



Opwall Risk Assessment and Audit Indonesia 2024

Risks when travelling – Completed by Date.....

Risk	Likelihood	Severity	Mitigation and Assessment Methods	Assessment Method	Compliance (Action to be taken if not compliant)
Travellers stomach problems	L	M	<p>Ensure only bottle water is drunk. Do not clean teeth in tap water.</p> <p>Method: Check this is included in pre-arrival briefing material sent to students and also in welcome talk</p>		
Mosquito bites leading to malaria, dengue fever or Zika virus	L	M	<p>All participants to be instructed to cover up in the early morning and late afternoons, sleep under mosquito nets in areas where the insect populations are high and wear insect repellent. If taking anti-malarial tablets, then participants advised to complete full course. All participants to be warned of specifics of each disease and symptoms to look out for.</p> <p>Method: Check this is included in pre-arrival briefing material sent to students and also in welcome talk</p>		
Theft, mugging, violence & personal security	L	M	<p>Participants will stay in a hotel whilst in towns or cities and will be briefed on how to reduce the risks. Valuables should remain “off display” at all times, and participants should not walk out alone at night and avoid remote areas of the city. Participants will be briefed on ensuring they lock their room doors overnight and when they leave the room.</p> <p>Method: Check this is included in pre-arrival briefing material sent to students and also in welcome talk</p>		
Dehydration	M	M	<p>All participants are informed that dehydration is a significant risk at all times when in the expedition country. They should be informed that they should drink 2 litres of water per day. For any treks, participants should carry sufficient water supplies for the duration of the trek and the trek leader should stop regularly to rest and check for signs of dehydration.</p>		

			Method: Check this is included in pre-arrival briefing material sent to students and also in welcome talk		
Being injured from traffic	L	M	All participants told of dangers of the busy city roads. Everyone should walk on sidewalk rather than road. Method: Check this is included in pre-arrival briefing material sent to students and also in welcome talk		
Terrorists target Operation Wallacea sites or volunteers/staff get caught up in a general terrorist attack	L	VH	Indonesia Country Coordinator to monitor political stability both nationally and locally throughout the course of the season. Expeditioners to be advised to exercise caution if travelling to Bali, Jakarta or other populated centres before or after their expedition. Method: Check with country coordinator		

Transfers & vehicles: Cars, buses, trucks – Completed by... Date.....

Risk	Likelihood	Severity	Mitigation measures	Assessment Method	Compliance (Action to be taken if not compliant)
Lack of management control increases risks of collision or other incident	L	M	Ensure there is an English-speaking transfer supervisor for each journey. This person should have a mobile phone and be able to contact each of the drivers travelling on any transfer. They should also ensure the drivers are always briefed (see below), and that vehicles travel in convoy with at least one transfer supervisor per group of vehicles. Where possible seat belts should be worn, although they are not common in cars in Indonesia. Method: Interview person in charge of supervising transfers		
Vehicles attacked	L	H	Travel to take place during daylight and on main roads wherever possible.		

			Method: Schedule of bus transfers done during daylight hours		
Passengers becoming sunburned or rained on during the journey	M	M	All participants sitting outside in the back of the trucks to be told to use sunblock. When raining all passengers to be given waterproof covers. Method: Interview person in charge of supervising transfers		
Participants unprepared for length of journey or relevant risks	L	M	Ensure transfer briefing is given before any transfer. This should include as a minimum: The length of the journey, the approximate times of any breaks, what to expect during breaks in terms of relevant risks and where is “off limits” (e.g. crossing the road to browse shops). Method: Interview person in charge of supervising transfers		
Inappropriate or lack of insurance	L	L	Ensure supplier holds relevant motor insurance to satisfy national requirements. This is a contract requirement. Method: Check with MWI		
Inexperienced driver increasing risk of accident	L	H	Ensure driver has more than 3 years’ relevant experience. Method: Check with MWI		
Driver fatigue	L	M	Ensure there is a second driver if the journey is longer than 10 hours on any given day. On any given day, ensure no driver is on duty for more than 11hours. Drivers must stop at least every 4 hours for a break. Method: Check with MWI		
Driver unaware of safety requirements	L	M	Ensure the driver has committed to meet their obligation to comply with national vehicle regulations relevant to the journey e.g. for licensing, speed limits, weight of vehicle, number of passengers etc. and have been briefed on our safety requirements (see below). This is a contract requirement. Method: Check with MWI		

