10.1 LIFEVAC DEVICE INSTALLATION AT COMMUNITY FACILITES

Attachments: **1. Notice of Motion - LifeVac CoV Community Facilities**

RECOMMENDATION:

That Council

1. **APPROVES LifeVac® devices to be installed at Community Facilities;**

2. **NOTES that $9,000 be included in the 2025/2026 budget to purchase,install and maintain LifeVac® devices at Community Facilities; and**

3. **NOTES the implementation and evaluation of the LifeVac® devices at Community Facilities to occur throughout financial year 2025/2026.**

PURPOSE OF REPORT:

To seek Council endorsement to install LifeVac® devices at City of Vincent Community Facilities.

DELEGATION:

Not applicable. Council resolution required a report for Council determination on this matter.

BACKGROUND:

In January 2025, Councillor Nicole Woolf and Councillor Suzanne Worner received email correspondence from Mr Brian Bwoga of Beldon, Western Australia with a notice of motion to consider installation of LifeVac® devices in City managed facilities. Tragically, Mr Bwoga's son, ZaZa, lost his life on 15 January 2024 after choking on a grape at Burns Beach. Despite Mr Bwoga's attempts to apply CPR, and paramedics rushing to the scene, ZaZa passed away within five minutes. He is currently advocating for implementation of Lifevac® devices throughout local councils.

In May 2025, the Administration provided Council a comprehensive evaluation of the LifeVac® device with additional considerations and relevant costs related to its installation at City of Vincent Community Facilities **ATTACHMENT 1.** Council subsequently resolved the following –

That Council REQUESTS that:

1. *the CEO prepares a report outlining the costs, benefits and risks of installing LifeVac® airway clearance devices in City of Vincent Community Facilities, such as those where Automated External Defibrillators are installed; and*
2. *the report is provided to Council for consideration by August 2025, including a recommendation on whether to proceed with the installation of LifeVac devices at City of Vincent Community Facilities.*

DETAILS:

LifeVac® is a non-powered upper airway clearing device. It is listed for sale in Australia as a Class 1 Medical Device on the Australian Register of Therapeutic Goods (ARTG) and has been validated through post market and clinical review audits. The LifeVac® Airway clearance device has been documented in multiple peer reviewed medical publications and has undergone independent testing on safety, effectiveness, and ease of use. LifeVac® uses a patented one-way valve system that creates a powerful suction to remove blockages from the airway without pushing the object further down. It is intended to be used in an emergency when the standard current choking protocol has been followed without success and recommended for use on persons over 12 months of age.

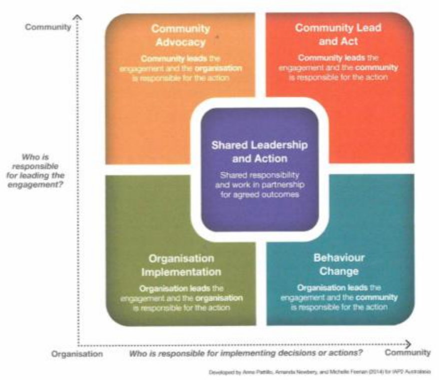
Administration's assessment concludes that LifeVac® devices do not replace first line treatment for chocking, however, could act as an additional tool should first line treatment be unsuccessful. These devices could dually support anyone administering first aid in an emergency.

It is recommended these devices be installed at Community Facilities where Automated External Defibrillators (AEDs) are located to ensure additional first aid equipment is available in emergency situations.

It is noted the availability of accessing the LifeVac® devices is limited, and several reviews of the product suggest there has been wait times up to 5 months for the product to arrive. It is therefore recommended the City acquire a surplus supply of the devices should any devices be damaged; these can then be easily replaced.

Whilst the devices are considered easy to use it is recommended that City staff at operated facilities be trained to use the device in emergency situations – for example Beatty Park Leisure Centre, Loftus Community Centre, Loftus Recreation Centre and Vincent Library and additional educational signage be investigated for inclusion at other sites.

CONSULTATION/ADVERTISING:



Community Advocacy

To achieve the desired action requires the response of a focal organisation because the community cannot achieve the desired result alone and, therefore, advocates to motivate the organisation to act.

