



Parkdale Preschool Association Inc A-0003637F

ANAPHYLAXIS POLICY

Mandatory – Quality Area 2

ELAA acknowledges the contribution of the Department of Allergy and Immunology at The Royal Children's Hospital Melbourne, Allergy & Anaphylaxis Australia Inc and Department of Education and Training (DET) in the development of this policy.

PURPOSE

This policy will provide guidelines to:

- minimise the risk of allergic reaction resulting in anaphylaxis occurring while children are in the care of Parkdale Preschool
- ensure that service staff respond appropriately to anaphylaxis by following the child's ASCIA action plan for anaphylaxis, Australasian Society of Clinical Immunology and Allergy (ASCIA)
- raise awareness of anaphylaxis and its management amongst all at the service through education and policy implementation.
- This policy should be read in conjunction with the *Dealing with Medical Conditions Policy*.

POLICY STATEMENT

1. VALUES

Parkdale Preschool believes that the safety and wellbeing of children who are at risk of anaphylaxis is a whole-of-community responsibility, and is committed to:

- providing a safe and healthy environment in which children at risk of anaphylaxis can participate fully in all aspects of the program
- raising awareness of families, staff, children and others attending the service about allergies and anaphylaxis
- actively involving the parents/guardians of each child at risk of anaphylaxis in assessing risks, and in developing risk minimisation and risk management strategies for their child
- ensuring all staff members and other adults at the service have adequate knowledge of allergies, anaphylaxis and emergency procedures
- facilitating communication to ensure the safety and wellbeing of children at risk of anaphylaxis.

2. SCOPE

This policy applies to the Approved Provider, Nominated Supervisor, Persons with Management or Control, Persons in Day to Day Charge, educators, staff, students on placement, volunteers, parents/guardians, children and others attending the programs and activities of Parkdale Preschool. This policy will apply regardless of whether a child diagnosed by a registered medical practitioner as being at risk of anaphylaxis is enrolled at the service.

3. BACKGROUND AND LEGISLATION

Background

Anaphylaxis is a severe and potentially life-threatening allergic reaction. Up to two per cent of the general population and up to ten per cent of children are at risk. The most common causes of allergic reaction in young children are eggs, peanuts, tree nuts, cow's milk, fish, shellfish, soy, wheat and sesame, bee or other insect stings, and some medications. A reaction can develop within minutes of

exposure to the allergen and young children may not be able to identify or articulate the symptoms of anaphylaxis. With planning and training, a reaction can be treated effectively by using an adrenaline auto-injection device, often called an EpiPen® or an Anapen®.

In any service that is open to the general community it is not possible to achieve a completely allergen-free environment. A range of procedures and risk minimisation strategies, including strategies to minimise the presence of allergens in the service, can reduce the risk of anaphylactic reactions.

Legislation that governs the operation of approved children's services is based on the health, safety and welfare of children, and requires that children are protected from hazards and harm. The Approved Provider will ensure that there is at least one educator on duty at all times who has current approved anaphylaxis management training in accordance with the *Education and Care Services National Regulations 2011* (Regulation 136(1)(b)). As a demonstration of duty of care and best practice, ELAA recommends all educators have current approved anaphylaxis management training (refer to *Definitions*). Approved anaphylaxis management training is listed on the ACECQA website (refer to *Sources*).

Legislation and standards

Relevant legislation and standards include but are not limited to:

- *Education and Care Services National Law Act 2010*: Sections 167, 169
- *Education and Care Services National Regulations 2011*: Regulations 90–96, 102, 136, 137, 146, 147, 160–162, 168(2)(d), 173, 177, 181, 183, 184, 246
- *Health Records Act 2001* (Vic),
- *National Quality Standard*, including Quality Area 2: Children's Health and Safety
- *Occupational Health and Safety Act 2004* (Vic),
- *Privacy and Data Protection Act 2014* (Vic)
- *Privacy Act 1988* (Cth)
- *Public Health and Wellbeing Act 2008* (Vic)
- *Public Health and Wellbeing Regulations 2009* (Vic)

The most current amendments to listed legislation can be found at:

- Victorian Legislation – Victorian Law Today: <http://www.legislation.vic.gov.au/>
- Commonwealth Legislation – ComLaw: <http://www.comlaw.gov.au/>

4. DEFINITIONS

The terms defined in this section relate specifically to this policy. For commonly used terms e.g. Approved Provider, Nominated Supervisor, Regulatory Authority etc. refer to the *General Definitions* section of this manual.

