



# UPPER MURRAY SUMMER BUSHFIRES 2019 – 2020 AFFECTS ON THE NURSING DYAD

Louise Middleton,  
MCHN/RN/Midwife/RIPRN  
Endorsed Scheduled Medicines,  
Nurse Xray Operator

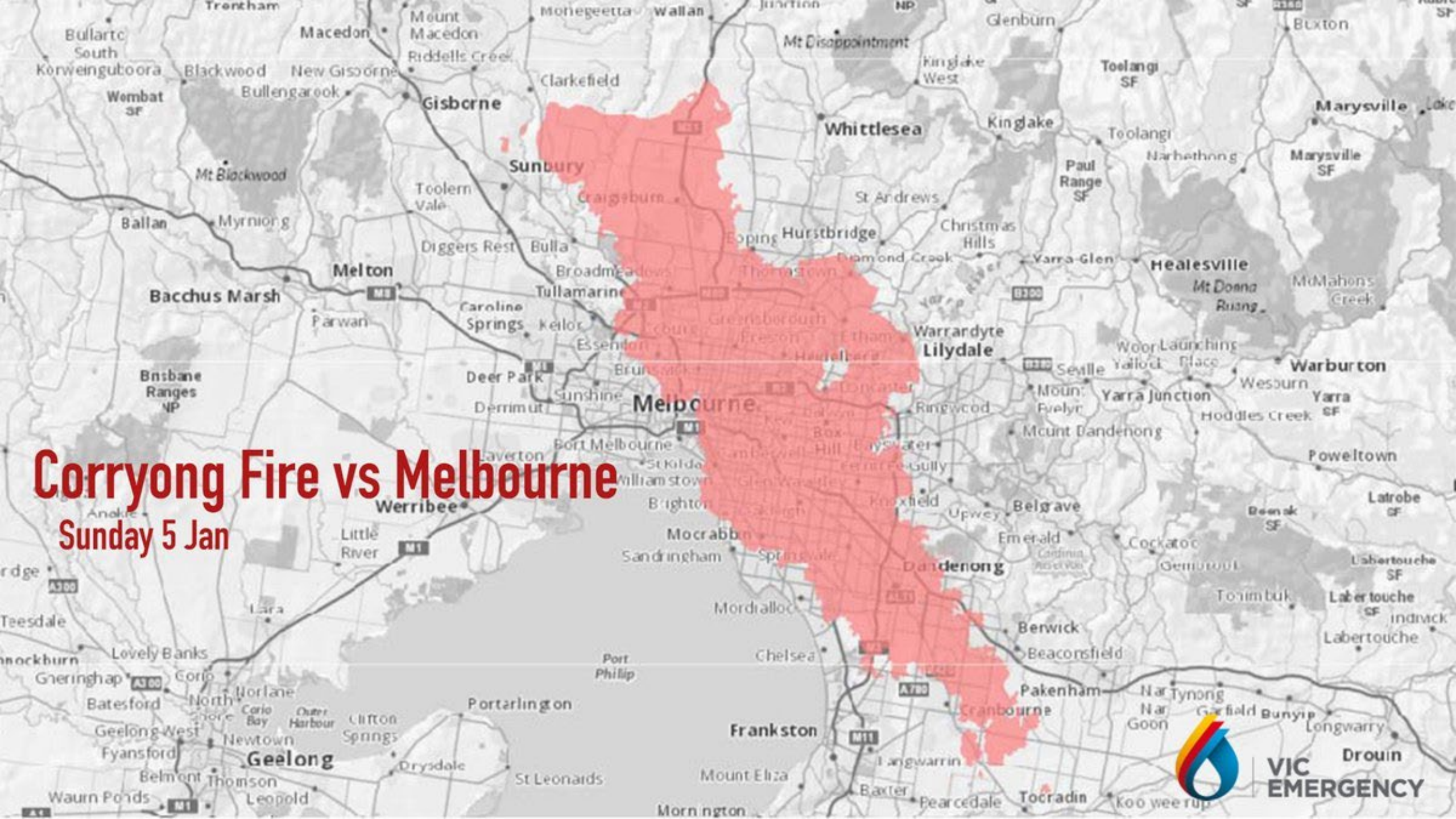
**FIRE BEGINS FROM LIGHTENING STRIKE ON 29 DECEMBER AND CONTINUES UNTIL 24 JANUARY 2020**

**FIRE AREA: 217,059HA**

**FIRE PERIMETER: 621KM**

**PEAK RESOURCES: FRIDAY, 3 JANUARY 2020**





# Corryong Fire vs Melbourne

Sunday 5 Jan



Many family units were separated either during the fire or immediately post fire due to loss of family home, dangerous ongoing fire conditions, evacuation orders, new threats, constant hazardous thick smoke, loss of electricity, poor water resources and cessation of transport (services and food) into the community. Several families decided to follow advice and evacuate women, children and the elderly out of the region whilst men remained to fight and defend properties, euthanize stock, feed and muster remaining stock, repair water lines, roads and fencing. It was not unusual for mothers to not leave the area and to stay; assisting their partner in the farm business.