Tension: Gap between what's wanted and what you can do or influence.
Mitigation: Showing you're willing to be their decision-makers' advocate.

Advocates have a transparent and genuine process to represent the needs and interests drawn from a diverse range of community members

Proactively communicate with advocates to understand their positions and processes

LEGAL/POLICY:

Nil

RISK MANAGEMENT IMPLICATIONS

Low: It is low risk for Council to approve LifeVac® devices to be installed at City of Vincent Community Facilities.

Risk Category	Risk Appetite / Tolerance Statement	Descriptor / clarification
Sustainable future for our community	The City supports investments, activities and developments that result in a sustainable future for our community while meeting the current needs of our residents. It recognises that this may at times involve accepting some degree of risk and is comfortable with this, subject to always ensuring that potential benefits and risks are fully understood before planning is approved and that appropriate measures to mitigate risk are established.	There is often a payoff. Proposals need to consider the risks and rewards based on the promises made to the community. This has been envisaged with the City's Project Management Framework implementation and future actions.
Activities against ratepayer values & ethics	The City has a ***very* low risk appetite** for investments and activities that do not align with the City's values.	The City has set its vision, purpose and guiding values based on the interpretation of those of the community it serves. When entering into new projects, investments and proposals, these values must be considered as one of the key consideration sets.

STRATEGIC IMPLICATIONS:

This is in keeping with the City's *Strategic Community Plan 2022-2032*:

<u>Enhanced Environment</u>

Our parks and reserves are maintained, enhanced and are accessible for all members of the community.

<u>Connected and Healthy Community</u>

We have enhanced opportunities for our community to build relationships and connections with each other and the City.
Our community facilities and spaces are well known and well used.
We are an inclusive, accessible and equitable City for all.
We protect, improve and promote public health and wellbeing within Vincent.

<u>Thriving Places</u>

Our town centres and gathering spaces are safe, easy to use and attractive places where pedestrians have priority.
We encourage innovation in business, social enterprise and imaginative uses of space, both public and private.

<u>Innovative and Accountable</u>

We embrace good ideas or innovative approaches to our work to get better outcomes for Vincent and our community.

SUSTAINABILITY IMPLICATIONS:

This does not contribute to any specific sustainability outcomes of the *City's Sustainable Environment Strategy 2019-2024,* however will play a significant role in supporting the City's Public Health Plan 2020-2025 outcomes.

PUBLIC HEALTH IMPLICATIONS:

This is in keeping with the following priority health outcomes of the City's *Public Health Plan 2020-2025*:

Reduced injuries and a safer community

Mitigate the impact of public health emergencies

FINANCIAL/BUDGET IMPLICATIONS:

The City currently has 14 AEDs located across 10 sites. The supply of Lifevac® devices at each of these sites would result in a total cost of approximately $2,270.00. Suitable housing for the 6 devices located in outdoor public spaces would incur an additional cost. The projected annual operating cost is $750.00 based on an assumption that 33% of the units (or components) may need to be replaced annually due to damage, deterioration or loss.

Component	Cost	Notes
10x LifeVac® Devices	$2,270	approx. maintenance cost $750.00 per year
3x replacement LifeVac®	$681	
Storage Cabinets	$2,000 - $5,000	Price dependent on facility (indoor/outdoor) and integration with AED storage.
Training	$500 - $1,000	
TOTAL	**$5,451 - $8,951**	

COMMENTS:

The installation of LifeVac® devices at City of Vincent Community Facilities represents a proactive and responsible measure to enhance emergency preparedness and community safety. While not a substitute for standard first aid protocols, LifeVac offers an additional, evidence-supported intervention in situations where conventional methods to relieve airway obstructions are unsuccessful.

Importantly, this initiative aligns with recent actions taken by neighbouring local governments, including the Cities of Joondalup, Wanneroo, and Swan, who have already approved the installation of LifeVac® devices within their community facilities. Their adoption of this device reflects a growing recognition across the sector of its potential to save lives and improve public health outcomes.