Adrenaline auto-injection device: An intramuscular injection device containing a single dose of adrenaline designed to be administered by people who are not medically trained. This device is commonly called an EpiPen® or an Anapen®. As EpiPen® and Anapen® products have different administration techniques, only one brand should be prescribed per individual and their anaphylaxis medical management action plan (refer to *Definitions*) must be specific for the brand they have been prescribed. Used adrenaline auto-injectors should be given to the ambulance officers to go with the child to the hospital.

Adrenaline auto-injector kit: An insulated container with an unused, in-date adrenaline auto-injection device, a copy of the child's anaphylaxis medical management action plan, and telephone contact details for the child's parents/guardians, doctor/medical personnel and the person to be notified in the event of a reaction if the parents/guardians cannot be contacted. If prescribed, an antihistamine should also be included in the kit. Auto-injection devices must be stored away from direct heat and cold.

Allergen: A substance that can cause an allergic reaction.

Allergy: An immune system response to something in the environment which is usually harmless, eg: food, pollen, dust mite. These can be ingested, inhaled, injected or absorbed.

Allergic reaction: A reaction to an allergen. Common signs and symptoms include one or more of the following:

- **Mild to moderate signs & symptoms:**
 - hives or welts
 - tingling mouth, swelling of the face, lips & eyes
 - abdominal pain, vomiting and/or diarrhoea are mild to moderate symptoms , however these are severe reactions to insects.
- **Signs & symptoms of anaphylaxis are:**
 - difficult/noisy breathing, swelling of the tongue
 - swelling/tightness in the throat
 - difficulty talking and/or hoarse voice
 - wheeze or persistent cough
 - persistent dizziness or collapse (child pale or floppy).

AV How to Call Card: A card that the service has completed containing all the information that Ambulance Victoria will request when phoned on 000. Once completed, this card should be kept within easy access of all service telephone/s.

Anapen®: A type of adrenaline auto-injection device (refer to *Definitions*) containing a single dose of adrenaline. The administration technique in an Anapen® is different to that of the EpiPen®. Two strengths are available: an Anapen® and an Anapen Jr®, and each is prescribed according to a child's weight. The Anapen Jr® is recommended for a child weighing 10–20kg. The Anapen® is recommended for use when a child weighs more than 20kg. The child's medical management action plan (refer to *Definitions*) must be specific for the brand they have been prescribed.

Anaphylaxis: A severe, rapid and potentially fatal allergic reaction that affects normal functioning of the major body systems, particularly the respiratory (breathing) and/or circulation systems.

Anaphylaxis medical management action plan (sometimes simply referred to as an Action Plan): An individual medical management plan prepared and signed by the child's treating, registered medical practitioner that provides the child's name and allergies, a photograph of the child, a description of the prescribed anaphylaxis medication for that child and clear instructions on treating an anaphylactic episode. The plan must be specific for the brand of auto-injection device prescribed for each child. Examples of plans specific to different adrenaline auto-injector brands are available for download on the Australasian Society of Clinical Immunology and Allergy (ASCIA) website: www.allergy.org.au/health-professionals/anaphylaxis-resources/ascia-action-plan-for-anaphylaxis

Anaphylaxis management training: Training that includes recognition of allergic reactions, strategies for risk minimisation and risk management, procedures for emergency treatment and facilitates practise in the administration of treatment using an adrenaline auto-injection device (refer to *Definitions*) trainer. Approved training is listed on the ACECQA website (refer to *Sources*).

Approved anaphylaxis management training: Training that is approved by the National Authority in accordance with Regulation 137(e) of the *Education and Care Services National Regulations 2011*, and is listed on the ACECQA website (refer to *Sources*).

At-risk child: A child whose allergies have been medically diagnosed and who is at risk of anaphylaxis.

Communication plan: A plan that forms part of the policy outlining how the service will communicate with parents/guardians and staff in relation to the policy. The communication plan also describes how

parents/guardians and staff will be informed about risk minimisation plans and emergency procedures to be followed when a child diagnosed as at risk of anaphylaxis is enrolled at a service. A risk minimisation and communication plan template is provided as Attachment 2.

