Ambulance Victoria

Virtual Paramedic

(Version 3)

Triage Simulation

User Guide

Ambulance Victoria has partnered with a simulation development company, CAE Professional Services, to develop *Virtual Paramedic* a "virtual world" simulation to allow health responders to rehearse the role of the Triage Officer as part of the first crew to arrive at a virtual mass casualty incident.

This is the third release. It is accessed from a new web address, and a number of enhancements have been made in the both the way the simulation works, and the user interface.

We welcome your constructive feedback so that we can make the simulation as useful as possible for health responders.

Feedback or other issues can be sent to Virtual.Paramedic@ambulance.vic.gov.au

Contents

1. Ensure Virtual Paramedic is installed on your computer 3
2. To access the simulation go to the AV Virtual Paramedic Learning Management System 3
3. Login to the simulation 4
4. Choose a scenario. 4
5. Read and print the scenario information 6
6. Launch the scenario. 6
7. Accept the warnings! 7
8. Get ready for the scenario 10
9. Get dispatched! 10
10. How to use the main screen. 11
11. How to move around in the scenario. 11
12. How to pause or stop the scenario. 12
13. How to use the 'Talking Heads' 12
14. How to interact with people (bystander, patients, paramedics, fire fighter, police) 13
15. How to use the Health Meter 14
16. How to use the Inventory Button 14
17. Giving a Situation Report (SITREP) 15
18. Triaging and Treating a Patient 16
19. Setting up special locations in the scenario (eg Casualty Clearing Point) 18
20. How to direct someone to a patient 20
21. How to request support from fire fighters 21
22. How to move patients 22
23. How to clear/move non-walking patients 22
24. How to transport/move patients to hospital 22
25. What to do is you get an error on screen 24
26. Getting your results. 25
27. Additional information or reporting issues 31

1. Ensure Virtual Paramedic is installed on your computer.

You can download the application and install it on a Microsoft Windows based computer. The application requires WindowsXP or better, and a good graphics card. Follow the instructions at http://kesem.com.au/avvplms (NB: This address has changed from Version 1).

HINT: *When installing the application on your own Windows computer, it is important to install it as an administrator.*

If you are using an Ambulance Victoria computer, check to see if the AV Simulation icon is present on your desktop (see below). If it is, then you are ready to commence.

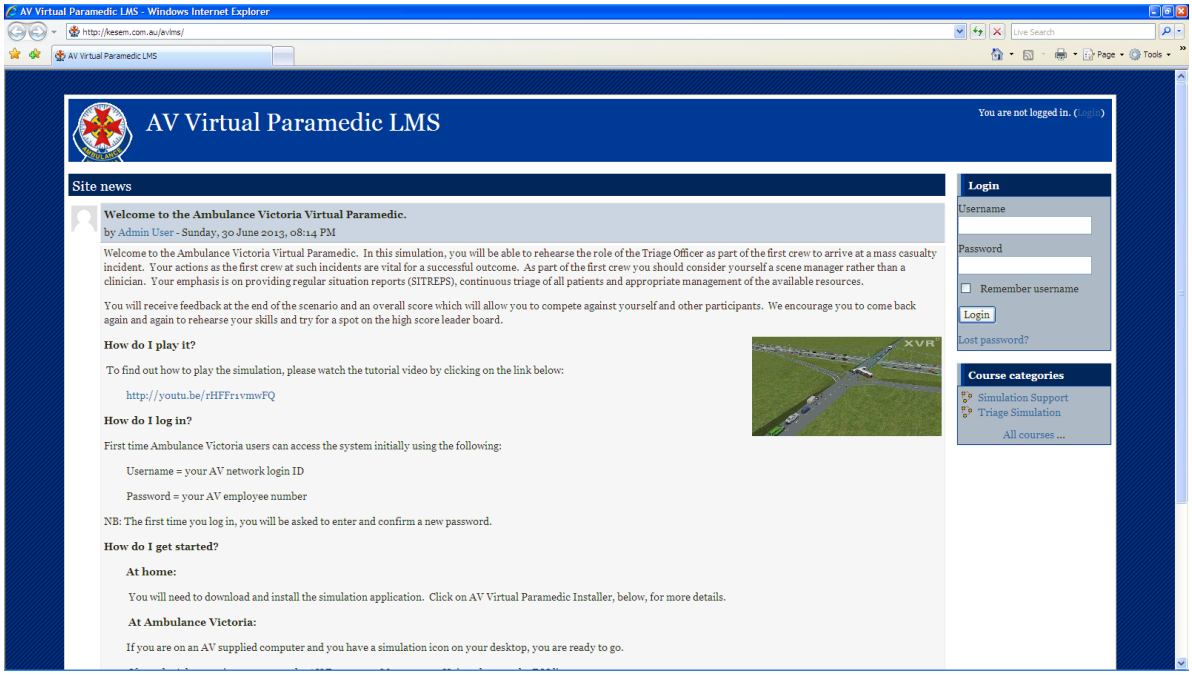
2. To access the simulation go to the AV Virtual Paramedic Learning Management System

Visit http://kesem.com.au/avvplms (NB: This address has changed from Version 1)

Ambulance Victoria computers will also have a shortcut on the desktop to direct you to this site (see below).

The Virtual Paramedic website will give you some background information and has a tutorial video.

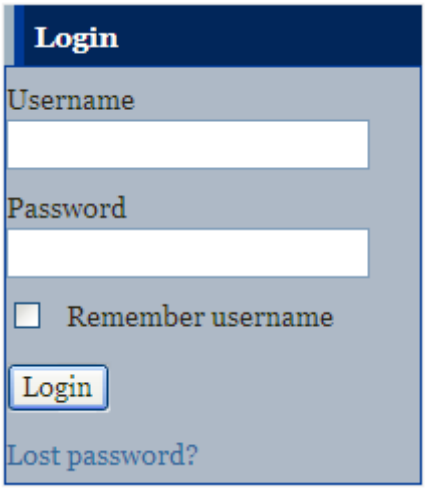
Have a read of the information and then login.



3. Login to the simulation

On the top right of the website, you will find the area to login. Type in your username and password and click the Login button.

If you are an Ambulance Victoria operational employee use your AV computer login ID as the username and your five digit staff number as your password on your first visit. You will be asked to set a new password on your first login.



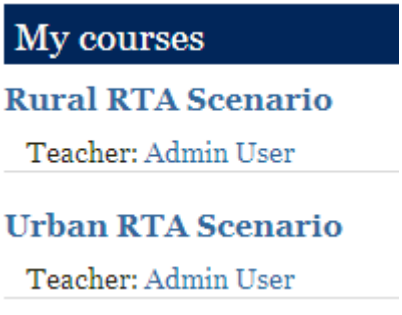
4. Choose a scenario.

There are a number of scenarios to choose from. In this new version, you can also choose different roles to undertake in the scenario.

To select a scenario and role, just click one of the ‘My Courses’ links on the right or bottom of the Welcome page.

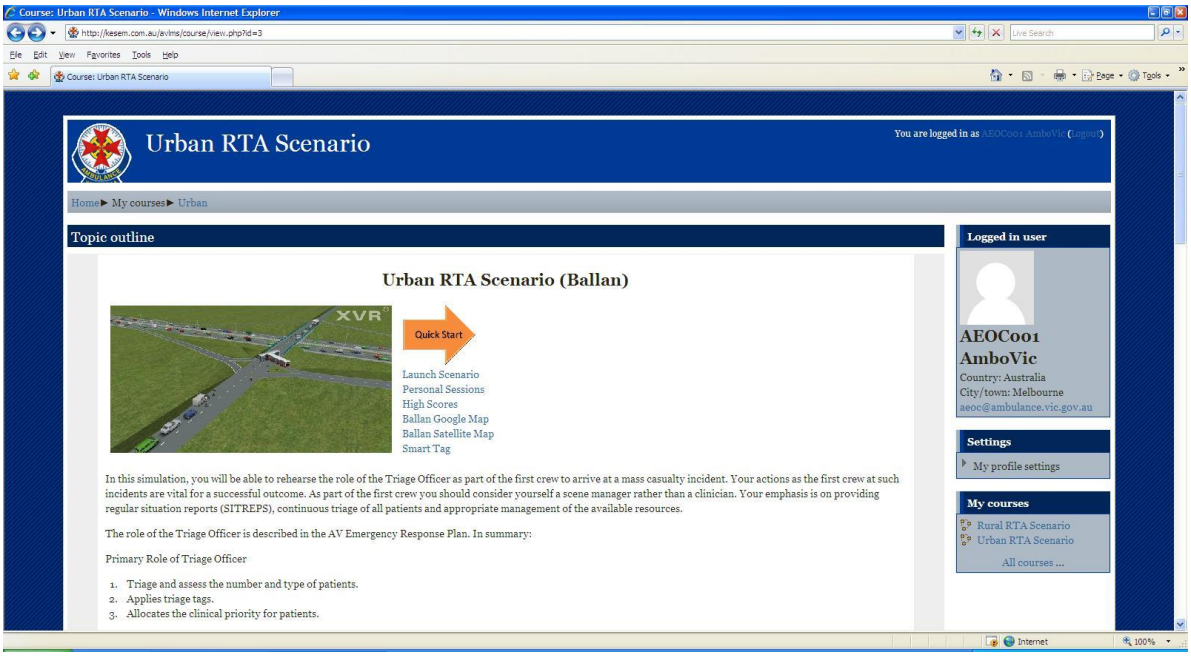
Right of page:

Bottom of page:



5. Read and print the scenario information

When you click on one of the scenario links you will be given a briefing page that provides the detail of the scenario you have selected. This contains your basic shift information and some information about the area you are working in at the time of the scenario. This includes local AV resources, hospital information and local emergency services.



