therefore safer. Reviewing the planning of the drug room, ensuring it is adequately lit and ensuring that the documentation made user friendly ought to take priority.

III. I recommend that management in Nurse Maude Hospice ... take steps to implement the recommendations the [internal review] provides. It is clear that the circumstances leading to the death of Geoffrey Haase are unusual but not unique. Management of Nurse Maude Hospice should take a lead in the Rest Home/Hospice profession to both draw the circumstances of the dispensing error to the attention of similar organisations in New Zealand and investigate further methods to avoid a recurrence.

CASE Copping [2009] NZCorC 81

CASE NUMBER CSU-2008-HAS-000709

DATE OF FINDING 5 August 2009

CIRCUMSTANCES

Elizabeth Marjorie Copping late of Tamatea, Napier died on 23 February 2008 at Hawkes Bay Regional Hospital of bronchopneumonia, on a background of an infective exacerbation of chronic obstructive pulmonary disease exacerbated by morphine toxicity.

Mrs Copping was admitted to Hawkes Bay Regional Hospital on 15 February 2008 with a presumed infection. On 18 February a new physician took over her case and discovered a mistake in her medication, resulting from a transcription error from the admission medicines list to the hospital's medicines chart. Mrs Copping had been dispensed this high dose on 16, 17, and 18 February. It was not considered at the time that the medication error was likely to have any significant adverse effect. Mrs Copping appeared to be improving, and her medication administration was changed from intravenous to oral antibiotics. On 19 and 20 February Mrs Copping suffered chest pains, but on both occasions they passed in a number of hours. The ward pharmacist noted that she was taking morphine at night on 21 February and noted it on her chart. On the 22 February Mrs Copping reportedly felt unwell and did not eat much. On the morning of 23 February Mrs Copping was unable to be fully roused, and was weak and vague. She was attended by medical staff, who uncovered that on 21 February her dose of morphine was ten times what had been prescribed. Her state was therefore understood to be as a result of an opiate overdose and steps were taken to correct this. Her level of consciousness improved as she was alert for much of the day, and was continued on intravenous fluids. In the evening she felt unwell, and was discovered deceased in her bed by hospital staff late that night.

The two high doses of the different drugs placed significant strain on Mrs Copping's already ailing health, especially in combination. The overdose of morphine also contributed to the development of bronchopneumonia, which caused her death.

RECOMMENDATIONS AND COMMENTS

The coroner endorsed the following recommendations:

I. The Coroner endorsed the following recommendations made by Kaye Lafferty, Quality and Risk Manager for the Hawkes Bay Regional Hospital:
   a. Professional competency review to be conducted for all staff involved.
   b. All patients' medicine related allergies or sensitivities must be documented on the patient's medication chart. Compliance will be audited in the Pharmacy audit schedule and Clinical Nurse Manager audit schedule. Alerts must also be recorded on the electronic patient record as per policy.
   c. A Memorandum to be sent to medical and nursing staff regarding the documentation of medication allergies on medication prescription charts.
   d. High strength controlled drugs are to be dispensed on a named patient basis in a self contained plastic bag. The outside of the plastic bag is to have specific labelling and the patient's identification label. All

controlled drug issues must be documented in a controlled drug register. The high dose controlled drug must be returned to the plastic bag before placing in the controlled drug safe. When the controlled drug is no longer required for the named patient, the controlled drug must be returned to the Pharmacy Department.

e. The medication reconciliation process should be undertaken within 24 hours of a patients' admission to hospital.

The coroner made the following recommendations:

To: Hawkes Bay District Health Board

I. That the Board review the rules for safe prescribing and administration of medication to include:
   a. Prescriptions must be written as a complete order for administration to occur (i.e. name of medicine/strength of medicine, dose required, route and frequency).
   b. Every drug chart must be reviewed daily by a Doctor.