*“An emergency situation affects the people’s self-esteem and produces strong feelings of fear, instability and loneliness that cause stress and anxiety, symptoms of depression or psychomatic manifestations.”* The Action contre la Faim – France, document - “Baby Friendly Spaces” (2014 pp19),



During the bushfire emergency the nursing dyad relationship was directly and negatively impacted in many different ways which all contribute to

- a decrease in responsiveness to baby cues and communication,
- adequate presentation to and time at the breast,
- decreased maternal nutrition and hydration and
- separation from partner and family supports
- separation from usual health professionals incl MCHN's.

Most distressing for our mothers was a noticeable decrease in their breast milk supply which remained until weaning.





Mothers evacuated to Community Places of Last Resort and were among varying ages of community members and their pets. The sole centre in Corryong was the indoor basketball stadium (2 toilets no showers or kitchen). The stadium did not have a space suitable for mothers to Breastfeed in privacy.

*“evidence indicates that providing facilities for breastfeeding in a safe and supportive place, counselling from health professionals, and communicating with mothers on breastfeeding helps maintain breastfeeding in disasters”.*

MirMohamadalile et al 2018 (Sulaiman, Mohamad, Ismail, Johari, Hussain, Nik pp626 2016)



Literature supports and recognises the importance of maintaining BF during emergencies for infant brain development and well-known life sustaining properties of breast milk including carbohydrates, vitamins, minerals, antibodies and sustaining maternal and child bonding providing a “security aspect for the child too” MirMohamadalile (pp 23 2018) .

Gribble et al discuss the importance of BF as a “biological process that has reproductive health implications and reproductive rights” by encouraging ongoing BF during emergencies amenorrhea associated with BF continues to protect mothers from successive births by up to 98%.