With modest upfront and ongoing costs, strong community advocacy, and clear alignment with the City's strategic objectives around safety, inclusion, and wellbeing, the implementation of LifeVac® devices demonstrates the City of Vincent's continued leadership and commitment to delivering responsive, community-focused services.

13.1 NOTICE OF MOTION - CR WOOLF AND CR WORNER - LIFEVAC DEVICES INSTALLED AT CITY OF VINCENT COMMUNITY FACILITIES

TRIM Ref: **D25/33974**

Attachments: **Nil**

That Council Requests that:

1. the CEO prepares a report outlining the costs, benefits and risks of installing LifeVac® airway clearance devices in City of Vincent Community Facilities, such as those where Automated External Defibrillators are installed.
2. the report is provided to Council for consideration by August 2025, including a recommendation on whether to proceed with the installation of LifeVac devices at City of Vincent Community Facilities.

REASON

On 6 January 2025, Councillor Nicole Woolf and Councillor Suzanne Worner received email correspondence from Mr Brian Bwoga of Beldon, Western Australia with a notice of motion to consider installation of LifeVac® devices in City managed facilities. Tragically, Mr Bwoga's son, ZaZa, lost his life on 15 January 2024 after choking on a grape at Burns Beach. Despite Mr Bwoga's attempts to apply CPR, and paramedics rushing to the scene, ZaZa passed away within five minutes. He is currently advocating for implementation of Lifevac® devices throughout local councils.

ADMINISTRATION COMMENTS

Supported.

LifeVac® is a non-powered upper airway clearing device. It is listed for sale in Australia as a Class 1 Medical Device on the Australian Register of Therapeutic Goods (ARTG) and has been validated through post-market and clinical review audits. LifeVac® airway clearance device has been documented in multiple peer-reviewed medical publications and has undergone independent testing on safety, effectiveness, and ease of use. LifeVac® uses a patented one-way valve system that creates a powerful suction to remove blockages from the airway without pushing the object further down. It is intended to be used in an emergency when the standard current choking protocol has been followed without success and recommended for use on persons over 12 months of age.

In Australia, choking is the second leading cause of accidental death in children under 14 years (11.1%) and the leading cause of accidental death in children under 1 year old, accounting for 40 child deaths annually. Choking is also the second leading cause of premature death in aged care in Australia (8%). Additionally, over 11 million Australians are susceptible to choking due to pregnancy, age, and/or profound disability, obesity, or being alone. In the first four minutes of an airway obstruction, brain damage is possible. In the next 4-6 minutes brain damage is likely and in 6-10 minutes brain damage is probable.

There were 1,500 hospitalisations in 2020/2021 within Australia due to choking or suffocation injuries (5.6% per 100,000 population), with 1,200 (4.6% per 100,000) deaths occurring. This represents 9% of injury deaths and 0.3% of injury hospitalisations. Rates of death due to choking and suffocation were highest for people aged 65 and over, while children aged zero to four had the highest rates of hospitalisation compared with other life-stage age groups.

LifeVac® is classified as a single use device to avoid contamination, however, if LifeVac® is used in an emergency, it will be replaced free of charge. The device is made of durable materials with an expected shelf life of over 5 years. The device can be used by anyone in an emergency and there are reports of hundreds of children who have been saved by parents with no training. Video and an online training course are available if required.

Lifevac® does not replace first line treatment for choking. First aid courses generally prescribe for the treatment of choking back blows followed by chest thrusts. The device is intended as an additional tool when first line treatment is unsuccessful.

Royal Life Saving Society WA were contacted by City of Joondalup for comment on the LifeVac® airway clearance device and were advised of the following: "*The National office of the Royal Life Saving Society advised that they focus their training on established procedures; encouraging coughing, back blows and* *chest thrusts. There is limited evidence of efficacy and concern the devices could/can cause additional harm if not used appropriately or if delaying the use of established procedures*."

Associated Costs

The City currently has 14 AEDs located across 10 sites. The supply of Lifevac® devices at each of these sites would result in a total cost of approximately $2,270.00. Suitable housing for the 6 devices located in outdoor public spaces would incur an additional cost. The projected annual operating cost is $750.00 based on an assumption that 33% of the units (or components) may need to be replaced annually due to damage, deterioration or loss.

