

# TinyTag Data Logger

## Battery Change & Ice Slurry Test

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# TinyTag Data Logger - Battery Change & Ice Slurry Test

## Collect the following items:

- Esky
- Ice
- Gladwrap/Plastic bag
- TinyTag Data logger
- USB cable



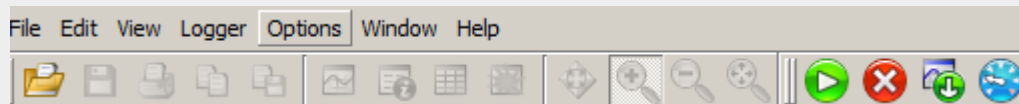
# TinyTag Data Logger - Battery Change & Ice Slurry Test

## Collect TinyTag Data Logger:

- Remove the data logger from the fridge and record on the Daily Temperature chart.
- Please ensure that the USB cable is labelled clearly and stored away safely when not in use.
- Connect the TinyTag data logger to the computer with USB cable.

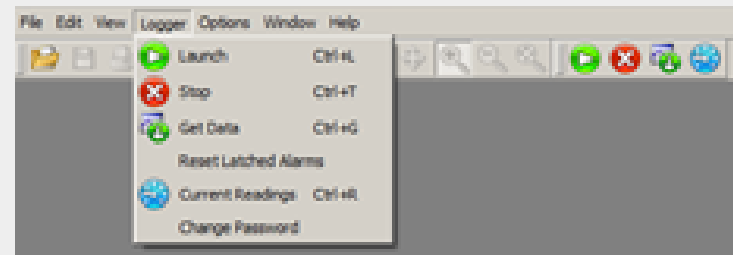


# TinyTag Data Logger - Battery Change & Ice Slurry Test



## Download the TinyTag Data Logger

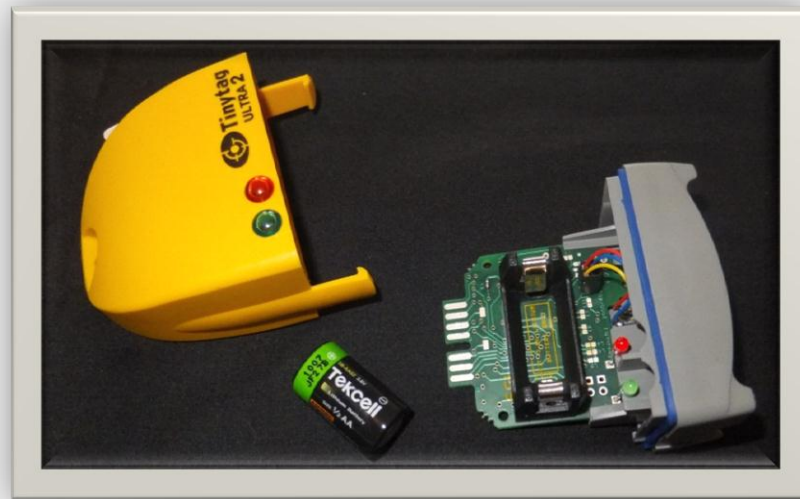
1. **Stop** - this will stop the Data logger recording the room temperature.
2. **Get data** – extract the data from the Data Logger and save to folder on the computer.
3. **Launch** – to restart the Data logger to commence recording.



# TinyTag Data Logger - Battery Change & Ice Slurry Test

## If a battery change is required:

- Downloaded data first.
- Carefully remove battery to avoid damage to the TinyTag memory board.
- Remember which way battery terminals face, as it is not labelled.
- Discard old battery to avoid mix up.
- Insert new battery (PHU can supply replacement batteries for CHC data loggers).



# TinyTag Data Logger - Battery Change & Ice Slurry Test

## Prepare Ice Slurry:

- Fill esky with ice.
- Add only enough water to esky to fill the air gaps.



# TinyTag Data Logger - Battery Change & Ice Slurry Test

## Prepare Data Logger

- Wrap the TinyTag data logger in glad wrap.



- Then place the TinyTag data logger in plastic bag & extract as much air as possible & seal.