CASE Yao [2015] NZCorC 100

CASE NUMBER CSU-2012-AUK-001636

DATE OF FINDING 28 September 2015

CIRCUMSTANCES

Aiyan Yao of Auckland died on 30 November 2012 at Auckland City Hospital of cardiac arrest due to a profoundly high potassium level as a consequence of rhabdomyolysis-induced kidney failure. The rhabdomyolysis was a result of the combination of two medications – simvastatin and ketoconazole.

Mrs Yao was a 79 year old woman living in a rest home in Epsom, Auckland. Mrs Yao did not speak English very well and also suffered from dementia which meant that communication between her and medical professionals was very difficult.

Mrs Yao had a long-standing prescription for (among other things) Simvastatin – a medication for hyperlipidaemia. Mrs Yao developed fungal rashes on her skin. Several treatments proved ineffective so her doctor prescribed her Ketoconazole – a powerful oral antibiotic. Mrs Yao first used this for four weeks from May 2011. When her fungal rash returned Mrs Yao again used Ketoconazole for four weeks from January 2012. Mrs Yao was tested for liver function which was appropriate for Ketoconazole use. Mrs Yao's rash returned in October 2012 so her doctor prescribed her a higher dose for a longer period of time. The dosage was the maximum recommended dose – 400mg daily.

On 19 October 2012 Mrs Yao began to become unwell. Her knee was sore, but this was thought to have been the result of a recent fall, or from her polymyalgia rheumatica. Her health continued to decline and she was admitted to Auckland City Hospital on 22 November 2012.

Over the next week Mrs Yao became progressively unwell. She developed rhabdomyolysis – a condition where the muscle cells break down and obstruct the kidneys. This led to kidney failure. Efforts to treat Mrs Yao were unsuccessful and she died on 30 November 2012. Mrs Yao's doctors realised at a late stage that the rhabdomyolysis was caused by a combination of Ketoconazole and Simvastatin. Neither medication by itself was at a dangerous dosage but the combination of the medications is known to cause rhabdomyolysis.

The doctor who prescribed Ketoconazole while Mrs Yao was already on Simvastatin did so at the rest home. He was not using a computer system so did not see the typical automated warning that a computer system would generate when these medications are prescribed together. The pharmacy that dispensed the prescriptions would have seen the automated warning but did not communicate this to the doctor and gave Mrs Yao the medications.

The pharmacy had been sold between the time of the dispensing and the coroner's inquiry. The Coroner noted the existence of the Pharmacy Council of New Zealand Code of Ethics 2011 which places obligations on pharmacists to consult with the prescribing doctor if there are reasonable grounds to consider that a prescription is in error or could be detrimental to a patient's health.

The coroner made the following comments:

I. Whilst the owners of the pharmacy at the time have sold the business this case clearly highlights the need to ensure that the inbuilt warning system which flags for health professionals an adverse combination of medications which can cause serious injury to patients is not ignored and a query is raised.
II. This case is a reminder of the importance of communication and professional obligation to each other between Pharmacists and prescribing Doctors.
III. There is no room for mistakes and again this case serves to remind the importance of a Pharmacist following their Code of Ethics and making the appropriate contact with the prescribing Doctor when there is an issue about contrary indication from a combination of medications.

CASE Gibbons [2011] NZCorC 72

CASE NUMBER CSU-2009-WHG-000260

DATE OF FINDING 2 June 2011

CIRCUMSTANCES

Tui Jocelyn Wellington Gibbons, 36 years of age, has died at her home on 19 December 2009. The cause of death was due to pulmonary aspiration of gastric contents where the aspiration was secondary to the high blood levels of clozapine detected as confirmed by the toxicology report.

The Coroner found it was more than likely the consumption of the medication Trimethoprim impacted on the therapeutic blood levels of the clozapine medication which increased the therapeutic range to that of a fatal level. There was no evidence that she was suicidal.