Duty of care: A common law concept that refers to the responsibilities of organisations to provide people with an adequate level of protection against harm and all reasonable foreseeable risk of injury.

EpiPen®: A type of adrenaline auto-injection device (refer to *Definitions*) containing a single dose of adrenaline which is delivered via a spring-activated needle that is concealed until administration is required. Two strengths are available: an EpiPen® and an EpiPen Jr®, and each is prescribed according to a child's weight. The EpiPen Jr® is recommended for a child weighing 10–20kg. An EpiPen® is recommended for use when a child weighs more than 20kg. The child's anaphylaxis medical management action plan (refer to *Definitions*) must be specific for the brand they have been prescribed.

First aid management of anaphylaxis course: Accredited training in first aid management of anaphylaxis including competency in the use of an adrenaline auto injector

Intolerance: Often confused with allergy, intolerance is an adverse reaction to ingested foods or chemicals experienced by the body but not involving the immune system.

No food sharing: A rule/practice in which a child at risk of anaphylaxis only eats food that is supplied/permitted by their parents/guardians and does not share food with, or accept food from, any other person.

Nominated staff member: (In relation to this policy) a staff member nominated to be the liaison between parents/guardians of a child at risk of anaphylaxis and the Approved Provider. This person also checks regularly to ensure that the adrenaline auto-injector kit is complete and that the device itself is unused and in date, and leads practice sessions for staff who have undertaken anaphylaxis management training.

Risk minimisation: The practice of developing and implementing a range of strategies to reduce hazards for a child at risk of anaphylaxis, by removing, as far as is practicable, major allergen sources from the service.

Risk minimisation plan: A service-specific plan that documents a child's allergy, practical strategies to minimise risk of exposure to allergens at the service and details of the person/s responsible for implementing these strategies. A risk minimisation plan should be developed by the Approved Provider/Nominated Supervisor in consultation with the parents/guardians of the child at risk of anaphylaxis and service staff. The plan should be developed upon a child's enrolment or initial diagnosis, and reviewed at least annually and always on re-enrolment. A risk minimisation and communication plan template is provided as Attachment 2.

Staff record: A record which the Approved Provider of a centre-based service must keep containing information about the Nominated Supervisor, staff, volunteers and students at a service, as set out under Division 9 of the National Regulations.

5. SOURCES AND RELATED POLICIES

Sources

- ACECQA provides lists of approved first aid training, approved emergency asthma management training and approved anaphylaxis management training on their website: <https://www.acecqa.gov.au/qualifications/nqf-approved>
- Allergy & Anaphylaxis Australia Inc is a not-for-profit support organisation for families of children with food-related anaphylaxis. Resources include a telephone support line and items available for sale including storybooks, tapes and EpiPen® trainers. www.allergyfacts.org.au
- Australasian Society of Clinical Immunology and Allergy (ASCIA): www.allergy.org.au
Provides information and resources on allergies. Action Plans for Anaphylaxis and a procedure for

the First Aid Treatment for Anaphylaxis can be downloaded from this site. Contact details of clinical immunologists and allergy specialists are also provided.

- Department of Allergy and Immunology at The Royal Children's Hospital Melbourne provides information about allergies and services available at the hospital. This department can evaluate a child's allergies and provide an adrenaline auto-injector prescription. Kids Health Info fact sheets are also available from the website including the following:
- *Allergic and anaphylactic reactions* (July 2019):
www.rch.org.au/kidsinfo/factsheets.cfm?doc_id=11148
- The Royal Children's Hospital has been contracted by the Department of Education and Training (DET) to provide an Anaphylaxis Advice and Support Line to central and regional DET staff, school principals and representatives, school staff, children's services staff and parents/guardians wanting support. They can be contacted on 1300 725 911 or 9345 4235, or by email: carol.whitehead@rch.org.au

Service policies

- *Administration of First Aid Policy*
- *Asthma Policy*
- *Dealing with Medical Conditions Policy*
- *Diabetes Policy*
- *Enrolment and Orientation Policy*
- *Excursions and Service Events Policy*
- *Food Safety Policy*
- *Hygiene Policy*
- *Incident, Injury, Trauma and Illness Policy*
- *Inclusion and Equity Policy*
- *Nutrition and Active Play Policy*
- *Privacy and Confidentiality Policy*