Tyres not able to support emergency braking	L	H	Ensure that each tyre has visible tread in the central part of the tyre all the way round, and that there are no clear irregularities such as bulges. Method: Check with MWI		
Lack of comfort on journey	M	L	Ensure that all passengers have a seat (not including floor space) if the journey is longer than 1 hour. Method: Interview person in charge of supervising transfers		
Lack of comfort on journey	M	L	Ensure that luggage is stored in a separate area of the vehicle or does not prevent passengers from being in a comfortable sitting position on journeys longer than 1 hour. Method: Interview person in charge of supervising transfers		
Participants becoming lost during travel	L	H	If using multiple vehicles, ensure that they travel in convoy or there is one transfer supervisor (who has a mobile phone and can contact each of the drivers) per group of vehicles. Method: Interview person in charge of supervising transfers		
Driver not following safety requirements	L	H	Ensure that the driver drives carefully and within the speed limit, does not use their phone whilst driving, and stops at least once every 4 hours in order to prevent fatigue. Method: Interview person in charge of supervising transfers		
Other risks associated with travel by pick up trucks	M	M	If participants are travelling in the bed of a pick up truck, ensure that they are all able to sit in the bed on not on the edge. Ensure that all participants are told not to sit on the edge, and not to stand during transit. Ensure that the tailgate locks securely, and that participants know not to touch it during transit. Ensure that pick up trucks carrying passengers never exceed 50kmp/h. Where large trucks with high sides are used for travel to camps, participants instructed to stand up and hold on to the side of the truck.		

			Method: Interview person in charge of supervising transfers		
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Transfers and vehicles: boats – Completed by..... Date.....

Risk	Likelihood	Severity	Mitigation measures	Assessment Method	Compliance (Action to be taken if not compliant)
Lack of management control increases risks of incidents	L	M	All journeys to be accompanied by a transfer manager who should make sure that the vessel is not overloaded, and that all participants are fully briefed on where they can travel or sit within the boat, location of lifejackets and toilets (if any), and expected journey time. Mattresses to be provided for volunteers sleeping on boats. Staff member to remain vigilant on overnight boat stays. Method: Interview person in charge of supervising transfers		
Vessel sinking or capsizing	L	H	All boats used for transportation to be registered with the relevant port authorities. Captain to have method for communication with rescue services. Lifejackets to be available for all participants (except on dive or snorkel trips). Passenger boats to have radio communications or mobile phone communications with the shore. Method: Interview person in charge of supervising transfers		
Passengers suffering sunburn, dehydration or heat-stroke	M	M	Transfer manager to make sure that sufficient drinking water is available, and that participants are told to wear sun block if outside. Method: Interview person in charge of supervising transfers		
Passengers suffering sea sickness	M	L	Participants to be advised to bring travel sickness medication and reminded to take it, if desired, prior to the journey. Method: Check this is included in pre-arrival briefing material sent to students		

Falling whilst boarding	L	L	Participants to be advised to board one person at a time. If using a gangplank ensure that there is an option for participants to board without their luggage and it be passed to them once they are onboard. Method: Interview person in charge of supervising transfers		
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Water Margins – Completed by..... Date.....

Risk	Likelihood	Severity	Mitigation measures	Assessment Method	Compliance (Action to be taken if not compliant)
Inappropriate supervision			Complete assessment pro-forma to establish level of supervision required Method: Interview site manager		
River crossings			Do not enter water where the current/flow could cause the participant to be moved to a deeper or more dangerous area of the water. Staff member to enter first in order to test the depth and terrain under the water. Any slippery sections should be highlighted. Use a rope if appropriate over sustained slippery terrain. Method: Check with site manager that this has been done on all transects being used by groups		
Bathing in streams			Give a safety briefing to ensure that any out-of-bounds areas are highlighted, any non-bathing activities are prohibited, means of access to the bathing area is specified (e.g. no diving in to the water), and participants are told not to be alone in the water unless in a pre-defined bathing area. Method: Check with site manager that this was included in welcome briefing		