Considerations

LifeVac® airway clearance devices need to be easily accessible to maximise effectiveness. In a similar way to Automated External Defibrillators (AEDs), the units would need to be checked regularly for damage and deterioration. If units are wall mounted, they may need to be housed in similar storage cabinets as those used for AEDs to protect from being damaged or removed.

Precedence

1. City of Joondalup voted and approved installation of LifeVac® devices in 38 council facilities, alongside defibrillators. See page 89: 22 October 2024 - Council Agenda LifeVac®.pdf

   At a meeting on 25 June 2024 the Council resolved the following: "*That Council requests the Chief Executive Officer to prepare a report examining the costs and benefits of the City installing LifeVac airway clearance devices in City managed facilities*."

   At a subsequent meeting on 22 October 2024, the Council agreed to install LifeVac airway clearance devices within its 35 community-based venues at an estimated cost of $5,200 (excluding GST) with an anticipated annual operating cost of around $1,700 (excluding GST) to replace used units and the potential loss of units (based on an the assumption that 33% of the units may need replacing per year due to them being damaged, elements within the kit being removed or through legitimate use).

   Advice from the City's insurers was that the City may be liable if the device is in a state of disrepair, not maintained or not available at the time when required to be used by a patron.

   The following comment was made: "*Any piece of equipment that aids dislodging a blocked airway is worth exploring. The LifeVac airway clearance device is approved through the Australian Register of Therapeutic Goods (ARTG) for sale in Australia as a Class 1 Medical Device; however, noting the comments from the National office of the Royal Life Saving Society*."

2. City of Wanneroo passed a Notice of Motion Tuesday 22 November 2024 for the Chief Executive Officer to prepare a report to examine the cost and benefits of installing LifeVac® devices in City managed facilities, with the report proposed to be tabled in March 2025.
   See: https://wanneroo.infocouncil.biz/Open/2024/11/OC_12112024_AGN_AT.HTM#_Toc181950661
   Consideration would be given as to whether LifeVac® airway clearance devices and Automatic External Defibrillators should be installed at City of Wanneroo community venues. Currently 10 of the City's community centres and facilities have AEDs, but there are 20 community locations that do not.

   To assist in preparing this notice of motion, conversations occurred between Mr Brian Bwogo, a City of Joondalup Councillor, and the Manager of Community Facilities.

   The following comment was made: "*The creation of a discussion paper addressing the costs and benefits of installing LifeVac airway clearance devices and AEDs would allow Council to make an informed decision as to whether they would support the installation of such devices at community facilities.*"

   The Council requested the Chief Executive Officer to prepare a report examining the costs and benefits of the City of Wanneroo installing LifeVac airway clearance devices and Automatic External Defibrillators in City of Wanneroo's managed facilities.

3. Mr Bwoga has advised recently that City of Swan passed a motion around LifeVac® devices. It is understood that LifeVac® devices will be installed alongside/in proximity to defibrillators.

Peer Reviewed Literature

1. Dunne CL, Osman S, Viguers K, Queiroga AC, Szpilman D, Peden AE. Phase One of a Global Evaluation of Suction-Based Airway Clearance Devices in Foreign Body Airway Obstructions: A Retrospective Descriptive Analysis. International Journal of Environmental Research and Public Health. 2022; 19(7):3846.

Conclusion: *Non-invasive and minimally invasive ACDs are novel interventions with positive initial findings. Prospective evaluation, independent of manufacturers, that improves data quality will further determine the devices respective roles in the response of healthcare workers and lay rescuers to a choking person.*

2. Patterson E, Tang H, Ji C, Perkins GD, Couper K. The efficacy and usability of suction-based airway clearance devices for foreign body airway obstruction: a manikin randomised crossover trial. Resuscitation Plus. 2021; 5: 100067.

   Conclusion: *In this manikin study, we found that, compared with abdominal thrusts, the success rate for foreign body airway obstruction removal was higher in the LifeVac® group but not in the Dechoker group.*

   (Additional information - The Dechoker has not undergone TGA post-market review or clinical review for safety and efficacy. The Dechoker was rejected by the peak international resuscitation body, ILCOR, as having inherent risk due to insertion of the device into the mouth.)