You can also print off some information to keep with you during the scenario including:

- a map of the area
- an aerial photograph of the area
- a SMART Triage card and SMART Count Card
- a Transport Officer Casualty Movement Log

At the very least, we recommend that you print out a SMART Triage Card. The link to this is at the bottom of the scenario briefing page.

6. Launch the scenario.

When you are ready to commence, click on one of the 'Launch Scenario' links or the orange 'Start' arrow at the top of the page.

7. Accept the warnings!

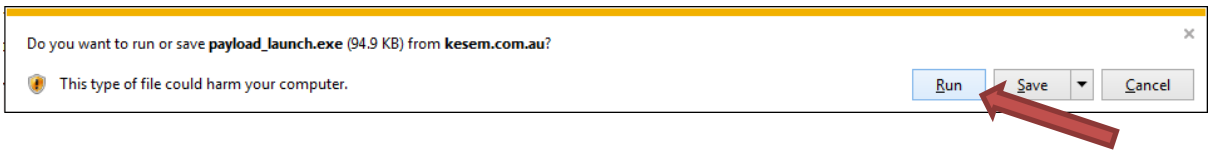
Now because the scenario launcher has to be downloaded to your computer, the computer will present you with a few security warnings to consider.

Depending on the web browser you use, they can look very different.

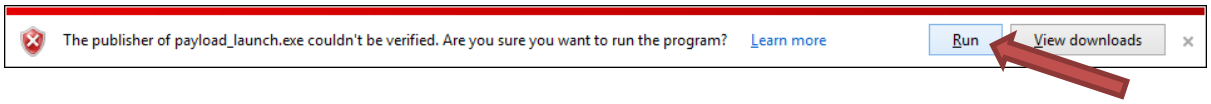
Either way, allow the scenario file (a .exe file) to download and run.

For Internet Explorer 10

Click on 'run' in the two dialog boxes:

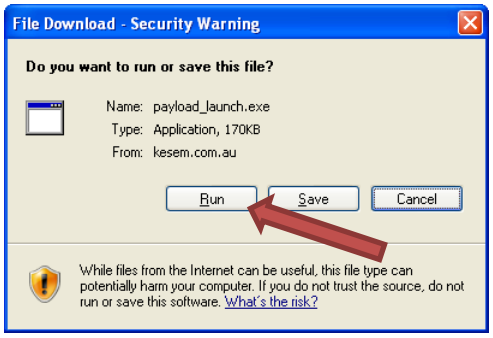


…and then:



For Internet Explorer v7:

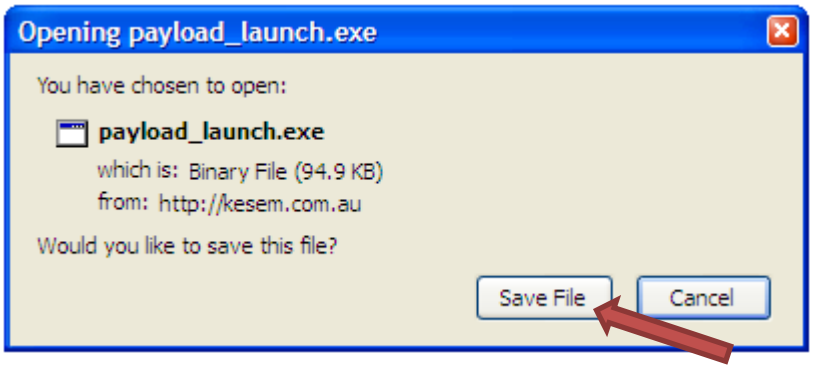
Accept the two warnings:



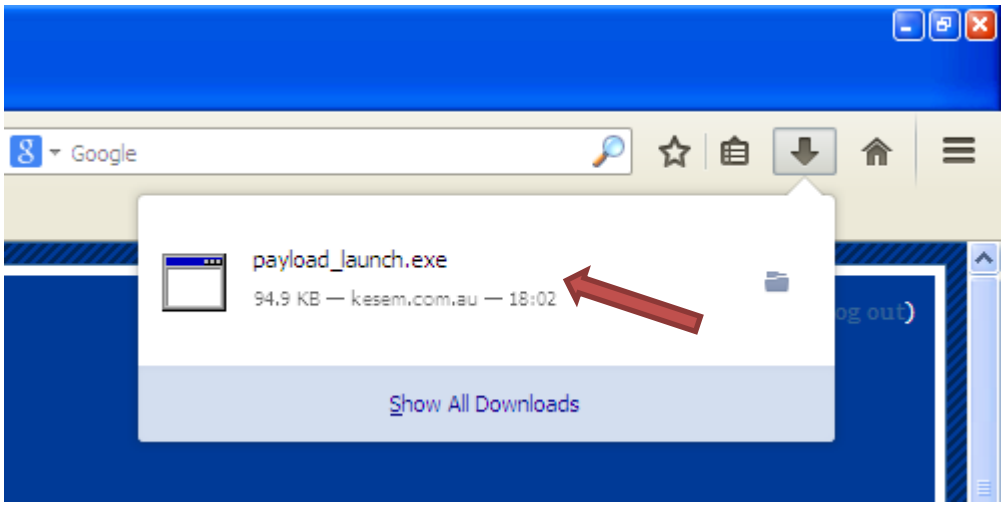
…and then:

For Firefox

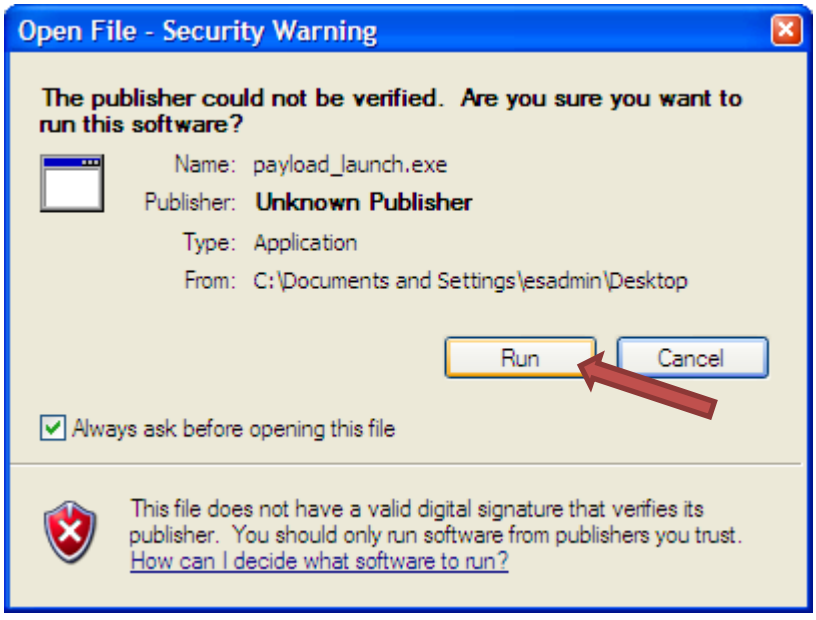
When you click on the Start link, you then need to 'Save File':



Then you need to open the downloads menu from the top right of the Firefox window and double click on the 'payload_launch.exe' file:

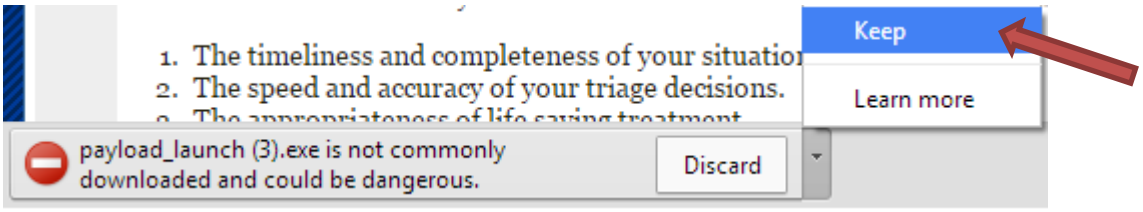


Finally, you need to select 'Run' from the security warning that should appear:

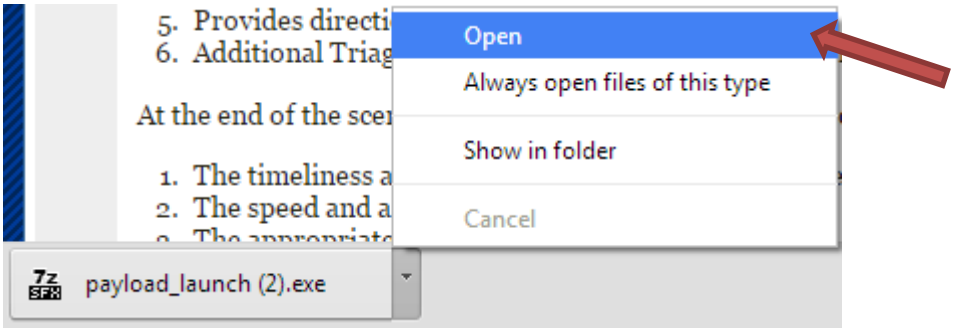


For Chrome

You need to select 'Keep' from the pop up menu on the bottom left of the Chrome screen:



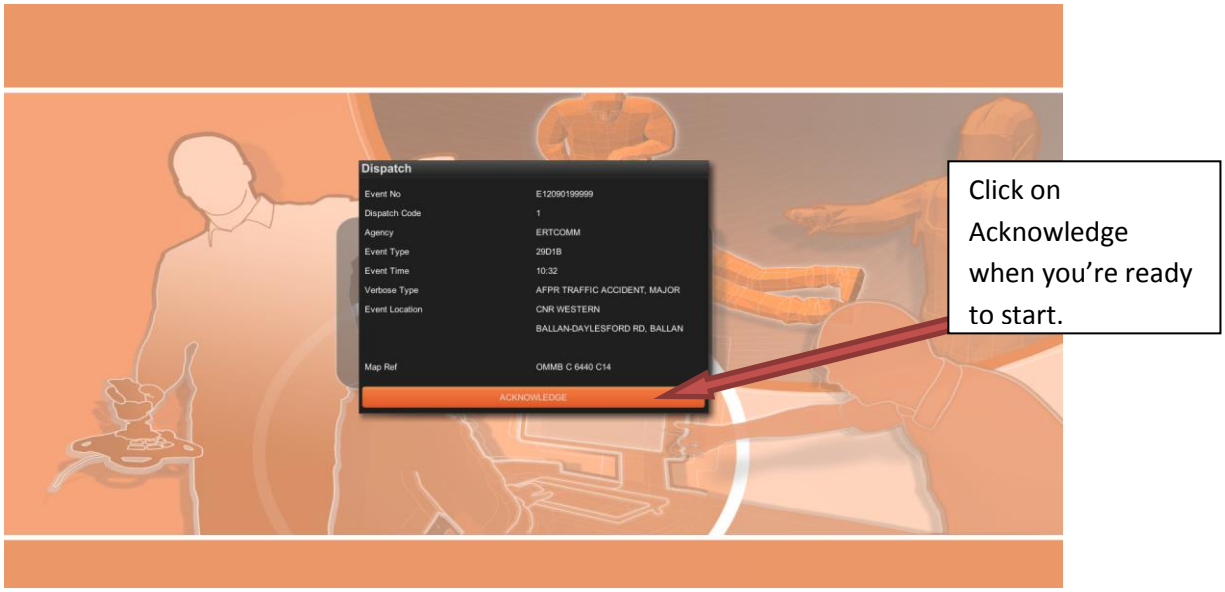
Then select 'Open' from the downloaded file options menu on the bottom left of the Chrome Screen:



8. Get ready for the scenario

As the “virtual world” is loaded you will see the following screen.

9. Get dispatched!



The first thing you will be presented with is a ‘dispatch screen’.

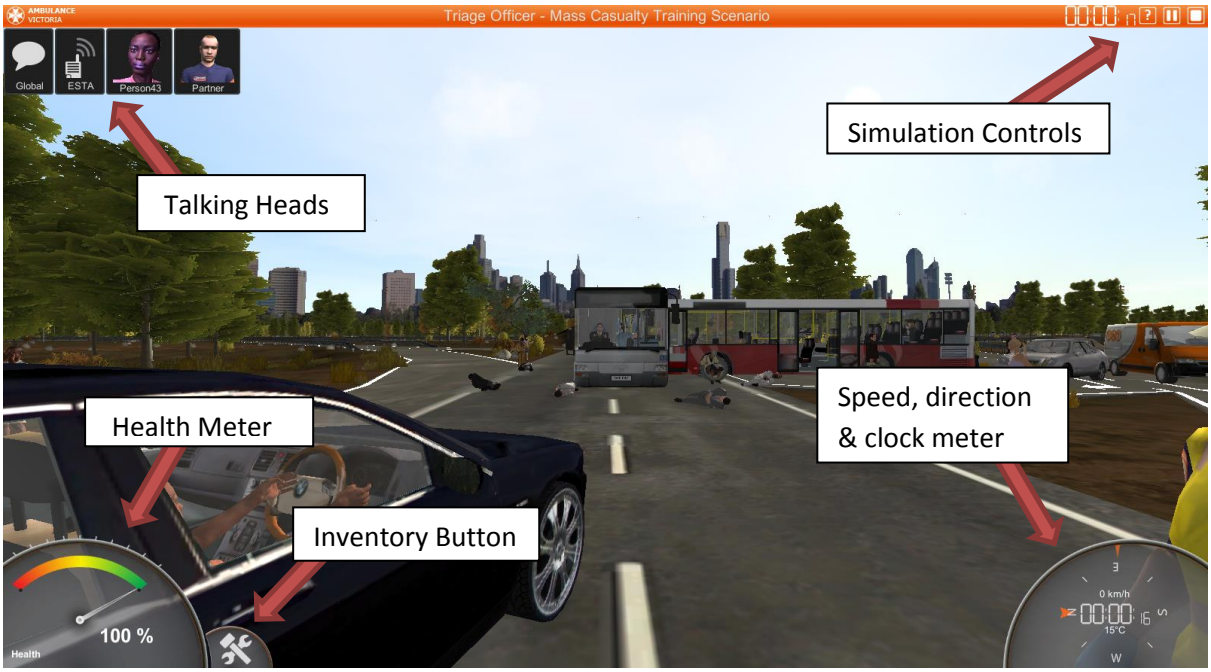
Take your time and read the dispatch information. The scenario will not start being timed until you click on the large, orange ‘Acknowledge’ button on the bottom.

10. How to use the main screen.

Once you've hit the Acknowledged button, you will be dropped straight into the scene, standing next to your ambulance.

There are a number of areas on the screen:

- Simulation clock and controls on the top right of the window
- The 'Talking Heads' at the top left of the window
- A 'Health Meter' on the bottom left corner of the windoe
- The 'Inventory Button' next to the Health Meter
- A speed, direction and clock meter on the bottom right of the screen



11. How to move around in the scenario.

To move around just use the keyboard arrow keys:

- Left Arrow and Right Arrow turn you around
- Up Arrow and Down Arrow move you forward and reverse
- Alt+Up Arrow and Alt+Down Arrow allow you to look up and down
- Alt-Left and Alt-Right allow you to side step
- The letter 'C' allows you to crouch
- The spacebar allows you to jump

12. How to pause or stop the scenario.

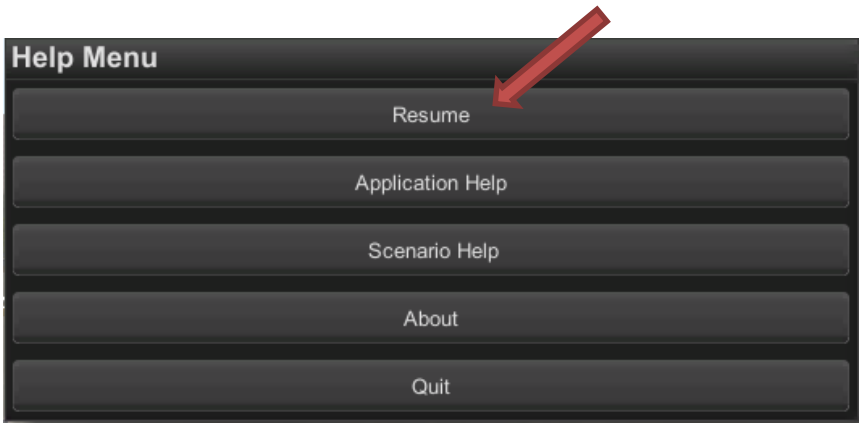
Once the scenario has started, you will notice that the timing clock near the top right corner starts to count (there is also a clock speed and direction meter on the bottom right of the screen). You have approximately 40 minutes to complete the scenario.

Clock and controls – top left

Clock with speed and direction – bottom left

If you get called away, or need to pause the game, you can stop the clock by pressing the Pause button in the controls area ().

A help menu will appear and the scenario will not proceed until you click on the 'Resume' button.



The scenario can only be paused, you cannot save the scenario to start again from any point.

If you want to stop the game, press the Stop button () and choose 'Quit' from the Help Menu. When you end the game, you will be taken back to a webpage to review your results.

13. How to use the 'Talking Heads'.

The Talking Heads represent anyone who is near you that you can communicate with.

The Global speech bubble allows you to call out to everyone in a 10 metre radius.

As you always have your radio with you, you can always talk to the dispatcher and your partner.

If a Talking Head is flashing, it means that they want your attention.

To communicate with any of the Talking Heads, just click on them.

14. How to interact with people (bystander, patients, paramedics, fire fighter, police)

Generally, you can only interact with a person in the simulation when you are close enough to them (approximately 5 metres).

You can 'call out' instructions to anyone within a 10 metre radius using the 'Global' talking head button. ESTA and your partner are always available 'via radio' via their talking heads.

You can interact with anyone by either clicking on their 'Talking Head' when it appears on the top of the screen, or by clicking on the person themselves if you are close enough.

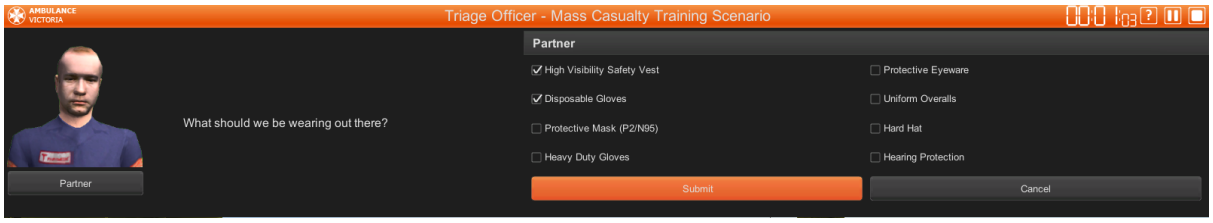
Using either method will display a communications dialogue box (see examples below.)

On the left side is a picture of the person you are talking with and their message.

On the right are the options you may choose to ask or undertake with the person (actions are usually listed in square brackets. Eg [Set up incident locations…])

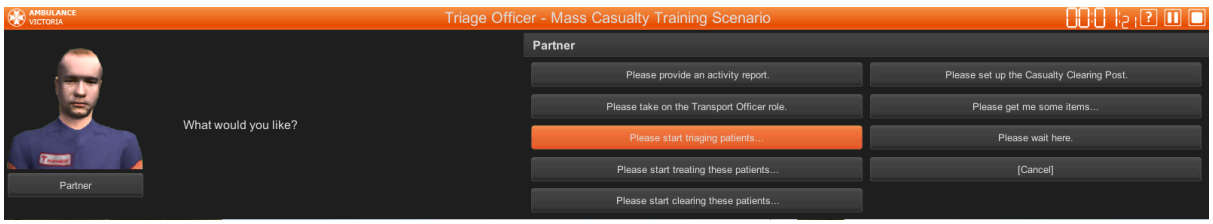
There are two types of options lists: checklist options and single button options.