# TinyTag Data Logger - Battery Change & Ice Slurry Test

- Immerse the TinyTag data logger into the Ice Slurry and leave in fridge for minimum of 2-3 hours.
- Ensure the top of the plastic bag is tied off and kept out of the water to prevent the data logger from becoming wet.





# TinyTag Data Logger - Battery Change & Ice Slurry Test



- Place the esky into a fridge **with the lid** on for at least 2-3 hours.
- This will allow the data logger time to reach 0°C and provide a recording for atleast 1-2 hours.

# TinyTag Data Logger - Battery Change & Ice Slurry Test

If the TinyTag data logger floats and you need to place a weight on it to keep it immersed in the ice slurry, then there is too much water:

- Drain off excess water and add more ice



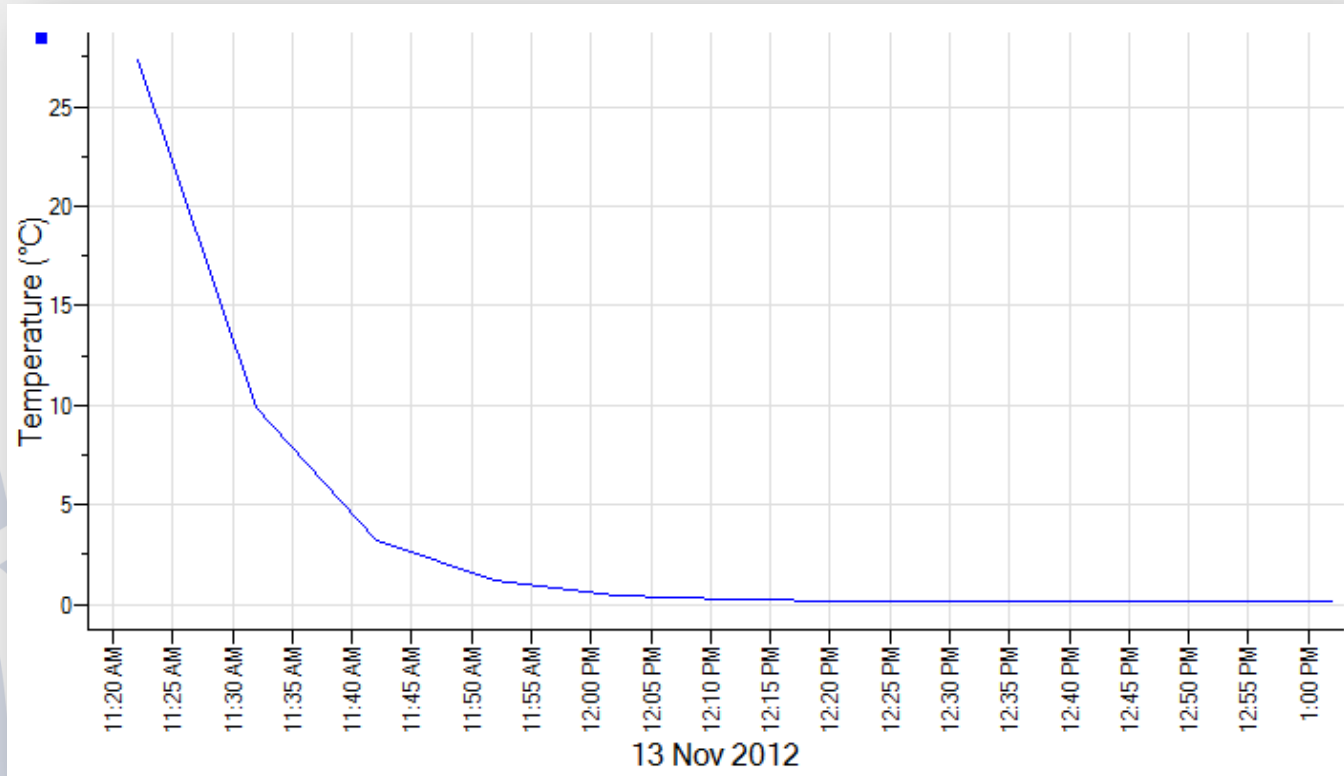
# TinyTag Data Logger - Battery Change & Ice Slurry Test



## AFTER 2-3 HOURS:

- Remove TinyTag Data logger from Ice Slurry.
- Connect data logger to the computer.
- **Stop** - the TinyTag data logger.
- **Get Data** - Perform data download – the temperature should be @ 0°C ( $\pm$  1°C) for at least 1-2 hours.
- Save to folder on computer.