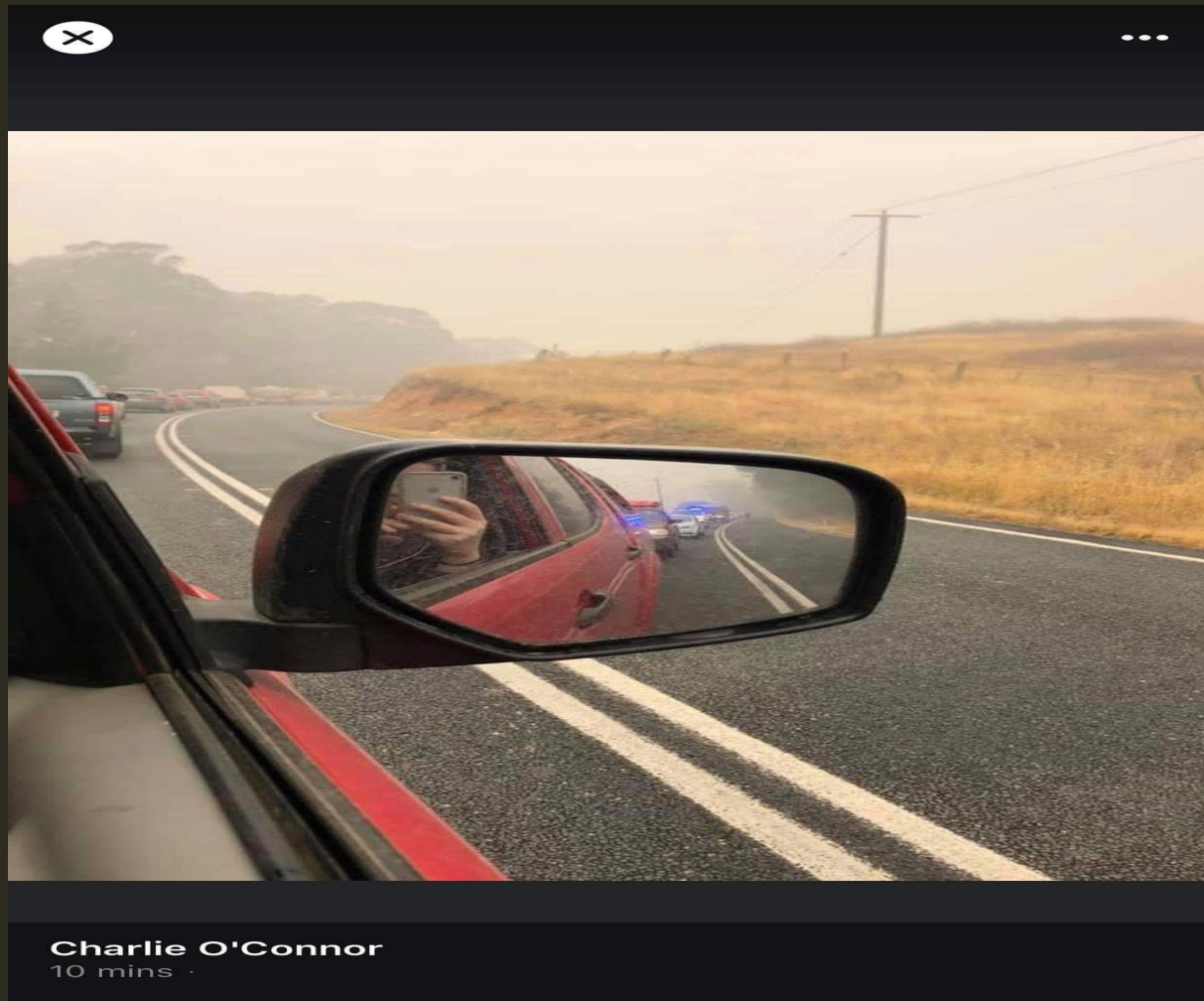


- **donated formula tins bottles, teats and dummies** arrived in various manners (trucks, differing couriers, private cars) and could be found in large quantities at the main evacuation centre and at distributions centres though out the shire (eg community halls).
- **Milk substitutes must be regulated and controlled** when introduced to communities in emergency relief food deliveries. *“A single exposure to breastmilk substitutes can increase vulnerability to illness for several weeks after consumption via its impact on the intestinal environment”* and gut microbiome (Gribble et al 2011 and Beghetti, Biagi, Martini, Brigidi, Corvaglia and Aceti 2019).
- Commencing formula feeding in an emergency, places a high risk to infant wellbeing and development and increases “resources needed and the work associated with caring for an infant” due to cleaning of equipment and preparation of milk. (Gribble et al 2011)
- **loss of power, gas and poor water quality** even in first world countries leave AF babies vulnerable to gastro-enteral diseases and diarrhoea.
- Corryong’s **water supply was contaminated** by large amounts of ash whilst in Christchurch New Zealand post-Earthquake 2011, Gribble, Peterson and Brown (pp2 2019) explain that water supplies were accessed and used unboiled for AF preparation and were contaminated with sewerage.
- There have been situations where mothers have commenced AF post disaster then were unable to access the same type of formula if any. AF tins supplied were out of date and may contain ingredients that do not meet Australian Standards. (Gribble et al pp2 2019, Theurich and Grote pp574 2017; Carothers and Gribble pp273 2014)

*“lactating mothers need adapted spaces allowing enough privacy, where they can breastfeed safely and quietly” further that “mothers psychological and emotional state affects the milk flow/production (positive feelings maintain milk flow, while negative emotions can lead to temporary slowing/stoppage of milk flow); support, encouragement and confidence building are essential to help the mother produce the oxytocin hormone, which is necessary for milk flow.” De Brabandere et al pp30 (2014)*



During CFA convoy evacuations (which entailed travel for over 2 hours and the inability to stop) mothers were unable to attend to their infant/child; increasing stress and anxiety in both mother and child and reduction in BF (including length of feed) decreasing breast stimulation.



Corryong is not alone in its unpreparedness for its vulnerable infants, children and BF mothers; Gribble et al (2019 p3) researched twenty-two national emergency plans and the Commonwealth Disaster Response Plan, Department of Health National Emergency Plans and the Australian Emergency Management Arrangements with no reference to the unique requirements of mothers and young children.

Gribble et al (2019 pp5) explored the Victoria Emergency Management Planning for Children and Young People guide and noted that the guide mentions considering breastfeeding women requiring support and equipment for formula feeding however the guide provides very little detail on each matter for the reader. (Campbell 2008)



# WHAT I LEARN'T FROM THIS INCIDENT & MY RESEARCH

Lactating mothers require familiar, safe, calm, private evacuation centres during natural disasters

MCHN centres are well known to our local maternal cohort. They visit frequently for visits and other activities such as Mother Goose, New Mums Group, Pregnancy Yoga , Supported Playgroup, Toy library and a place to attend when in town for BF and nappy changes etc. Importantly I push our centre as a community hub for Early Years.

MCHN centres (to) have kitchens, fridge, microwave, oven and full bathrooms, laundry facilities, couches, air-conditioning (warm and cold); as a prepared evacuation centre (can share with kinder etc)

Fly in Squad of suitably trained Vic. MCHN's to assist and maintain service during this time for communities. MCHN would stay at and work out of the centre.

Satellite internet and phone communications

MCHN specific development of Policies and Procedures for Local and Statewide Emergencies (generators at centres, longlife foods and preparedness of same, toiletries, nappies, towels, linen, batteries, breast pumps, bottles etc, water storage – eg tank attached to centre)

*“Even under the worst conditions,  
breastfeeding mothers have the ability to  
safely nurture their infants. The ability is  
empowering and healing for women.  
Breastfeeding may be a source of hope, even  
in the darkest days.”* Jane Heinig (pp396 2005)



Action contre la Faim Baby Friendly Spaces Holistic Approach for Pregnant, Lactating Women and their very young children in Emergency 2014. Astrid De Brabandere, Alexandra David, Elisabetta Dozio, Cecile Bizouerne.

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[Louise.Middleton@towong.vic.gov.au](mailto:Louise.Middleton@towong.vic.gov.au)  
Ph 0427 334 448