Checklist Options



The checklist options allows you to tick any number from a selection of options. To select and confirm the options selected click 'Select', or 'Cancel' to cancel the dialogue.

Single Button Options



Single button options present a selection of options. You can only select one option by clicking on it. The option will be actioned immediately.

HINT: *If a paramedic has a dialogue that has an option of "Do me a favour" this indicates that the paramedic has already been tasked by your partner to do something. You can over ride this action by clicking on this button, but remember it may stop the paramedic doing something important!*

HINT: *If a person replies "I cannot do that", it probably means that they don't have the skill, or equipment. For example asking a Clinical Transport Services officer to transport a supine patient will result in "I cannot do that".*

15. How to use the Health Meter

The 'Health Meter' is shown on the bottom left of the screen. This indicated the level of health you possess within the scenario. Your health will decrease if you no not wear the appropriate personal protective equipment, or move into a hazardous area.

The scenario will end if you reach 0% health.

16. How to use the Inventory Button

An 'Inventory Button' appears next to the Health Meter in the bottom left of the window.

Click on the Inventory Button to see a list of all the equipment you currently have taken with you.

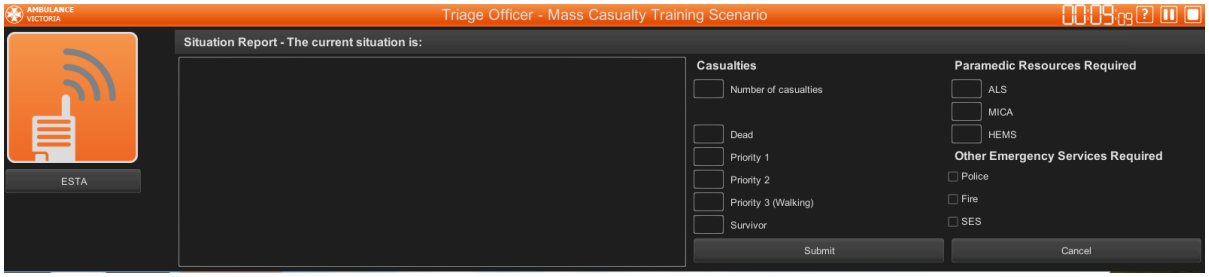
Each of the major pieces of ambulance equipment are represented by an icon. Your partner will ask you early in the scenario what you want to take. You can also return to the ambulance and click on it to retrieve more equipment, or ask a paramedic to get it for you.

If you don't have the right equipment, you may not be able to undertake triage or some treatments!

The major buttons are:

- SMART Triage Pack (triage card icon)
- Trauma Bag (first aid kit icon)
- Oxygen Unit (oxygen cylinder icon)
- Monitor (defibrillation icon)
- MICA Drug Box (needle icon)

17. Giving a Situation Report (SITREP)



When you elect to give a Situation Report, a special Situation Report dialogue box will appear.

You can type a full situation report in the free text box on the left hand side.

Patient numbers can be typed into the corresponding boxes in the middle column.

If you want to request any ambulance resources, type in the number you require on the right.

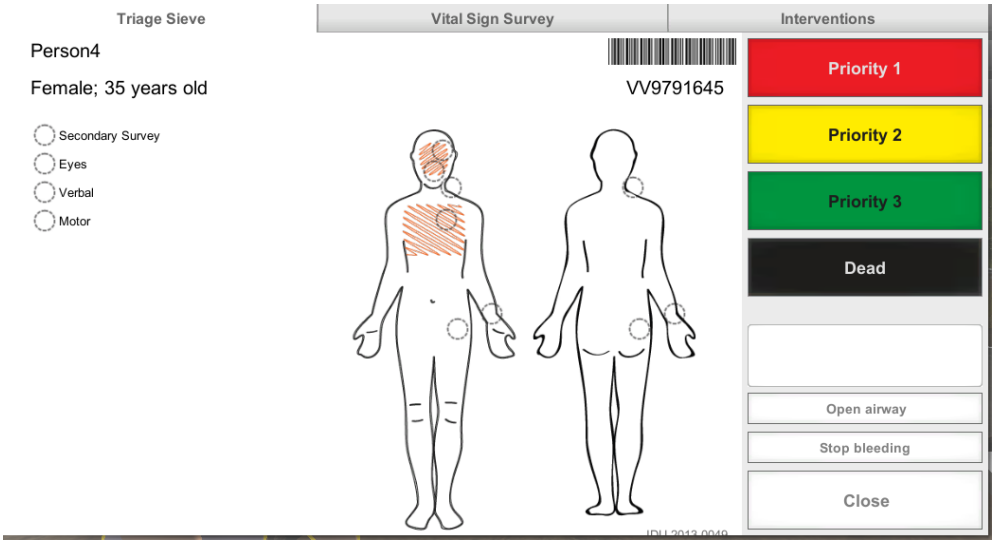
You can also request other services by checking the tick boxes on the bottom right.

Don't forget to click the 'Submit' button on the bottom right hand side when you're ready to send your situation report.

18. Triaging and Treating a Patient

When you elect to triage a patient, a special Triage dialogue box will appear. This dialogue box has three tabs: Triage Sieve, Vital Signs Survey and Interventions.

Triage Tab



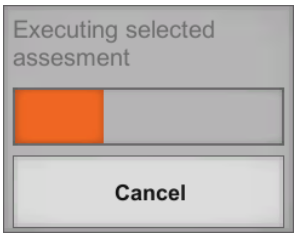
To assign a Triage Priority to the patient, just click on the corresponding coloured triage button.

If the patient has any injuries, the area affected will be shaded in orange.

Life saving treatments (open airway and stop bleeding) can be done immediately, without leaving the triage screen by clicking the buttons on the bottom right side of the triage card.

If you need to assess the patient's observations to triage, click on one of the circles on the body symbol (eg click on the circle over the chest to obtain the respiratory rate, click on the circle over the wrist to obtain the pulse rate). In the triage tab, the pulse and breathing assessments are quicker and only returns rates.

Remember that each assessment will take some time to complete (as indicated by an orange progress bar). If you decide the assessment is taking too long, you can cancel it by clicking the 'Cancel' button below the progress bar.



The Vital Signs tab

The Vital Signs tab works just like the triage tab, except pulse and breathing assessments take longer and report full status assessments.

The Interventions Tab (Treatments)

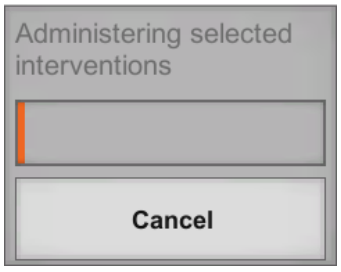
When you want to treat a patient, select the Interventions Tab.

To choose a treatment, first choose the treatment categories on the left side and then click on the Treatment option that appears in the centre column (NB: If you don't have the right equipment with you, some treatment may not be available.)

You can select multiple treatments. All selected treatments will appear in the right hand column.

To carry out the selected treatments, click on the 'Start treatment' button on the bottom right of the dialogue box.

Each treatment will take some time to complete (as indicated by an orange progress bar).



You can cancel a treatment at any time, if you change your mind, or it is taking too much time.

19. Setting up special locations in the scenario (eg Casualty Clearing Point)

Generally, the Triage Officer and Transport Officer have to community with each other to establish locations in the scenario. If no Transport Officer has been appointed, then most locations cannot be established.

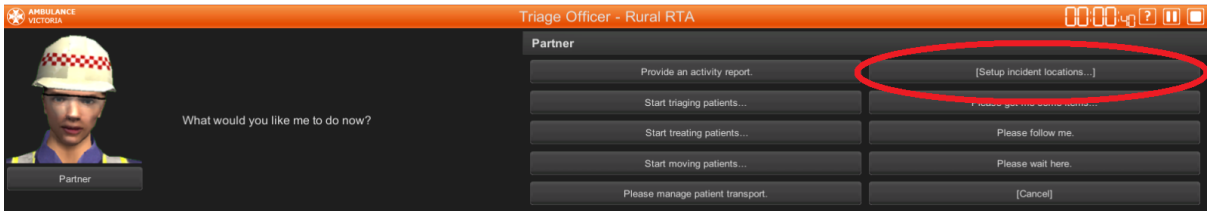
The locations that can be established are:

- Casualty Clearing Point (CCP)
- Ambulance Loading Point (ALP)
- Ambulance Holding Point (AHP)

HINT: *If you are the Triage Officer, it is a good idea to task your partner with taking on the role of Transport Officer as soon as possible after arrival on scene.*

If you are undertaking the Transport Officer role, the Triage Officer will ask you to assist in choosing locations.