# TinyTag Data Logger - Battery Change & Ice Slurry Test



# TinyTag Data Logger - Battery Change & Ice Slurry Test



- **Relaunch** the TinyTag Data logger – to restart at a specific time once returned to fridge.
- Disconnect data logger from computer.
- Label the TinyTag data logger with the dates of when:
  - Battery changed.
  - Ice slurry preformed.

# TinyTag Data Logger - Battery Change & Ice Slurry Test

- Return the TinyTag data logger to the vaccine fridge and place towards the back of the middle self in Fridge.
- Record activity in the comments section of the Daily temp Chart.
- Email Annual Ice Slurry results to local PHU.



# TinyTag Data Logger - Battery Change & Ice Slurry Test

## ONCE DAILY VACCINE FRIDGE TEMPERATURE CHECK



Murrumbidgee LHD & Southern NSW LHD

### PUBLIC HEALTH UNIT AIM FOR 5°C

FRIDGE RANGE: +2°C TO +8°C – If outside this range please contact Nurse Immuniser, 02 6000 6000

MONTH: JANUARY 2013

DAY	TIME	Now	Min.	Max.	Reset		SIGNATURE	COMMENT
					Min	Max		
1 <sup>st</sup>	2330	5	4	6	√	√		0930 stock checked & ordered, reset BW
2 <sup>nd</sup>	2310	4	3	7	√	√		0800 Vaccines removed - reset BW 1230 Vaccines returned - reset BW
3 <sup>rd</sup>	2345	5	3	6	√	√		
4 <sup>th</sup>	2325	4	3	5	√	√		1340 Vaccines received, reset BW
5 <sup>th</sup>	2340	4	4	6	√	√		
6 <sup>th</sup>	2347	3	3	7	√	√		0800 Vaccine removed, School clinic, reset BW 1345 Vaccines returned, reset BW



Health

# TinyTag Data Logger - Battery Change & Ice Slurry Test

Vaccine Fridge Daily Temperature Chart															
NSW Health GOVERNMENT   Murrumbidgee LHD & Southern NSW LHD															
°C	Facility Name: PUBLIC HOSPITAL							Month: JANUARY 2013							
>12°C															
11°C															
10°C															
9°C															
8°C				8			8								
7°C	7				7										
6°C		6	6	x		6	x								
5°C	x				x	x									
4°C		4x	x		4		4								
3°C	3		3	3		3									
2°C															
1°C															
0°C															
-1°C															
<-2°C															
Date	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Time	2340	2310	2346	2330	2340	2315	2315								
Comments	0800 Vaccines checked & ordered, reset BW		0800 Vaccines removed, reset BW 1226 Vaccines returned, reset BW	1340 Vaccines received, reset BW			0800 School clinic vaccines removed, reset BW 1400 Vaccines returned, reset BW								
Initials	BW	RS	BW	BW	BW	RS	RS								