PROCEDURES

The Approved Provider or Persons with Management and Control is responsible for:

- following appropriate reporting procedures set out in the *Incident, Injury, Trauma and Illness Policy* in the event that a child is ill, or is involved in a medical emergency or an incident at the service that results in injury or trauma
- ensuring that an anaphylaxis policy, which meets legislative requirements is developed and available at the service, and reviewed regularly
- providing approved anaphylaxis management training (refer to *Definitions*) to staff as required under the National Regulations and ensuring the details are included on the staff record (refer to *Definitions*), (Regulations 146, 147)
- ensuring that at least one educator with current approved anaphylaxis management training (refer to *Definitions*) is in attendance and immediately available at all times the service is in operation (Regulations 136, 137)
- ensuring that staff practice administration of treatment for anaphylaxis using an adrenaline auto-injection device trainer at least annually, and preferably quarterly, and that participation is documented in staff meeting minutes.
- ensuring that parents/guardians or a person authorised in the enrolment record provide written consent to the medical treatment or ambulance transportation of a child in the event of an emergency (Regulation 161), and that this authorisation is kept in the enrolment record for each child.

- ensuring the Nominated Supervisor, educators, staff members, students and volunteers at the service are provided with a copy of the *Anaphylaxis Policy* and the *Dealing with Medical Conditions Policy*
- ensuring parents/guardians and others at the service are provided with a copy of the *Anaphylaxis Policy* and the *Dealing with Medical Conditions Policy* (Regulation 91)
- ensuring that parents/guardians or a person authorised in the child's enrolment record provide written authorisation for excursions outside the service premises (Regulation 102) (refer to *Excursions and Service Events Policy*)
- following appropriate reporting procedures set out in the *Incident, Injury, Trauma and Illness Policy* in the event that a child is ill, or is involved in a medical emergency or an incident at the service that results in injury or trauma.
- identifying children at risk of anaphylaxis during the enrolment process and informing staff

In services where a child diagnosed as at risk of anaphylaxis is enrolled, the Approved Provider is also responsible for:

- displaying a notice prominently at the service stating that a child diagnosed as at risk of anaphylaxis is being cared for and/or educated by the service (Regulation 173(2)(f))
- ensuring parents/guardians of children at risk of anaphylaxis are provided with a copy of the *Anaphylaxis Policy* and the *Dealing with Medical Conditions Policy* (Regulation 91)
- ensuring an anaphylaxis medical management action plan, risk management and communication plan (refer to Attachment 2) is developed for each child at the service who has been diagnosed as at risk of anaphylaxis, in consultation with that child's parents/guardians and with a registered medical practitioner. These must be filed with the child's enrolment record (Regulation 162)
- ensuring a medication record is kept for each child to whom medication is to be administered by the service (Regulation 92)
- ensuring parents/guardians of all children at risk of anaphylaxis provide an unused, in-date adrenaline auto-injection device at all times their child is attending the service. Where this is not provided, the child will be unable to attend the service
- ensuring that the child's anaphylaxis medical management action plan is specific to the brand of adrenaline auto-injection device prescribed by the child's medical practitioner
- ensuring the expiry date of any adrenaline auto-injection devices are checked regularly and replaced when required and the liquid in the EpiPen/EpiPen Jnr is clear
- ensuring the the communication plan is implemented and encouraging ongoing communication between parents/guardians and staff regarding the current status of the child's allergies, this policy and its implementation
- identifying and minimising allergens (refer to *Definitions*) at the service and developing risk minimisation procedures such as preventing cross-contamination of any food given to children diagnosed as at risk of anaphylaxis (refer to *Nutrition and Active Play Policy* and *Food Safety Policy*)
- ensuring that children at risk of anaphylaxis are not discriminated against in any way
- ensuring that children at risk of anaphylaxis can participate in all activities safely and to their full potential
- ensuring that medication is not administered to a child at the service unless it has been authorised and administered in accordance with Regulations 95 and 96 (refer to *Administration of Medication Policy* and *Dealing with Medical Conditions Policy*)
- ensuring that parents/guardians of a child and emergency services are notified as soon as is practicable if medication has been administered to that child in an anaphylaxis emergency without authorisation from a parent/guardian or authorised nominee (Regulation 94) and that written notice is given to a parent/guardian as soon as is practicable
- ensuring that a medication record is kept that includes all details required by Regulation 92(3) for each child to who medication is to be administered