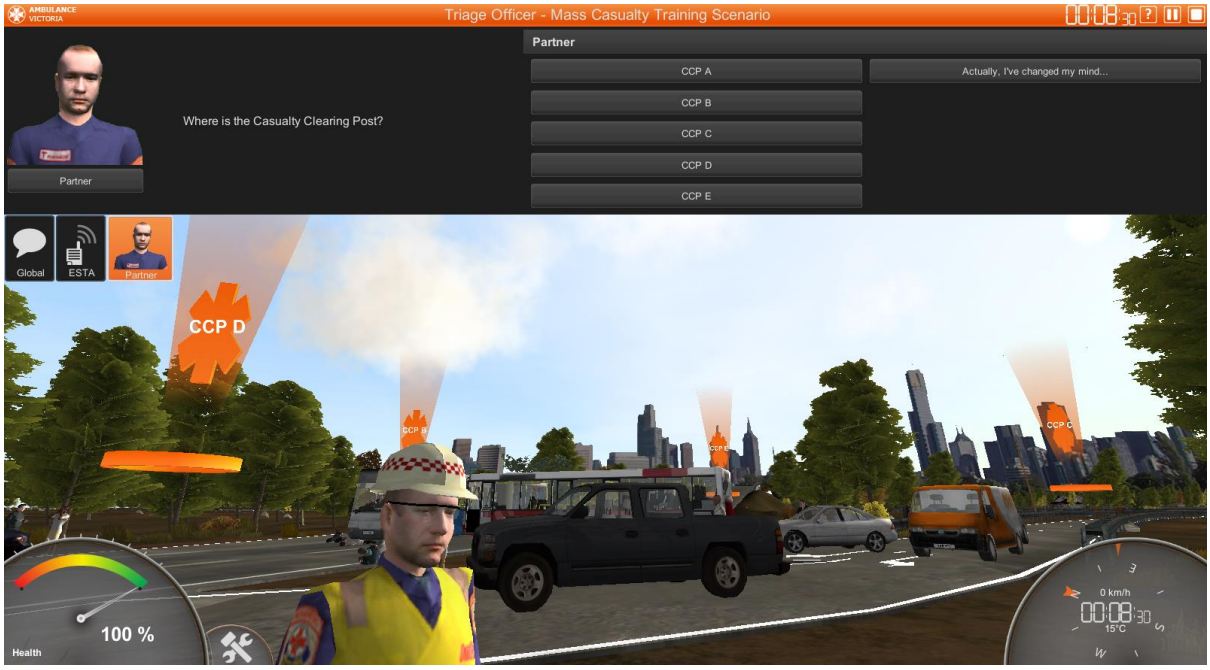
If you are undertaking the Triage Officer role, you need to initiate "Setup Incident Locations" with your partner once you have asked them to take on the Transport Officer role.



As the Triage Officer, when you have initiated "Setup Incident Locations" with your partner, a list of special locations is presented for you to choose from.

Selecting a place for a special location

When you are asked to choose a place for any special location (eg CCP) a number of orange labelled options will appear within the scenario, move around to have a look at them all. When you have identified the place you wish to use, select it from the dialogue buttons.

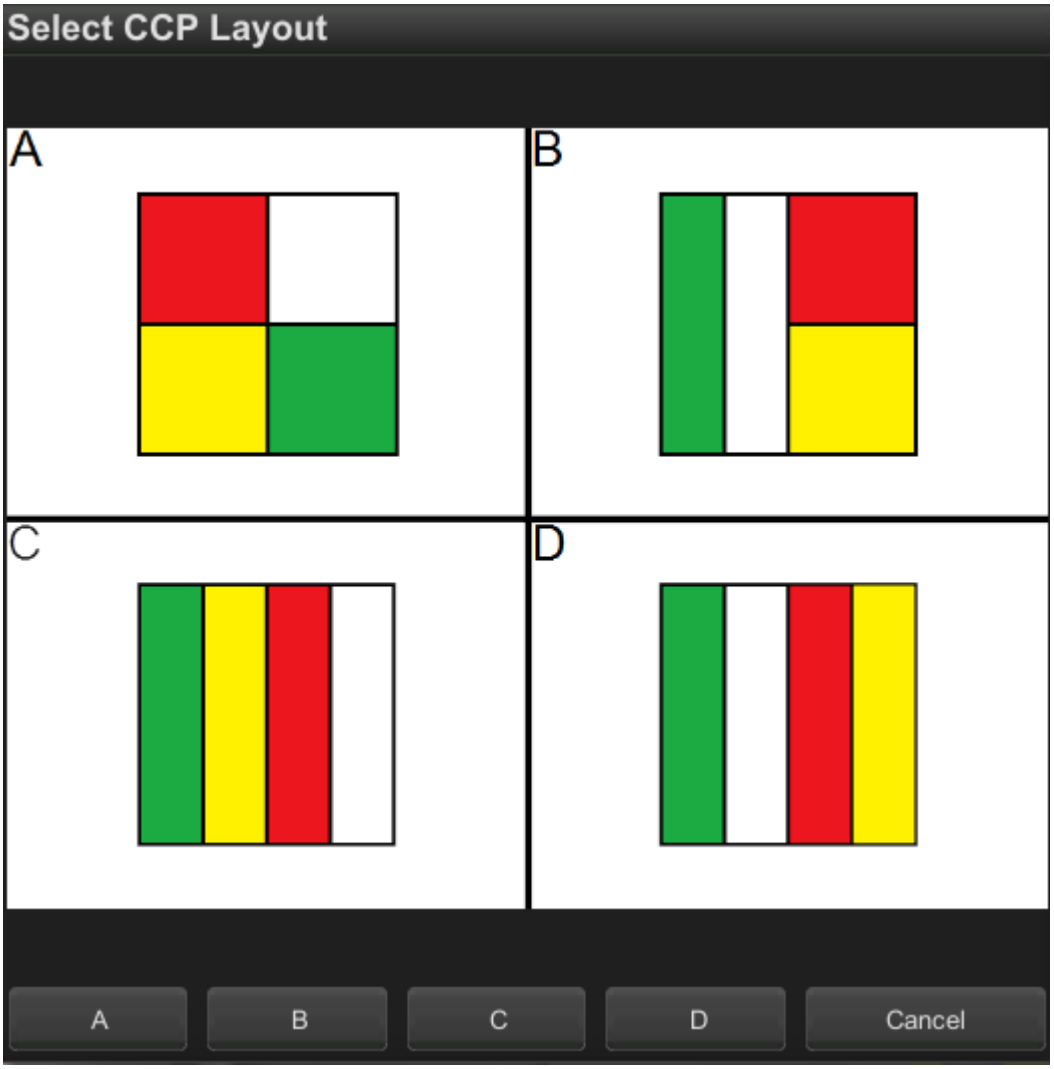


HINT: *When asked to find a place for a special location, use the keys to move so you can see all the options available, use the Alt-Up Arrow and Alt-Down Arrows to adjust your view.*

ADVANCED HINT: *If there are too many buttons and dialogues in the way, you can press the F12 key to remove them from the screen to find and select a good place for a special location. Don't forget to press F12 again to get the buttons and dialogues back, or you won't be able to use them!*

Selecting the layout for your Casualty Clearing Point

When a place for a Casualty Clearing Point has been selected, an additional option to choose the layout of the Casualty Clearing Point is made available. When this option is selected a special dialogue box opens:

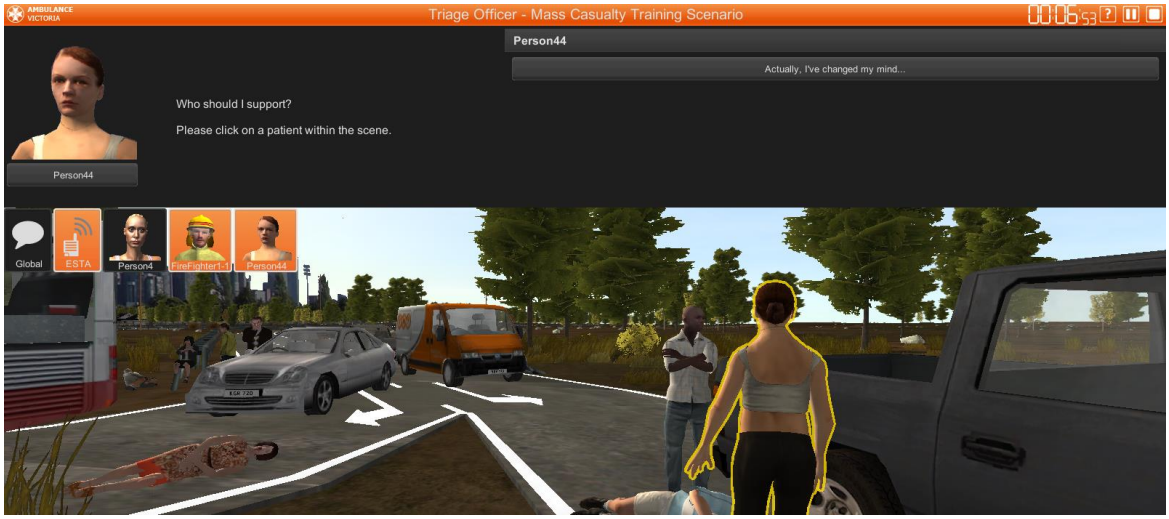


To choose a CCP layout, click the black button on the bottom of the dialogue box with the label (letter) corresponding to the CCP layout you wish to select.

20. How to direct someone to a patient

You can request most people in the scenario to provide support to patients. This can include support, triage, treatment, clearing and transporting.

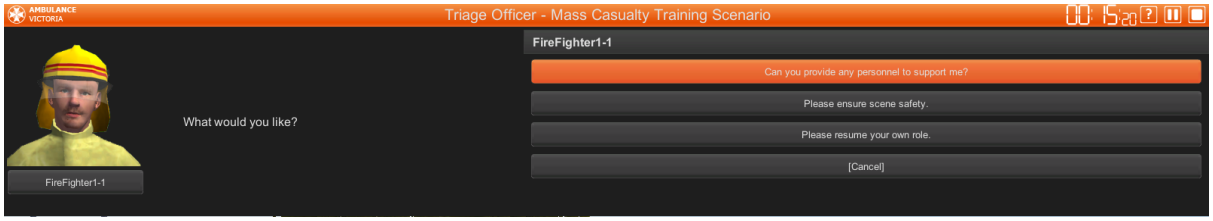
When anyone asks “Who should I….” you can move to any part of the scenario and click on a person to direct your assistant to support that person.