Beach/lakeside activities (including leisure time on the beach)			<p>Ensure appropriate supervision is in place (see pro-forma). Do not enter water if there are strong tides or current that could cause participants to be drawn out to sea or to a dangerous area (e.g. rocks or coral). Give a safety briefing to highlight any out-of-bounds areas. Ensure that shoes are worn if entering the water.</p> <p>Method: Check with site manager that this was included in welcome briefing</p>		
Alcohol			<p>No alcohol to consumed by any participants whilst in the water. No participants to enter the water whilst under the influence of alcohol.</p> <p>Method: Check with site manager that this was included in welcome briefing</p>		

Terrestrial risks – Completed by..... Date

Risk	Likelihood	Severity	Mitigation measures	Assessment Method	Compliance (Action to be taken if not compliant)
Participant becoming lost	L	H	<p>All groups must sign out when leaving the camp using whiteboard system and if the group does not return on time then contact will be attempted with the group and if this is not possible a search and rescue team will be organised. No participant to leave the camp site area unaccompanied.</p> <p>Method: Direct observation of white board sign out/in, and check that groups have been briefed</p>		
Safety and security of participants and personal belongings	L	H	<p>Valuables should not be left lying around. Guards or Opwall staff members will always be present in the terrestrial sites. Where homestays are used, Operation Wallacea Standard</p>		

			<p>Operation Procedures are followed to ensure the host families and houses are suitable for accommodating students.</p> <p>Method: Check with site manager that this was included in welcome briefing and that Standard Operating Procedures were followed when assigning houses</p>		
Participants poorly equipped or with a lack of fitness to cope adequately with the forest conditions	L	M	<p>Participants are fully briefed prior to the start of any walks and check they have the appropriate equipment with them. New participants will be watched carefully for signs of exhaustion and to adjust the distances covered according to the fitness levels. Training sessions given to students prior to expedition to ensure they are fully prepared for conditions on site.</p> <p>Method: Interview project leaders to check that this information is included in their briefings</p>		
Lack of hygiene increasing risk of disease	L	M	<p>Hands should be washed regularly before eating using hand washing facilities provided on site. Kitchen facilities whilst on site should be kept clean and food categories (e.g. meats, vegetables etc.) are prepared separately. All tables on site are cleaned with bleach at least once a day and dishwashing bucket water changed frequently.</p> <p>Method: Direct observation</p>		
Allergic reaction to food	M	H	<p>All participants to submit dietary and allergy information prior to the expedition. Where allergies are serious (e.g. severe nut allergies), no trigger foods to be prepared or served whilst the relevant participant is on-site (e.g. a total nut ban).</p> <p>Method: Interview site manager</p>		
Medical problem for participant	M	M	<p>All medical details are provided by all participants before the expedition and reviewed by country manager and expedition medics. Medical staff always available during the expedition or always within close proximity of medical facilities. Sites</p>		

			<p>have adequate medical supplies for stabilising any patients needing to be transferred to a hospital.</p> <p>Method: Interview site manager and check first aid kit.</p>		
Need for emergency evacuation	L	H	<p>Vehicles always available for emergency evacuation from field sites. Full evacuation plans in place for extraction to local medical facilities.</p> <p>Method: Direct observation of vehicles on site and evacuation plans posted</p>		
Falling down steep slopes, hole or tripping on slippery surfaces	M	H	<p>All participants must stick to designated paths in the forest along which any potential hazards are roped off. Regular trails with steep slopes to be fitted with ropes. Ropes to be installed around river showers and washing areas where needed.</p> <p>Method: Interview project leaders to ensure that the transects are safe</p>		
Night trekking	L	H	<p>Ensure all participants wear a working head torch. Ensure a full briefing is done before the start of the trek, and that all safety precautions are taken in line with control measures for falls and injuries, water margins and safe trekking</p> <p>Method: Direct observation of briefings, and interview project leaders to check that this information is included in their briefings</p>		
Snake bite	VL	H	<p>Only herpetologists will handle snakes and venomous species should not be brought to camp to show participants. All participants should wear long baggy trousers and walking boots/wellingtons when walking through the forested areas. If snake bite was to occur then response is to apply a light pressure bandage, immobilise the patient and evacuate them to hospital.</p> <p>Method: Check that this is included in welcome briefing</p>		

