

Survey of Injuries, Illnesses, Gear Failures and Incidents in the Newport to Bermuda Races of 1998, 2000, 2002, 2004, 2006, 2008, 2010

Introduction:

How the survey was conducted: Beginning in 1998 skippers in the Newport Bermuda race turned in a form surveying the injuries and illnesses that occurred on their boat during the race. Injuries were categorized by anatomic location and type, defined mostly in lay terms because the target audiences for the survey were future race participants and the sailing community in general. For the same reason illness were treated in similar general terms. In 2004 the survey was expanded to include gear failures and “incidents” such as man overboard, collision, fire, flooding, et cetera. Skippers were in no way handicapped or punished for reporting any information on the survey and all information regarding yachts has been kept confidential and the names of crew were never recorded. The CCA Fleet Surgeon alone collated the information from the survey forms.

Scope of the Survey: There a total of 1336 entries in the past seven Bermuda Races, the average size of the crew being nine. 1202, or 90% of the finishing 1084 skippers returned the forms. Recognizing that there is an element of underreporting, there were 85 injuries and 18 medical conditions not related to trauma, excluding the 65 boats that reported sea sickness among one or more crew members. A small number of injuries came to the attention of the Fleet Surgeon after the race and amended to the survey. On the return trip after the 2008 race, a head injury (concussion and severe scalp laceration) was the subject of a crew evacuation by the USCG and standby attention by the cruise ship Norwegian Princess, which crossed the path of the Fleet Surgeon’s vessel on its way to the scene. In the same passage a crew member on another vessel, captained by the mechanic who services the Fleet Surgeon’s vessel in Newport, sustained 3 broken ribs and was secured in his bunk for the remainder of the trip back.

Concussions occurred, but there were no head injuries with permanent neurological damage nor were there any spinal cord injuries identified.

The results of the survey for the 1998-2006 races have been published [Nathanson et al, BRIEF REPORT: Injury and Illness at the Newport-Bermuda Race 1998–2006, *Wilderness and Environmental Medicine*, 19, 129 132 (2008)], a pdf version of which can be found in the Fleet Surgeon’s section of the Bermuda Race website.

Results of the Survey:

Overview of Survey Reports gathered from Newport Bermuda Races 1998-2010:

	Totals	1998	2000	2002	2004	2006	2008	2010
Number Boats Entered	1336	176	177	182	157	263	198	183
Nnumber Boats Finished	1267	139	176	173	145	260	191	183
Reports turned in	1202	81	170	173	152	260	187	179
Reports with injury/illness	122	10	22	36	4	11	28	11
Reports with Gear Failure	60						44	16

Table 1. Injuries

		85	1998	2000	2002	2004	2006	2008	2010
	Total Injuries	85							
Head	Total Head Injuries	8							
	Bruise		1					1	
	Cut					1	1	2*	
	Concussion							1	1
Face	Total Face Injuries	4							
	Scrape			1				1	
	Cuts				2				
Toes	Total Toe Injuries	3							
	Cut			1				1	
	Fracture							1	
Leg	Total Leg Injuries	13							
	Bruise				2				9
	Scrape		1						
	Pulled Tendon						1		
Knee	Total Knee Injuries	2							
	Sprain				1			1	
Foot	Total Foot Injuries	5							
	Fracture				1				
	Burn galley						1		
	Cut							1	
	Scrape								1
	Sprain								1
Shoulder	Total Shoulder Injuries	2							
	Possible Fracture							1	
	Dislocation								1
Arm	Total Arm Injuries	9							
	Unspecified							3	
	Bruise								6
Hand	Total Hand Injuries	8							
	Cut				1				
	Burn galley						1		1
	Rope burn						1		
	Sprain						1		
	Unspecified							3	
Fingers	Total Finger Injuries	18							
	Cut		4	2	4		1		
	Fracture		1	1					
	Bruise						1		
	Dislocation								1
	Unspecified							3	
Neck	Total Neck Injuries	1							
	Strain				1				
Back	Total Back Injuries	8							
	Bruise/Strain			3	1			1	3
Chest	Total Chest Injuries	3							
	Fracture Rib							1*	
	Bruise								2
Abdomen	Total Abdomen Injuries	1							
	Bruise								1

(* 1 head injury and 1 rib fracture on return trip, 2008)

Table 2. Factors Contributing to Injuries

	Total	1998	2000	2002	2004	2006	2008	2010
Climbing Mast	1						1	
Cooking	4					2		2
Darkness	1	1						
Fatigue	2	1						1
F'deck hatch left open	1		1					
Gear failure	2					1	1	
Heavy Weather	18		4	7		1	3	3
Inattention	1	1						
Inexperience	1					1		
Jibing	1			1				
Knife (galley;sail locker)	2		2					
No Shoes	1		1					
Pin fell out of vang	1	1						
Sail change	4		2				1	1
Sharp edge on Runner	1	1						
Tacking	1							1

Table 3. Illnesses (medical conditions not related to trauma)

Total Illnesses (except sea sickness)	18	1998	2000	2002	2004	2006	2008	2010
Choking	1					1		
Constipation	1	1						
Diabetes/dehydration	2			1				1
Diarrhea	1	1						
Headache	1					1		
Hypothermia	1							1
Ingestion sea water	1							1
Insomnia	1	1						
Leg infection	2	1					1	
Migraine	1					1		
Sun Burn	3		1			1		1
Syncope (fainting)	1						1	
Urinary retention	1						1	
Urinary tract infection	1			1				
Seasickness (# of boats)	65	1	13	26	3	3	15	4

Table 4. Radio/Satellite Calls for Medical Assistance

Total medical calls	10	1998	2000	2002	2004	2006	2008	2010
Arm infection (cellulitis)	1						1	
Back injury	2		2					
Face injury	1			1				
Head Injury	2						2*	
Leg infection	1	1						
Sea sickness	1		1					
Sea water ingestion	1							1
Urinary tract infection	1			1				

(* indicates one of head injuries on return trip)

Table 5. Crewmembers Removed from Vessel

Total crewmembers removed	4	1998	2000	2002	2004	2006	2008	2010
Back injury	1		1					
Cut Finger (St Georges)	1			1				
Diabetes/dehydration (St Georges)	1			1				
Head Injury, scalp laceration	1						1*	

*On return trip. (Responders: cruise ship *Norwegian Princess* standing by; USCG SAR)

Table 6. Gear Failures (with or without injury) 2004 and after.

Total Gear Failures	68	2004	2006	2008	2010
"Equipment failure" - withdrew	1	1			
Alternator	3			2	1
Battery isolator failed	1	1			
Binnacle and compass broken by mainsheet during accidental gybe	1	1			
Boom	1			1	
Collision	2			2	
Electrical	5			5	
Engine	3			2	1
Fire	1			1	
Flooding	1			1	
Generator	2			2	
Jib tack line parted (rope burn)	1		1		
Lifeline	3			1	2
Lightning strike	4			1	3
MOB	2			1	1
Prop lost	1				1
Rigging	18			13	5
Sail	5			5	
Seacock	1			1	
Spinnaker block and boom broke	1	1			
Steering	9	2		4	3
Toilet detached from deck	1			1	
Watermaker	1			1	

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