The coroner made the following comments:

I. What was apparent in this unfortunate situation is that the consulting doctor at the White Cross Medical Centre had no knowledge of the medications or levels that Tui Wellington Gibbons was consuming. It should be recognised that Tui was unable to provide that information to the doctor and he prescribed what was appropriate for the health complaint.
II. I refer to a publication by Medsafe, New Zealand Medicines and Medical Devices Safety Authority. In their prescriber update publication volume 25, 2 November 2004 at page 18, there is a warning to general practitioners to treat patients with dual diagnosis being mental health and medical complaints. In particular, this article refers to those who are being treated by clozapine and a reminder of mixing antipsychotic drugs with some antibiotics.
III. The article indicates that general practitioners should be aware of safety protocols established by psychiatrists particularly with patients who are on clozapine. It must be acknowledged there is no software package or

integrated database that can refer a weekend GP to information about a client who presents to them who may have an extensive mental health history with associated medication regimes.

IV. In an area like Whangarei and many other smaller provincial towns in New Zealand where the provision of medical services, are provided after hours, it would be of great assistance to the consulting doctor to refer to relevant and accurate medical and pharmaceutical information when prescribing medications or treating a patient. Had that information been available then a different course of treatment and medication may have been pursued and Tui's death may have been prevented. Whether a cost efficient and secure software package could be developed for this specific purpose remains the challenge. It would assist the integration and continuity of medical services in smaller towns.

CASE Borgen [2014] NZCorC 66

CASE NUMBER CSU-2012-PNO-000202

DATE OF FINDING 30 May 2014

CIRCUMSTANCES

Margaret Ellen Borgen of Otaki died on 4 May 2013 at Palmerston North Hospital of the effects of medications intended for another person she was mistakenly given by rest home staff.

Mrs Borgen was a resident of Ocean View Rest Home. Delivery of medication to patients began at 8am. Mrs Borgen's morning dose of medication came in two blister packs. The caregiver responsible for giving Mrs Borgen her medication gave Mrs Borgen the first blister pack but was then distracted by another patient. When the caregiver returned to Mrs Borgen the caregiver handed her a second, incorrect blister pack of medication. Mrs Borgen took this medication, which included Cilazapril and Diltiazem – two medications for hypertension that would lower blood pressure.

The caregiver quickly realised her mistake but waited until the end of the medication round (at 9am, although there is no indication of where within this hour Mrs Borgen was administered her medication) to call a registered nurse about the medication error. The registered nurse told the caregiver to monitor Mrs Borgen every fifteen minutes which the caregiver did. At 9.45am Mrs Borgen became unwell and the nurse, who was some distance away, recommended the caregiver call a second nurse who lived close by to attend. The second nurse lived three minutes away from the rest home and left for the rest home straight away. Nobody called an ambulance until around 11am. The ambulance arrived promptly and Mrs Borgen was taken to hospital where, despite treatment, she died at 1.20pm. The coroner found the cause of death to be the effects of the two medications which had not been prescribed to Mrs Borgen. The coroner also noted some background medical conditions that would have made Mrs Borgen "less tolerant to the side effects" of the medications in question.

The coroner made the following comments:

I. I consider that Mrs Borgen was badly let down by the actions of staff at Ocean View Rest Home. The administering of medications Cilazapril and Diltiazem which were not prescribed to Mrs Borgen caused her death. The actions of staff in failing to act promptly once the medication error was identified likely contributed to her death. Had there been more prompt notification by the care giver to nursing staff of the medication error, immediate contact by nursing staff with a doctor, and more prompt summoning of ambulance assistance, the chance of the lethal effect of the medication error being overcome would have increased significantly.

CASE Smilijanova [2011] NZCorC 109

CASE NUMBER CSU-2009-AUK-001537

DATE OF FINDING 29 November 2011

CIRCUMSTANCES

On 16 November 2009 Danica Smilijanova (80 years) died at Northshore Hospital from complications of malnutrition, pressure ulcers and cerebrovascular accident (infarct). As there were concerns at the time of her death about her generally deteriorated physical condition, and whether her care prior to death had been adequate, Mrs Smilijanova's death was reported to the Coroner.