Dog or cat bite whilst in village	L	H	<p>All participants advised not to approach, handle or feed dogs or cats in the villages</p> <p>Method: Check that this is included in welcome briefing</p>		
Small mammal or bat bite	L	H	<p>Only participants who have received rabies injections to be allowed to handle bats and small mammals. Any participant or staff member bitten by a bat to be given booster rabies injections.</p> <p>Method: Interview site manager</p>		
Reaction or disease from insect or arachnid bite	L	M	<p>Participants with strong reactions to insect/arachnid bites identified prior to expeditions, and instructed to carry epipens with them. Participants to wear long trousers and closed-toed footwear whilst in forested areas and long grass.</p> <p>Method: Interview site manager</p>		
Local fauna and flora	M	M	<p>Trek leaders to walk at front of group and identify any major insect hives and ensure groups avoid these areas. All participants should check their shoes before putting them on. Participants will be briefed on any risks from flora or fauna. No participant (student or staff) is to take a trip to the mangroves anywhere on Buton.</p> <p>Method: Check with site manager that this was included in welcome briefing</p>		
Heavy rain causes river to rise, landslides or tree fall	L	H	<p>Experienced expedition site manager to select the site to minimise risk from flooding, landslides and tree fall. In exceptionally heavy rain Camp Manager to organise a 24 hour look out system.</p> <p>Method: Interview site manager</p>		
Fire	L	VH	<p>Smoking is not permitted anywhere inside the forest except in designated areas. All participants should be fully briefed on this regulation and are trained in evacuation procedures. No</p>		

			smoking allowed in any tent, hammock, building or local houses. Method: Check with site manager that this was included in welcome briefing		
Burns from cooking or drying fires	L	H	Fuel stored away from fire. No fire left unattended. No participants to cook with a fire unsupervised. Participants briefed on the use of drying fires and informed to keep a safe distance at all times Method: Interview site manager		

Canopy Work – Completed by..... Date.....

Risk	Likelihood	Severity	Mitigation measures	Assessment Method	Compliance (Action to be taken if not compliant)
Equipment failure	L	H	Canopy Access Limited staff audit all equipment prior to shipping to country, and inspect each piece prior to initial setup and before assigning equipment to students. Method: Interview Canopy Access Instructors		
Students poorly equipped to climb trees	L	M	Students are not able to climb until they have received instructions and seen a demonstration, and only then under the supervision of the Canopy instructors. Students failing to listen to the instructions or watch the demonstration and achieve an acceptable level of proficiency with the equipment as determined by the Canopy instructors will not be allowed to climb. Method: Interview Canopy Access Instructors		
Climbing line failure	L	H	Lines are only installed by Canopy Access Ltd. staff. Top anchors and lines are inspected weekly by canopy staff. All students climb on two lines, a primary and secondary line, and		

			fall arrest devices are installed, and students taught how to use them, on the secondary line in the unlikely event of a primary line failure. Method: Interview Canopy Access Instructors		
Panic attack	L	M	All trees are rigged with two complete sets of lines, and an instructor is able to ascend the same tree and assist a student returning to the ground. Canopy Instructors received extensive training in emergency recovery as part of their BCAP, ACAP and ICAP certifications. Method: Interview Canopy Access Instructors		

Marine risks – Completed by..... Date.....

Risk	Likelihood	Severity	Mitigation measures	Assessment Method	Compliance (Action to be taken if not compliant)
Need for emergency evacuation	L	H	Vehicles always available for emergency evacuation from field sites. Full evacuation plans in place for extraction to local medical facilities. Method: Interview site manager		
Falling down steep slopes, holes or tripping on slippery surfaces	L	H	All participants must stick to designated paths around the site and briefed on using torches at night, and be wearing sandals. Method: Check with site manager that this was included in welcome briefing		
Local fauna and flora	M	M	Participants will be briefed on any risks from flora or fauna. Method: Check with site manager that this was included in welcome briefing		