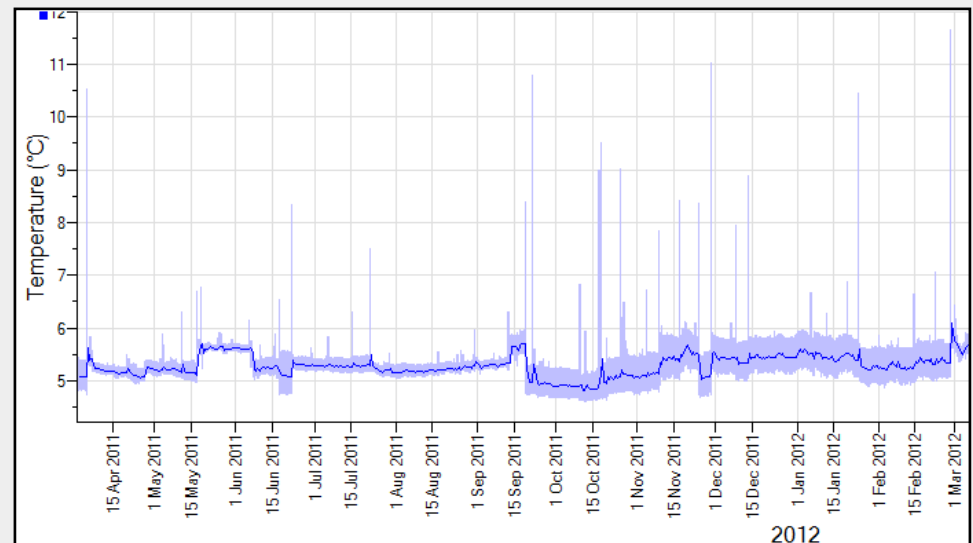
RECORD: Current temp - 'X'      Min and Max – as a Number      Reset the thermometer after each recording.  
Report any temperatures in SHADED AREA (<+2 C or >8 C) to your local Public Health Unit.      Revised: Nov 2012



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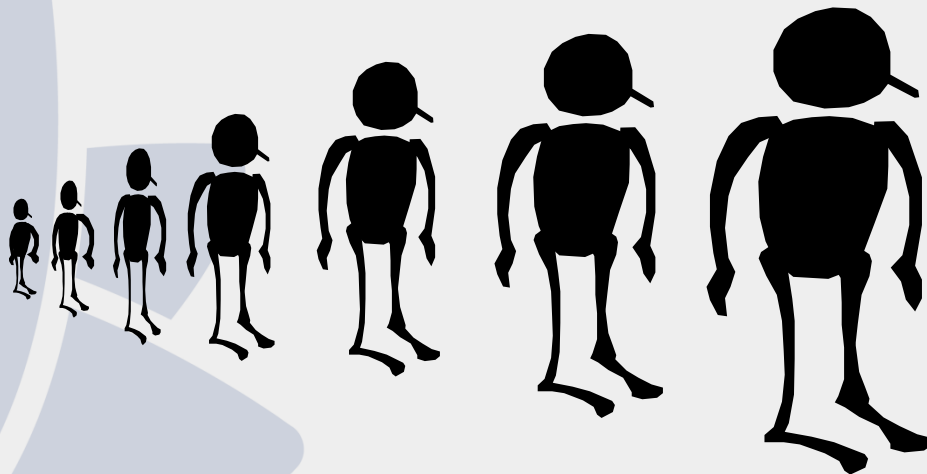
## Data logger downloads should occur:

- At least monthly.
- Before childhood immunisation clinic.
- Before School Based Immunisation clinic.
- When ever fridge temperature display is  $< 2^{\circ}\text{C}$  or  $> 8^{\circ}\text{C}$ .



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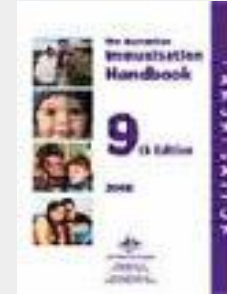
“The more you practice downloading the TinyTag data logger the easier it becomes and revaccination of individuals will not be required, saving us all a lot of time”



# TinyTag Data Logger - Battery Change & Ice Slurry Test

- ❑ TinyTag batteries are available from the PHU and should be changed:
  - TinyTag Ultra/Ultra 2K - every 2 years
  - TinyTag Ultra 2 – will indicate the need for a battery change when attached to the computer
  
- ❑ Ice Slurry test should be performed:
  - Annually or
  - After battery is changed

# TinyTag Data Logger - Battery Change & Ice Slurry Test



## Reference:

- National Vaccine Storage Guidelines – ‘Strive for 5’
- 9<sup>th</sup> Edition of the Australian Immunisation Handbook
- GP NSW <http://www.gpnsw.com.au/programs/immunisation/index.html>