3. Gal LL, Pugliesi P, Peterman D. Resuscitation of Choking Victims in a Paediatric Population Using a Novel Portable Non-Powered Suction Device: Real-World Data. Pediatr Ther.2020; 10.371.

   Conclusion: *These cases describe the successful use of the device in paediatric patients who experienced a choking emergency. This study is limited by a reliance on user-reported data; although no device failures have been reported to date, we cannot definitively declare that they have not occurred. Based on these findings, and the data collected from adult subjects, use of this device during choking emergencies should be studied further.*

4. McKinley MJ, Deede J and Markowitz B. Use of a Novel Portable Non-Powered Suction Device in Patients With Oropharyngeal Dysphagia During a Choking Emergency. Front. Med. 2022; 8:742734.

   Conclusion: *This portable, non-powered suction device may be useful in resuscitating patients with oropharyngeal dysphagia who are choking. The reported cases describe successful use of the device in real-world settings with minimal risk. Resuscitating patients with oropharyngeal dysphagia using this device may be a viable option when abdominal thrusts or back blows fail to resolve a choking emergency.*

5. Patel PB, Shapiro NL. Portable, non-powered, suction-generating device for management of life-threatening aerodigestive tract foreign bodies: Novel prototype and literature review. International Journal of Paediatric Otorhinolaryngology. 2019; 118, 31-35.

   Conclusion: *PNSDs may play an important role in the emergent, non-operative, pre-hospital management of upper aerodigestive tract foreign body aspiration, particularly in settings and populations with high choking risk. Further characterization of effectiveness and safety in larger cadaveric or simulation studies mimicking physiologic conditions is indicated.*

6. Saperstein DM, Pugliesi PR, Ulteig C, Schreiber N. Successful Use of a Novel Device Called the LifeVac® ton Resuscitate Choking Victims World-wide Results (Case Report). International Journal of Clinical Skills. 2018; 12(3), 216-219.

   Conclusion: *The use of LifeVac® has huge potential to save thousands of people from choking, including more susceptible populations such as children and the elderly. It can be used by EMS in the field, and the device could prove valuable in hospitals, nursing homes, day care centres, and other settings. Based on these encouraging results the LifeVac® device should be considered as an option during a choking emergency when standard protocol fails.*

7. Ramaswamy A, Done A, Solis R, Srikanth M, Olinde L, Belafsky P. The efficacy of two commercially available devices for airway foreign body relief: A cadaver study. Laryngoscope Investig Otolaryngol. 2023 Apr 22;8(3):708-711.

   Conclusion: *Upon testing the efficacy of these two portable, non-powered suction devices (PNSDs) in a fresh frozen cadaver, we find the LifeVac to be effective in removing only barium moistened saltines. Despite previous data indicating the potential efficacy of these PNSDs, we stress the very low certainty of this evidence and high risk of bias. Our findings suggest that the LifeVac should not replace abdominal thrusts and back blows as the treatment of choice for choking. Further independent studies must be conducted before these devices can be marketed as a secondary treatment option.*

   (Additional information - This study contains several limitations. They did not have comparative data on the efficacy of PNSDs to traditional methods and therefore cannot conclude which has higher efficacy. Additionally, they could not replicate the time-critical event that is choking. It was reported that a live animal trial may provide a better model for tissue effects of these devices in more realistic clinical circumstances.)

Media Reports and Supporting Information

- https://www.perthnow.com.au/news/wa/LifeVac®-city-of-joondalup-to-implement-anti-choking-device-in-community-venues-c-16336462
- https://www.9news.com.au/national/zazas-legacy-perth-council-to-install-lifesaving-devices-after-toddlers-choking-death/688d0231-c18b-4751-a9c0-1ca2e8aeb714
- https://omny.fm/shows/perth-live/perth-council-to-install-anti-choking-devices-afte
- https://LifeVac®.net.au/pages/choking-awareness-and-support#:~:text=ZaZa's%20Law,endure%20such%20a%20tragic%20loss.
- https://www.change.org/p/zaza-s-law