HINT: *When asked who to help, use the keys to move so you can see the person that you want your assistant to help, use the Alt-Up Arrow and Alt-Down Arrows to adjust your view to see the person you are looking for then click on the person to select them.*

ADVANCED HINT: *If there are too many buttons and dialogues in the way, you can press the F12 key to remove them from the screen to find and select a person. Don't forget to press F12 again to get the buttons and dialogues back, or you won't be able to use them!*

21. How to request support from fire fighters



If you would like a fire fighter to assist you in any way, you must communicate with their team leader (identified by a yellow helmet with two red stripes).
If you choose to ask for a fire fighter to support you, the team leader will send a fire fighter who will report to you and ask what you require. From there, you can task them to perform a number of actions.

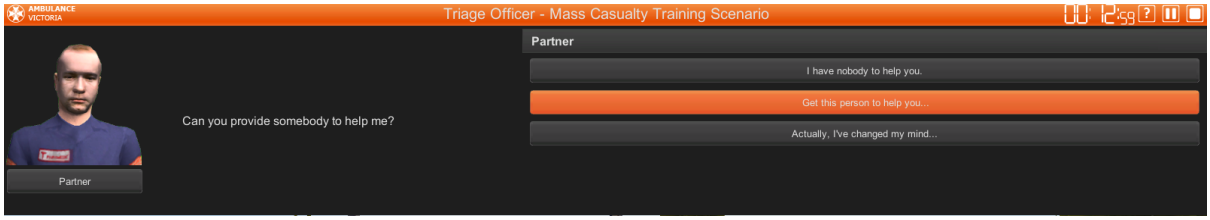
22. How to move patients

When tasking a paramedic to 'move' a patient there are two options:

- Clearing – to the Casualty Clearing Point; or
- Transport – to hospital

23. How to clear/move non-walking patients

One of the options you can task people with is 'clearing' patients to the Casualty Clearing Point (CCP). Walking patients by anyone without assistance, however non-walking patients will need to be cleared by at least one paramedic with an assistant (eg another paramedic, bystander, fire fighter or police officer).



When you assign a paramedic to clear non-walking patients, you will be asked whether there is someone to assist. If you respond by clicking 'Get this person to help you', you will then need to move around the scene and click on the individual you wish to act as the assistant (can be a walking patient, bystander, paramedic or other emergency service worker).

24. How to transport/move patients to hospital

There are a few steps required to transport a patient to hospital in the scenario.

i. Choose a crew to transport.

Selecting either member of a two person crew to transport will automatically allocate both to the task (this means the other member will stop doing their tasks immediately.)

ii. Select patients for the crew to transport.

All crews can load multiple patients (according to the vehicle type they are in). Stretcher ambulances can take up to 1 x supine and 1 x walking patient, or up to 3 x walking patients. Clinic Transport Service vehicles can take up to 6 x walking patients.

Patients must be selected one at a time.

When selecting patients, you have the option of selecting an individual patient within the scene (see 'Directing someone to a patient' in this guide above); or tasking the crew to find a patient that meets your criteria (eg "any red patient").

If you get a response of **"No patients meet that criteria"**, this simply means that all patients of that type in the CCP have been allocated at that time.

If you get a response of **"I am unable to do that"**, it may be that the paramedic does not have the ability (eg a Clinic Transport Service vehicle cannot load a supine patient; or an AGP cannot load a second supine patient).

The crew member will state **"We have room for another patient"** after each patient is selected until all available patient spaces are occupied. (NB: The Clinical Transport Service crew member will ask this up to six times!)

You do not have to fully load each ambulance. The option to "Depart for hospital" is available after each patient is loaded.

iii. Select the destination hospital.

When you have selected "Depart for hospital", a list of available destinations is shown. Click on the hospital name button to select the patient(s) destination.

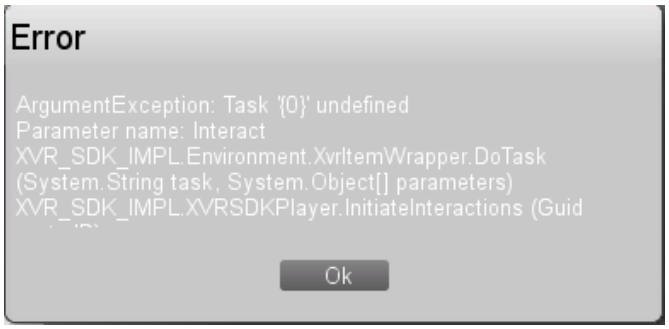
HINT: *The ESTA dispatcher can be asked to provide a list of hospitals and their bed availability from the ESTA talking head.*

Once the crew have been tasked, they will provide feedback to you on which patients they are transporting and their destination. This allows you to complete a Casualty Movement Log.

HINT: *It is a good idea to print off and complete a Casualty Movement Log during the scenario to keep track of this information for Situation Reports.*

25. What to do is you get an error on screen

We have tried our best to eliminate any errors from the simulation, but occasionally they still occur. Most errors look like the box below on the screen:



If you get an error like this, it would be great if you could email Virtual.Paramedic@ambulance.vic.gov.au with the following information:

- What you were doing when the error occurred.
- The text that appeared in the error box.

If you're keen to keep working through the scenario, it should still work, just click the 'OK' button and keep working. If you find that the scenario has stopped functioning, you will need to stop it and start again (sorry!)

26. Getting your results.

Summary Information and benchmarking

When you stop the scenario you will be returned to a results page where you can review your actions in the scenario (and your past attempts too).

You can also access your previous results by clicking on “Personal Sessions” on the scenario webpage.

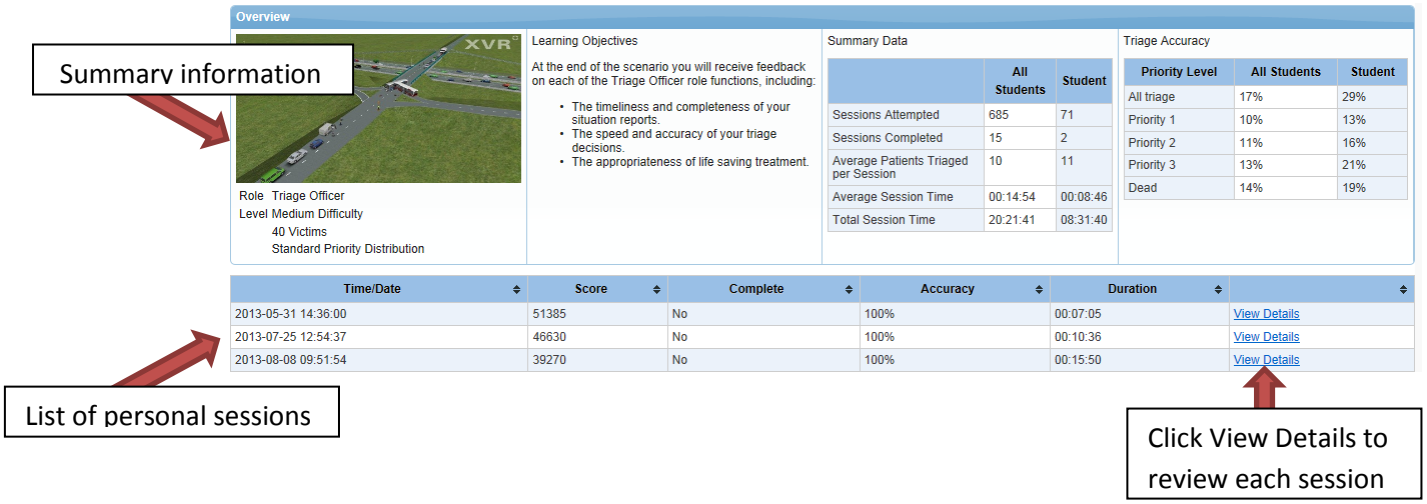
Each scenario provides an overview of for all simulation sessions run.

The first panel on the top far left provides a high level description of the scenario. The next panel to the right provides the high level learning objectives for this scenario.

The third top panel provides a summary of the number of times the scenario has been run and duration, and allows you to benchmark yourself against other students.

The fourth top panel provides a summary of the triage accuracy from all sessions run and allows you to benchmark yourself against other students.

The bottom panel provides a listing of each of your own sessions for this particular scenario. Each session is displayed, one session per row with a summary of the session time, duration, accuracy and ‘game’ score.



HINT: If your most recent results are missing try refreshing the results page in your web browser (usually you click an icon similar to or in the menu of the web browser) . If the
recent results still don’t appear then raise an issue via:

Virtual.Paramedic@ambulance.vic.gov.au .