The coroner made the following comments:

I. The circumstances of Mrs Smilijanova's death raises questions about public awareness of, and access to community services to assist in elder care. I note that Age Concern operates an Elder Abuse and Neglect Prevention Service focussed on public awareness and the early identification of, and prevention of elder neglect. A copy of these findings will be sent to that organisation for consideration within their neglect prevention programme of the specific factors in this case which limited Mrs Smilijanova's (and her son's) opportunity to access help and assistance, and how such factors may be alleviated.

The coroner made the following recommendations:

To: Waitemata District Health Board:

I. Notwithstanding Dr Stables' opinion regarding the role of morphine and midazolam in Mrs Smilijanova's death, and my findings in this respect, it is extremely concerning that the clinical records show, at least in the case of midazolam, that twice the prescribed dose was administered on 15 November. This is especially worrying in light of Mrs Smilijanova's fragile physical state. It is difficult to understand how such an error occurred given that a checking system was clearly in place (as evidenced by the chart itself).
II. I recommend that this case be reviewed to identify how the error occurred, and that steps be undertaken to assist in the prevention of similar errors occurring in the future. Given the ambiguity of the clinical record as it pertains to the administration of morphine, such review should also consider and re-emphasise the importance of accurate and legible record-keeping.

CASE Miller [2015] NZCorC 99

CASE NUMBER CSU-2013-CCH-000292

DATE OF FINDING 21 October 2015

CIRCUMSTANCES

Mary Hearn Miller of Timaru died on 31 May 2013 at Timaru of terminal bronchopneumonia, complicating chronic congestive heart failure.

Miss Miller was a 92 year old woman who lived in a fully serviced apartment in Strathallan Lifecare, a retirement village in Timaru. At 9.25am on 18 April 2013 an enrolled nurse gave Miss Miller medication intended for another resident. The error was immediately identified and Miss Miller's general practitioner (GP) informed. The GP advised

that the medication should not cause any problems but that Miss Miller should be kept under observation. Her blood pressure was taken regularly. Miss Miller initially seemed fine and continued with her daily routine. At 12.45pm she was pale and drowsy. Strathallan staff again consulted with her GP and an ambulance was called at 2.00pm.

Over the following weeks Miss Miller's condition remained poor. She required one-on-one support in the hospital and assistance with all daily activities. She expressed a desire to return to Strathallan. This was arranged. Her condition worsened and she died on 31 May 2013.

One of the key issues was the extent to which the medication error contributed to Miss Miller's death. The Coroner found the evidence to be equivocal. Miss Miller had a prolonged reaction to the accidental administration of metoprolol and cilazapril and the severity of the reaction was unexpected. The medical evidence was that the medication error was likely to have been non-lethal however Miss Miller already had a precarious state of health at the time. When admitted to hospital Miss Miller was found to have low blood pressure, a slow heart rate, agitation and confusion. The pathologist opined that those symptoms could be from either the medication error or a lower respiratory tract infection he had identified. The Coroner ultimately found the medical evidence on the point of causation inconclusive.

Strathallan Lifecare and its staff undertook internal reviews and the enrolled nurse was initially prohibited from dispensing medication. The enrolled nurse was required to complete reflective practice exercises, study the medication dispensing policies, and undergo further assessment before she could resume dispensing medications.

The coroner made the following comments:

I. Miss Miller's death reinforces the need for extreme care in the administration of medication to those who are not able to assume responsibility for that aspect of their lives.
II. In this instance, Strathallan had in place processes to ensure the safe administration of medication and took immediate and appropriate steps once the error had been made. The error that occurred was simply unfortunate human error.
III. Miss Miller's death is a tragic reminder of the possible consequences that can flow from human error in a process such as the administration of medication which has the potential to adversely affect the health of those involved. Those responsible for the design and management of such processes must ensure that the possibility of human error is decreased as much as possible by the provision of appropriate equipment, training (both initial and refresher), ongoing assessment and appropriate levels of resourcing.
IV. In order to remind those involved in the administration of medication to elderly persons of the need for caution, a copy of this finding will be sent to the Health Quality and Safety Commission New Zealand, the New Zealand Aged Care Association, and the Retirement Villages Association of New Zealand.

Index