- ensuring that written notice is given to a parent/guardian as soon as is practicable if medication is administered to a child in the case of an emergency
- responding to complaints and notifying DET, in writing and within 24 hours, of any incident or complaint in which the health, safety or wellbeing of a child may have been at risk
- displaying the Australasian Society of Clinical Immunology and Allergy (ASCIA) (refer to *Sources*) generic poster *Action Plan for Anaphylaxis* in key locations at the service
- displaying Ambulance Victoria's *AV How to Call Card* (refer to *Definitions*) near service telephones
- ensuring that educators/staff who accompany children at risk of anaphylaxis outside the service carry each child's fully equipped adrenaline auto-injector kit (refer to *Definitions*) including a copy of their anaphylaxis medical management action plan.

Risk assessment

The National Law and National Regulations do not require a service to maintain a stock of adrenaline auto-injection devices at the service premises to use in an emergency. However, ELAA recommends that the Approved Provider undertakes a risk assessment in consultation with the Nominated Supervisor and other educators, to inform a decision on whether the service should carry its own supply of these devices. This decision will also be informed by considerations such as distance to the nearest medical facility and response times required for ambulance services to reach the service premises etc.

If the Approved Provider decides that the service should maintain its own supply of adrenaline auto-injection devices, it is the responsibility of the Approved Provider to ensure that:

- adequate stock of the adrenaline auto-injection device is on hand, and that it is unused and in date
- appropriate procedures are in place to define the specific circumstances under which the device supplied by the service will be used
- the device is administered by an educator with approved anaphylaxis management training
- the service follows the procedures outlined in the *Administration of Medication Policy*, which explains the steps to follow when medication is administered to a child in an emergency
- parents/guardians are informed that the service maintains a supply of adrenaline auto-injection devices, of the brand that the service carries and of the procedures for the use of these devices in an emergency.

The Nominated Supervisor or Person in Day to Day Control is responsible for:

- ensuring that all educators' approved first aid qualifications, anaphylaxis management training and emergency asthma management training are current, meet the requirements of the National Act (Section 169(4)) and National Regulations (Regulation 137), and are approved by ACECQA (refer to *Sources*)
- ensuring that medication is not administered to a child at the service unless it has been authorised and administered in accordance with Regulations 95 and 96 (refer to *Dealing with Medical Conditions Policy*)
- ensuring that parents/guardians of a child and emergency services are notified as soon as is practicable if medication has been administered to that child in an anaphylaxis emergency without authorisation from a parent/guardian or authorised nominee (Regulation 94)
- ensuring that all persons involved in the program, including parents/guardians, volunteers and students on placement are aware of children diagnosed as at risk of anaphylaxis
- ensuring each child's adrenaline auto-injector kit (refer to *Definitions*) is taken on all excursions and other offsite activities (refer to *Excursions and Service Events Policy*)
- compiling a list of children at risk of anaphylaxis (with details of their allergies) and placing it in readily accessible locations known to all staff including casual and relied staff. The anaphylaxis medical management action plan for each child must be kept securely in the child's enrolment record and a copy in their adrenaline auto-injector kit (allergy buddy pouch).

- organising anaphylaxis management information sessions or other appropriate information to the preschool community about resources and support for managing allergies and anaphylaxis as required
- ensuring programmed activities and experiences take into consideration the individual needs of all children, including children diagnosed as at risk of anaphylaxis
- ensuring used adrenaline auto-injection devices are sent with the child to hospital, with the time of injection written on the case if possible.
- ensuring that each child's adrenaline auto-injector kit (allergy buddy pouch) is stored in a location that is known to all staff, including casual and relief staff, is easily accessible to adults both indoors and outdoors (not locked away) but inaccessible to children, and away from direct sources of heat and cold
- ensuring that parents/guardians or an authorised person named in the child's enrolment record provide written authorisation for children to attend excursions outside the service premises (Regulation 102) (refer to *Excursions and Service Events Policy*)
- complying with identified risk minimisation procedures

Educators and staff are responsible for:

- reading and complying with the *Anaphylaxis Policy* and the *Dealing with Medical Conditions Policy*
- maintaining current approved anaphylaxis management qualifications (refer to *Definitions*)
- practising the administration of an adrenaline auto-injection device using an auto-injection device trainer and 'anaphylaxis scenarios' on a regular basis, at least annually and preferably quarterly
- knowing which children are diagnosed as at risk of anaphylaxis, their allergies and symptoms, and the location of their adrenaline auto-injector kits (allergy buddy pouch), and medical management action plans as well as following these plans in the event of a reaction
- identifying and minimising allergens (refer to *Definitions*) at the service and developing risk minimisation procedures such as preventing cross-contamination of any food given to children diagnosed as at risk of anaphylaxis (refer to *Nutrition and Active Play Policy* and *Food Safety Policy*)
- developing a risk minimisation and communication plan for children diagnosed as at risk of anaphylaxis in their group, as needed
- ensuring used adrenaline auto-injection devices are sent with the child to hospital, with the time of injection written on the case wherever possible
- following appropriate first aid procedures in the event that a child who has not been diagnosed as at risk of anaphylaxis appears to be having an anaphylactic episode
- informing the Approved Provider and the child's parents/guardians following an anaphylactic episode
- taking the adrenaline auto-injector kit (refer to *Definitions*) for each child at risk of anaphylaxis on excursions or to other offsite service events and activities
- contacting parents/guardians immediately if an unused, in-date adrenaline auto-injection device has not been provided to the service for a child diagnosed as at risk of anaphylaxis. Where this is not provided, children will be unable to attend the service
- discussing with parents/guardians, the requirements for completing the enrolment form and medication record for their child
- consulting with the parents/guardians of children diagnosed as at risk of anaphylaxis in relation to the health and safety of their child, and communicating any concerns
- ensuring that children diagnosed as at risk of anaphylaxis are not discriminated against in any way and are able to participate fully in all activities.

Parents/guardians of a child at risk of anaphylaxis are responsible for:

- informing staff, either on enrolment or on initial diagnosis, of their child's allergies

- completing all details on the child's enrolment form, including medical information and written authorisations for medical treatment, ambulance transportation and excursions outside the service premises
- assisting the Approved Provider and educators to develop an anaphylaxis risk minimisation and communication plan (refer to Attachment 2)
- providing staff with an anaphylaxis medical management action plan signed by a registered medical practitioner and with written consent to use medication prescribed in line with this action plan
- providing staff with an unused, in-date and complete adrenaline auto-injector kit that does not expire until after the end of the preschool year and complying with the service's policy where a child who has been prescribed an adrenaline auto-injection device is not permitted to attend the service or its programs without that device
- ensuring that the child's anaphylaxis medical management action plan is specific to the brand of adrenaline auto-injection device prescribed by the child's medical practitioner
- assisting staff by providing information and answering questions regarding their child's allergies
- notifying staff of any changes to their child's allergy status and providing a new anaphylaxis medical management action plan in accordance with these changes
- communicating all relevant information and concerns to staff, particularly in relation to the health of their child
- complying with the identified risk minimisation procedures (see Attachment 1)
- ensuring they are aware of the procedures for first aid treatment for

Parents/guardians are responsible for:

- reading and complying with this policy and all procedures, including those outlined in Attachment 1
- bringing relevant issues and concerns to the attention of both staff and the Approved Provider.

Volunteers and students, while at the service, are responsible for following this policy and its procedures.

EVALUATION

In order to assess whether the values and purposes of the policy have been achieved, the Approved Provider will:

- regularly seek feedback from everyone affected by the policy regarding its effectiveness
- monitor the implementation, compliance, complaints and incidents in relation to this policy
- keep the policy up to date with current legislation, research, policy and best practice
- revise the policy and procedures as part of the service's policy review cycle or following an anaphylactic episode at the service, or as otherwise required
- notify parents/guardians at least 14 days before making any changes to this policy or its procedures.

ATTACHMENTS

- Attachment 1: Risk minimisation procedures
- Attachment 2: Risk Minimisation and Communication Plan Template
- Attachment 3: First Aid Treatment for Anaphylaxis – download from the Australasian Society of Clinical Immunology and Allergy:

<http://www.allergy.org.au/health-professionals/anaphylaxis-resources/first-aid-for-anaphylaxis>

AUTHORISATION

This policy was adopted by the Approved Provider of Parkdale Preschool on 11th June 2020

REVIEW DATE: JUNE 2022