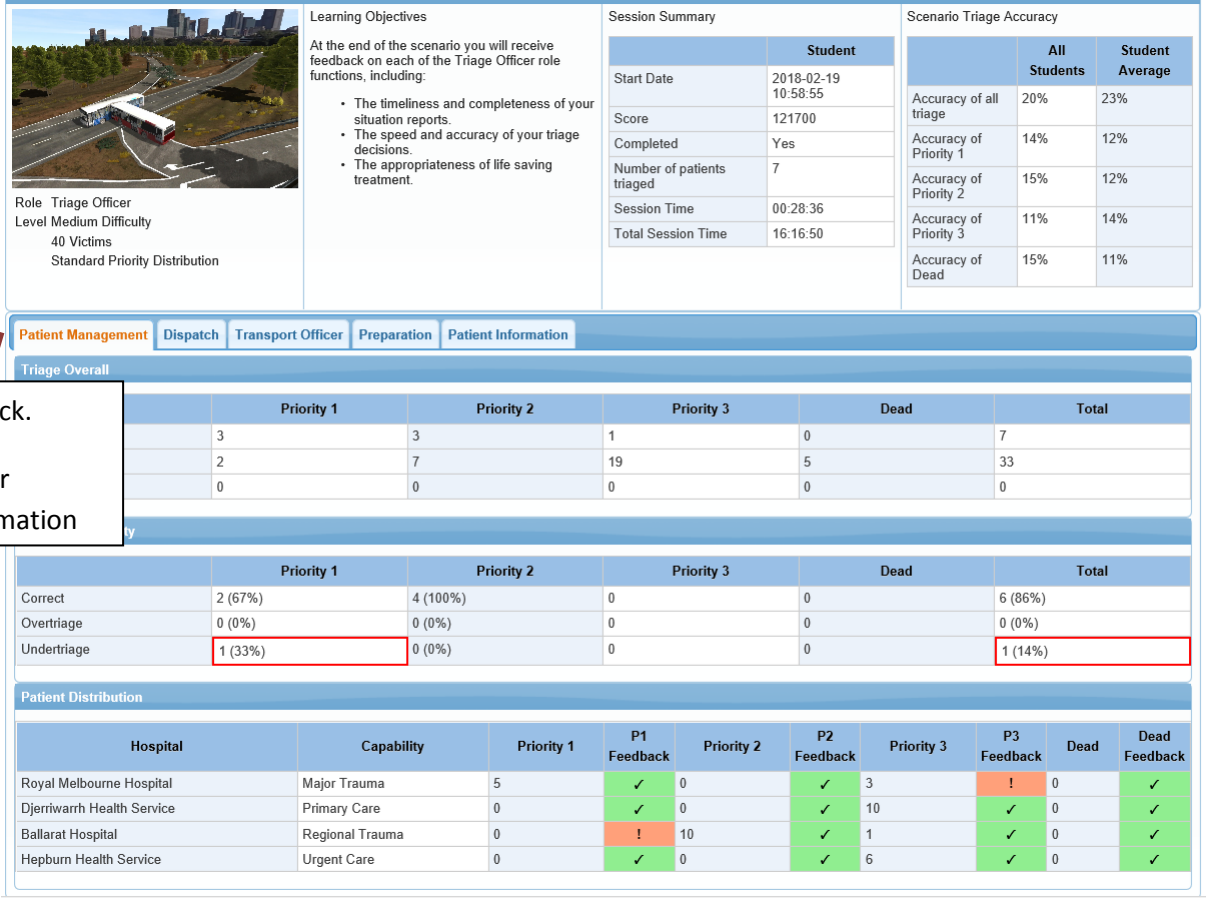
Personal Session Information

To view more detailed feedback on any of your personal session, just click on the 'view details' link on the right hand side of the session you are interested in.

The session results page also contains summary information on the top of the page. This includes the high level description of the scenario and objectives on the top left, and the summary data from your session on the top right of the window.

The bottom panel of the screen allows you to view more detailed feedback across a series of tabs.

Summary information



Detailed feedback.

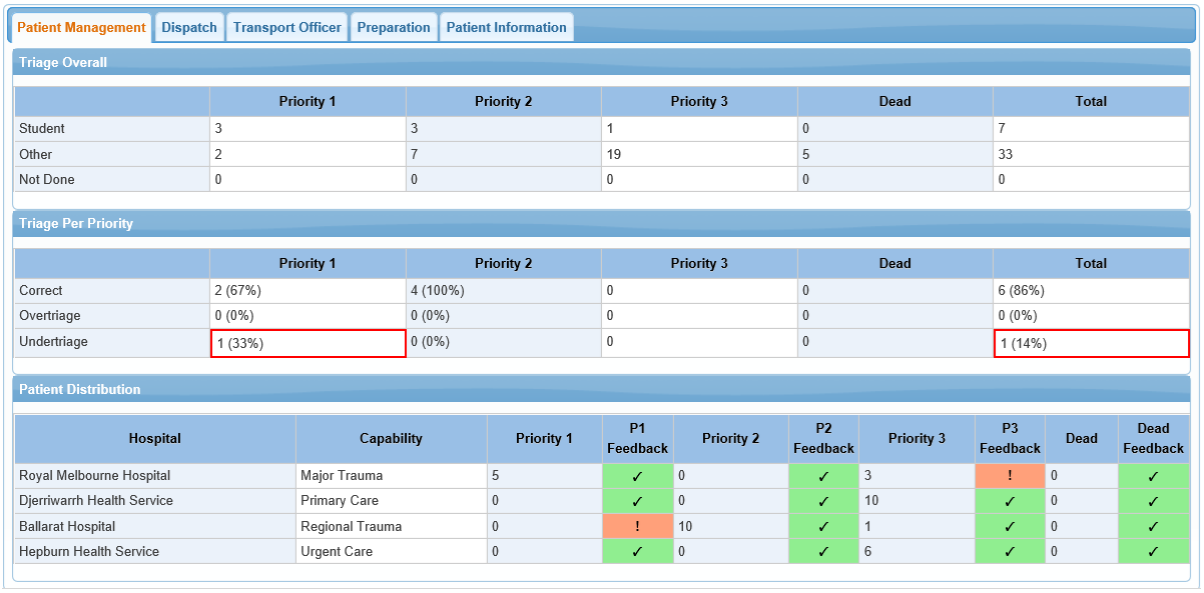
Click on a tab for additional information

Patient Management Tab

The patient treatment tab provides more detailed feedback regarding triage decisions.

The upper section reports the number of triage decisions (by triage priority) that were undertaken by the student themselves, and those undertaken by the simulated paramedics that were tasked by the student to undertake triage. It also reports the number of patients that were not triaged.

The lower section reports triage accuracy of the triage decisions made, including whether there was any under-triage , or over-triage. It now also includes a summary of the distribution of patients to hospital.



Patient Management | Dispatch | Transport Officer | Preparation | Patient Information

Triage Overall

	Priority 1	Priority 2	Priority 3	Dead	Total
Student	3	3	1	0	7
Other	2	7	19	5	33
Not Done	0	0	0	0	0

Triage Per Priority

	Priority 1	Priority 2	Priority 3	Dead	Total
Correct	2 (67%)	4 (100%)	0	0	6 (86%)
Overtriage	0 (0%)	0 (0%)	0	0	0 (0%)
Undertriage	1 (33%)	0 (0%)	0	0	1 (14%)

Patient Distribution

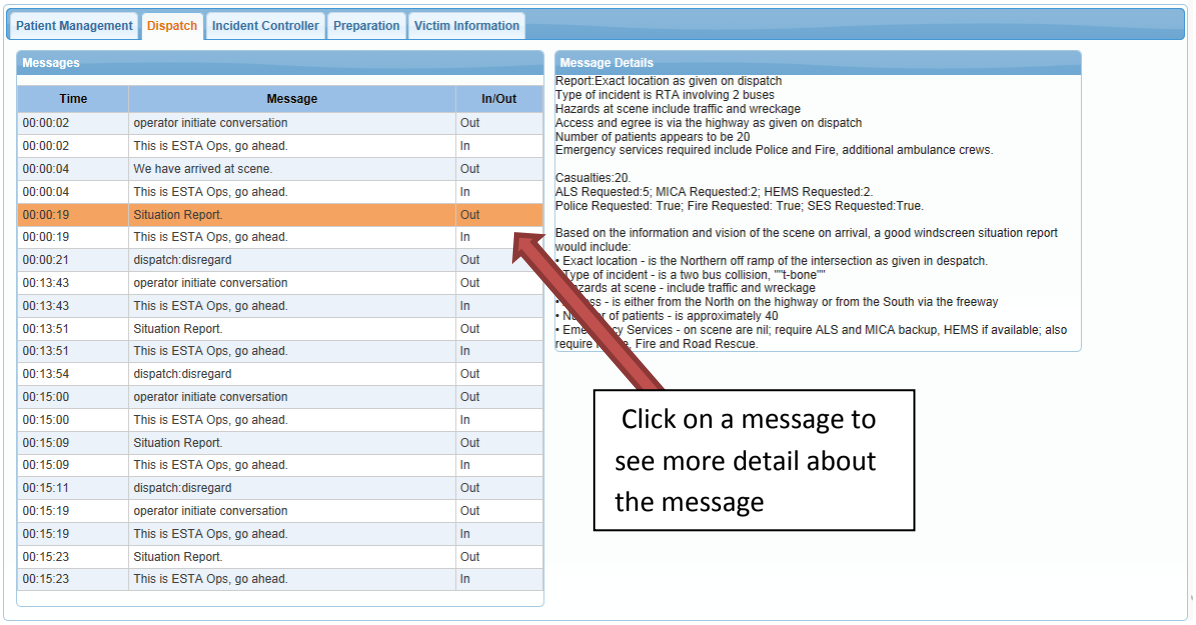
Hospital	Capability	Priority 1	P1 Feedback	Priority 2	P2 Feedback	Priority 3	P3 Feedback	Dead	Dead Feedback
Royal Melbourne Hospital	Major Trauma	5	✓	0	✓	3	!	0	✓
Djerriwarrh Health Service	Primary Care	0	✓	0	✓	10	✓	0	✓
Ballarat Hospital	Regional Trauma	0	!	10	✓	1	✓	0	✓
Hepburn Health Service	Urgent Care	0	✓	0	✓	6	✓	0	✓

When reviewing patient distribution, the LMS includes some assessment feedback to consider. The legend below explains how to use this feedback

✓	A tick suggests that this was correct
X	A cross suggests that this was in-correct. For example sending a high priority patient to a low care facility; or sending too many patients to a facility.
!	An exclamation suggests that you need to reflect on these decisions. For example sending low priority patients to a high level care facility might be correct – if they were double loaded with a high priority patient; or whether there were other hospital options for high priority patients.