Injury or danger encountered when wandering around the town	L	M	<p>Camp manager must be informed of any groups leaving site and when they are due to return. All trips off site should be in groups of at least two people.</p> <p>Method: Direct observation of white board sign out/in, and check that groups have been briefed</p>		
Fire	L	H	<p>No smoking allowed within buildings and only in designated smoking areas. All participants should be fully briefed on evacuation procedures.</p> <p>Method: Check with site manager that this was included in welcome briefing</p>		
Medical problem for participant	M	M	<p>All medical details are provided by all participants before the expedition and reviewed by Camp manager and expedition medics. Medical staff always available during the expedition or always within close proximity of medical facilities. Sites have adequate medical supplies for stabilising any patients needing to be transferred to a hospital.</p> <p>Method: Interview site manager and check first aid kit.</p>		
Allergic reaction to food	M	H	<p>All participants to submit dietary and allergy information prior to the expedition. Where allergies are serious (e.g. severe nut allergies), no trigger foods to be prepared or served whilst the relevant participant is on-site (e.g. a total nut ban).</p> <p>Method: Interview site manager</p>		
Lack of hygiene increasing risk of disease	L	M	<p>Participants sleep in dorm rooms with flushing toilets and showers and will be briefed on the importance of washing hands thoroughly before meal times.</p> <p>Method: Direct observation</p>		
Safety and security of participants and personal belongings	L	H	<p>Valuables should not be left lying around. Guards or Opwall staff members will always be present on site. If accommodation has lockable rooms then this should be done at night and whilst rooms are unoccupied.</p>		

			Method: Check with site manager that this was included in welcome briefing		
Dog or cat bite whilst on site or at the beach	L	H	All participants advised not to approach, handle or feed dogs or cats at the beach. All advised not to feed any domesticated dogs onsite. Method: Check that this is included in welcome briefing		
Insufficient communication facilities	L	H	Emergency phone charged and kept with a copy of emergency numbers. Method: Interview site manager		

Diving & Snorkelling – Completed by..... Date.....

Risk	Likelihood	Severity	Mitigation measures	Assessment Method	Compliance (Action to be taken if not compliant)
Injury caused by falling tank	M	M	All tanks should be laid down when they are not being held. Method: Direct observation during kit-up		
Inappropriate pre-dive check	L	H	Buddy dive equipment checks to be done for all divers prior to entering the water and these to be checked by supervising dive staff Method: Direct observation of pre-dive safety check		
Becoming separated whilst diving	L	M	All divers receive a full briefing about the times, dive profile, possible currents and what to do in the event of becoming separated. Method: Direct observation of pre-dive safety check		

Injury during entry/exit from water	L	M	Water entry exit points are assessed for safety given the current water conditions before each dive/snorkel by responsible dive staff. Method: Interview site manager		
Lack of supervision during dive training	L	H	All dive trainers in the water at a ratio of 1 Dive Instructor and 1 Dive Master per 8 students. Dive instructor or dive master to remain close to group and monitor group at all times. Method: Check logs of dive groups		
Lack of supervision during dives	L	H	All qualified divers in the water with a Divemaster per 6 students. Dive instructor or dive master to remain close to group and monitor group at all times. Method: Check logs of dive groups		
Lack of cover for divers	L	H	For boat dives: boat to maintain visual contact with dive groups on the surface and to have sufficient oxygen, trained personnel in oxygen delivery and a First Aid kit. All dive professionals to be briefed to make every effort to surface as near to the boat as safely possible. Shore dives to always have a sign out system where an alarm is raised if the group are not back on time. Method: Interview dive ops manager		
Are all divers checked to ensure they have not exceeded 18m depth, maximum dive time of 50 minutes, stopped at 5m for 3 minutes and have 50 bar/700psi remaining in the tanks at the end of the dive?	L	M	The boat roster is completed pre-dive with starting air and post-dive with final air, time, safety stop check and max depth for all dives. Method: Direct observation of dive logs, and direct observation of pre-dive briefings		
Lack of understanding signals	M	M	Some dive professionals will use different signals, so it is important that a standard is kept for all. Briefings given prior to dive.		