Dispatch Tab

The dispatch tab provides a detailed log of all communications with ESTA dispatch. Each entry can be selected to reveal additional detail. Situation Report entries contain a model answer to compare your reports to.



Incident Controller Tab

The Incident Controller tab is similar to the dispatch tab in that it provides a detailed log of all communications with the Incident Controller. Each entry can be selected to reveal additional detail. Situation Report and Health Monitoring report entries contain a model answer to compare your reports to.

Tirage Officer Tab

The Triage Officer tab is similar to the dispatch tab in that it provides a detailed log of all communications with the Triage Officer. Each entry can be selected to reveal additional detail.

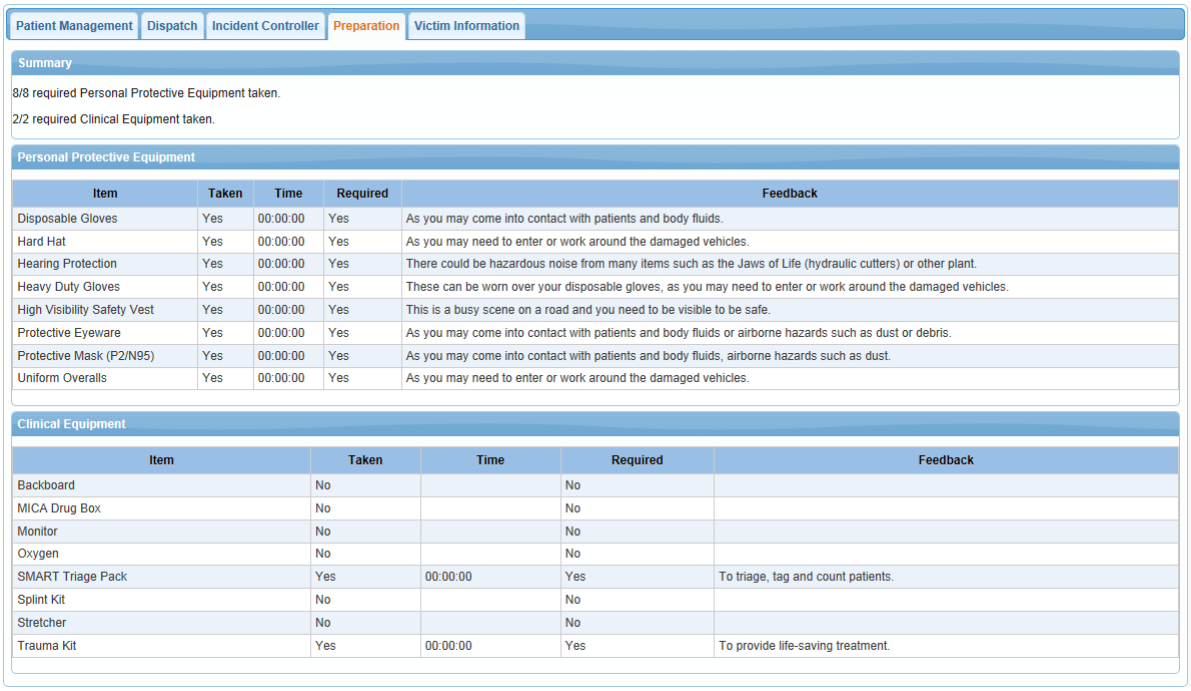
Transport Officer Tab

The Transport Officer tab is similar to the dispatch tab in that it provides a detailed log of all communications with the Transport Officer. Each entry can be selected to reveal additional detail.

Preparation Tab

The upper section of the preparation tab provides a summary of the decisions to take personal protective equipment and clinical equipment. The summary is listed against the number of items recommended.

The lower section provides more detailed feedback about each item of equipment taken the time it was obtained and whether it was required. It also contains a rationale provided by AV's Health Safety and Welfare Unit and the AV Emergency Management Unit.



Patient Management | Dispatch | Incident Controller | Preparation | Victim Information

Summary

8/8 required Personal Protective Equipment taken.

2/2 required Clinical Equipment taken.

Personal Protective Equipment

Item	Taken	Time	Required	Feedback
Disposable Gloves	Yes	00:00:00	Yes	As you may come into contact with patients and body fluids.
Hard Hat	Yes	00:00:00	Yes	As you may need to enter or work around the damaged vehicles.
Hearing Protection	Yes	00:00:00	Yes	There could be hazardous noise from many items such as the Jaws of Life (hydraulic cutters) or other plant.
Heavy Duty Gloves	Yes	00:00:00	Yes	These can be worn over your disposable gloves, as you may need to enter or work around the damaged vehicles.
High Visibility Safety Vest	Yes	00:00:00	Yes	This is a busy scene on a road and you need to be visible to be safe.
Protective Eyeware	Yes	00:00:00	Yes	As you may come into contact with patients and body fluids or airborne hazards such as dust or debris.
Protective Mask (P2/N95)	Yes	00:00:00	Yes	As you may come into contact with patients and body fluids, airborne hazards such as dust.
Uniform Overalls	Yes	00:00:00	Yes	As you may need to enter or work around the damaged vehicles.

Clinical Equipment

Item	Taken	Time	Required	Feedback
Backboard	No		No	
MICA Drug Box	No		No	
Monitor	No		No	
Oxygen	No		No	
SMART Triage Pack	Yes	00:00:00	Yes	To triage, tag and count patients.
Splint Kit	No		No	
Stretcher	No		No	
Trauma Kit	Yes	00:00:00	Yes	To provide life-saving treatment.

Patient Information

Detailed triage, assessment and treatment feedback is provided under the victim information tab. Each of the victims that were triaged will appear, one victim per row.

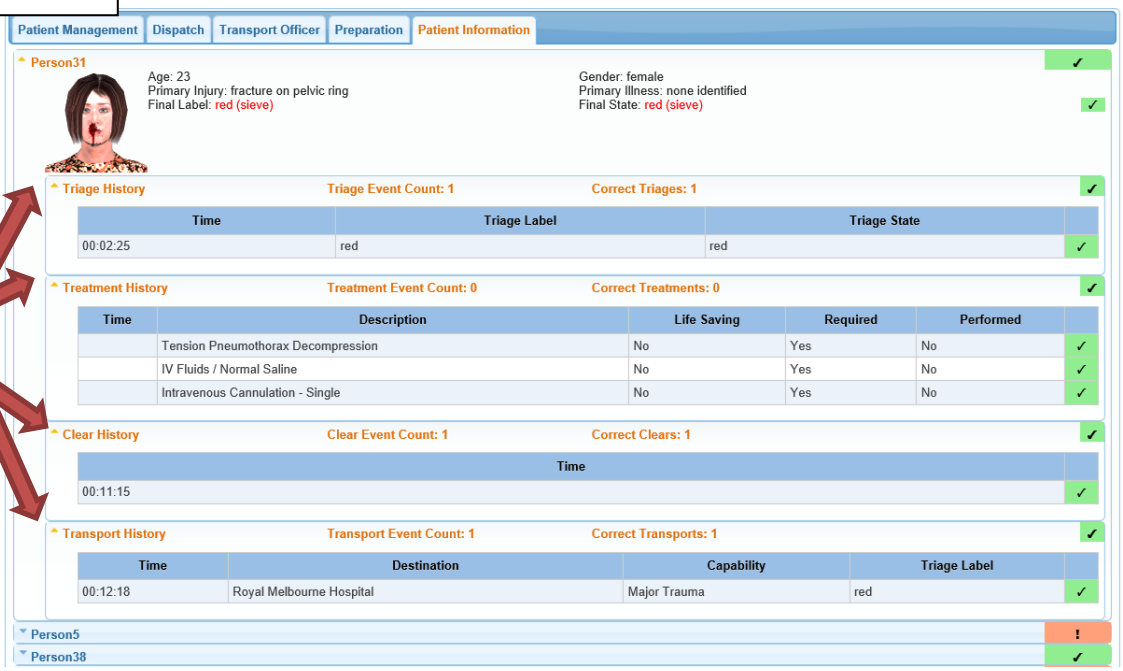
A summary tick or cross indicates the overall feedback for the management of each victim.

Clicking on a row will access additional details about a victim and their management.

You can also drill down on all triage decisions and treatment decision by clicking on the subsequent Triage History and Treatment History rows that appear under the victim detail.

Click on a victim's row to see more detail

Click on Triage, Treatment, Clear and Transport History headings to see more feedback



When reviewing patient information, the LMS includes some assessment feedback to consider. The legend below explains how to use this feedback

✓	A tick suggests that this was correct
X	A cross suggests that this was in-correct. For example, not undertaking a life saving treatment that the patient required; or sending a high priority patient to a low care hospital.
!	An exclamation suggests that you need to reflect on this action. For example sending a low priority patient to a high level care facility might be correct – if they were double loaded with a high priority patient.

NB: For the purposes of the triage process, life saving treatments are those that can be achieved quickly with large effect (eg opening airway, controlling major bleeding). As a general rule, in a mass casualty incident, treatments should be limited to life saving until sufficient resources are available to manage all patients.

HINT: *Remember to scroll down each tab of the results to see all your results. Also, some boxes (eg results on each overview item, each patient, and each dispatch communication) can also be scrolled to see additional information.*`

The Game Score mean

In order for you to see how you're improving we have included a game score. We have also included a multi-user high score table so you can compete against your colleagues. You can see the High Score page by clicking on the link in the scenario webpage.

While the scoring system is still being refined, you gain points for the following:

- Accuracy of triage
- Time to triage all patients
- Correctly applying life-saving treatment
- Providing Situation Reports inside the correct time intervals (check the AV Emergency Response Plan Specifications to see what they are!)
- Speed in completing the scenario

27. Additional information or reporting issues

If you need additional information, or would like to report any issues with Virtual Paramedic, please email Virtual.Paramedic@ambulance.vic.gov.au