			Method: Interview dive ops manager/Dive Masters		
Marine Fauna accident	L	H	<p>All participants briefed on dangers of marine flora and fauna. Wetsuits or rash guards used for protection. Suitable foot wear always used when walking in the water. Boats equipped with suitable equipment and emergency supplies to respond to a marine fauna accidents. Medics and dive staff briefed on correct techniques for handling Marine Fauna accidents, and laminated emergency flow charts kept in key places.</p> <p>Method: Check that this is included in welcome briefing. Interview site manager/dive ops manager</p>		
Injury during snorkelling from boats	L	VH	<p>Clear briefings on designated snorkelling areas and need to stop and check for boats every few minutes.</p> <p>Method: Interview dive ops manager/Dive Masters</p>		
Becoming lost while diving	L	VH	<p>Dive boat leader fully completes the Dive roster prior to each dive trip with a copy left on base. Dive roster on board the boat is completed before and after each dive. All divers to have a safety sausage attached to a reel with them. Dive leader assesses the conditions and briefs the divers prior to each dive. If conditions indicate strong currents an alternative dive site is to be chosen or the trip aborted. Always at least 2 boat staff members on board at all times. Boat staff are briefed regarding the dive plan before each dive, and that at least one boat staff member is on lookout for surfacing divers at all times. Ensure that everybody is back on the dive boat at the end of each dive before boat moves on.</p> <p>Method: Interview dive ops manager/Dive Masters</p>		
Becoming lost while Snorkelling	L	H	<p>All snorkelers must sign in and out and be covered by a staff member (see below)</p> <p>Method: Direct observation of white board sign out/in, Interview dive ops manager</p>		

Lack of supervision for snorkelling groups	L	H	Depending on the location this may be shore cover / boat cover / in-water supervision. All snorkelers must be in groups of two or more and the group or supervisor (who should have an appropriate water rescue qualification) must carry an SMB. For night-snorkels, each pair to have a torch, and supervision must be provided both in water and on shore with a maximum ratio of 1:6. Method: Interview dive ops manager		
Dive Tank Air contamination through a faulty compressor	L	H	Ensure all compressor maintenance is carried out by the Authorised Staff Only Ensure that air quality from the compressors is tested before the start of the season and the results of these tests filed on site Method: Interview dive ops manager		
Explosion when filling dive tanks	L	VH	Ensure that all dive tanks used are serviced before the start of the season. Method: Interview dive ops manager		
Incorrect storage of oxygen could lead to explosion	L	VH	Ensure the use of non-flammable lubricants. Ensure that the cylinders are secure and not at risk of falling. Ensure that a strict no smoking policy is enforced in the vicinity of all the oxygen facilities. Ensure that no untrained personnel are involved with the storage or administration of oxygen Method: Interview dive ops manager		

Natural disaster risk – Completed by..... Date.....

Risk	Likelihood	Severity	Mitigation measures	Assessment Method	Compliance (Action to be taken if not compliant)
Typhoon, cyclone or severe weather	L	H	Weather monitored by Indonesia Country Coordinator using the info BMKG app or equivalent, and any severe weather		

			<p>forecasts are relayed to Opwall site staff. If weather is severe but camp safety is not compromised then activities to be restricted until it has passed. If impending weather conditions to are sufficiently serious to warrant an evacuation of personnel from the survey sites, then instructions to be given to remove all staff and volunteers to the nearest government assigned evacuation point. Ensure senior staff on site regularly communicate with Country Manager regarding weather issues.</p> <p>Method: Interview site manager</p>		
Earthquake	VL	VH	<p>Country manager and site managers with cell phone signal to have Earthquake+ app or suitable alternative in order to enable immediate notification in the event of an earthquake at any of the sites, so that support can be arranged if needed. Communication via GPS messenger service to be available at sites without cell phone signal. Alarm system available in each camp so that all teams can be recalled and assembled in the event of an earthquake. Assembly location to be detailed in site operating procedures and explained to all participants as part of the health and safety briefing on arrival.</p> <p>Method: Interview site manager, view site operating procedures, view health and safety presentation given on participant's arrival</p>		
Tsunami	VL	VH	<p>Country manager and site managers with cell phone signal to have Earthquake+ app or suitable alternative in order to enable immediate notification in the event of an earthquake that could trigger a tsunami. Communication via GPS messenger service to be available at sites without cell phone signal so that notification can be sent immediately if needed. If an earthquake above magnitude 7.0, shallower than 70km below the surface of the earth should occur in the "danger zone" for any of the sites (i.e. where there is a clear stretch of water between the earthquake's occurrence and the site)</p>		

		<p>then evacuation procedures are to be initiated immediately. These procedures are to be detailed in the site operating procedures for each camp and explained clearly to participants on arrival in the health and safety briefing.</p> <p>Method: Interview site manager, view site operating procedures, view health and safety presentation given on participant's arrival</p>		
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