

Godfrey, Sonora HLTH:EX

From: Erickson, Anders HLTH:EX
Sent: October 12, 2021 4:13 PM
To: Ye, Xibiao HLTH:EX
Subject: RE: weekly update, Oct. 12, 2021

Additional items discussed today (edit as needed):

1. AAF
 - a. Look up garbage codes using the Cause Hierarchy Mapping tool and determine if excluded condition can be appropriately mapped using a high level code → assess # of death differences after taking this into account
 - b. share table with Xibiao when complete and will review on Monday TAC meeting
2. Climate work
 - a. allow time next week (Oct.18-21) to start a high-level plan regarding climate-related work and how my contribution will fit with other team members and partners (e.g. Rudra, PPH, BCCDC, etc.)
 - b. Improvements made in managing projects, but now looking to see greater independence moving forward
 - c. two areas of future work:
 - i. vulnerability index for BC
 - ii. excess mortality/morbidity due to extreme weather/events (heat, cold, smoke?, flooding?)

Anders

From: Erickson, Anders HLTH:EX
Sent: October 12, 2021 12:07 PM
To: Ye, Xibiao HLTH:EX <Xibiao.Ye@gov.bc.ca>
Subject: weekly update, Oct. 12, 2021

To review today at 1:1

October 12, 2021 - Weekly Progress Plan for Anders Erickson

Progress, Plans and Problem Report – Date range: Oct.04 to Oct.15, 2021

Progress (Oct.04 - 07)

1. StatCan LIM-AT data:
☐ Run Tongfen on 2006 to 2016 data

☐ Create quintiles

2. ★ INSPQ SES data:

☒ Assess missing data for census cycles --> check if population == 0

☒ Join 2016 DAUID

☐ Create quintiles (material, social and total) from the annual DA-level data

☐ Censor FN reserve data? --> add flag to ID rows

☐ Produce data dictionary and provide draft of technical documentation

☐ QA quick maps to visually assess data by city/region (e.g. Victoria, Vancouver, PG, etc.)

3. Alcohol PAF

☒ ★ Flag GBD garbage codes that are NOT currently excluded in data extraction
--> initial scan of outcomes

☐ ★ Flag GBD codes that are currently included that should maybe not be

☐ Need to look into how to update GBD RR files in InterMAHP from 2017 to 2019

○ what form does the input file look like to use in InterMAHP?

☐ create overview of workflow to easily understand the required inputs, transformations, and output files

○ Misc.

• ☒ Review Alzh+PM paper --> Oct.6th team meeting

○ High-level summary (methods, biological mechanisms, results)

• ☒ ★ Draft HAGIS email --> send to Alyssa

• ☐ ★ Finish notes from PM Plan meeting --> send to participants

• ☒ Met with Reiko re: Metis COVID19 SAS code update for 2022

• ☒ Met with Reiko re: SES data visualizations

• ☒ Met with Yonabeth and Fernanda re: epi-team strategic meeting

Plans (Oct.12 - 15)

1. StatCan LIM-AT data:

☐ Run Tongfen on 2006 to 2016 data

☐ Create quintiles

2. ★ INSPQ SES data:

☐ Create quintiles (material, social and total) from the annual DA-level data

☐ Censor FN reserve data? --> add flag to ID rows

- ☐ Produce data dictionary and provide draft of technical documentation
- ☐ QA quick maps to visually assess data by city/region (e.g. Victoria, Vancouver, PG, etc.)

3. Alcohol PAF

- ☐ ★ Flag GBD garbage codes that are NOT currently excluded in data extraction
- ☐ Flag GBD codes that are currently included that should maybe not be
- ☐ Need to look into how to update GBD RR files in InterMAHP from 2017 to 2019
 - what form does the input file look like to use in InterMAHP?
- ☐ create overview of workflow to easily understand the required inputs, transformations, and output files
- Climate work:
- ☐ HSIAR-PPH analysis - create list of heat-related health condition ICD10/9 codes

5. Misc.

- ☐ ★ Finish notes from PM Plan meeting --> send to participants
- ☐ ? Meet with Fernanda re: GBD

Problems

1. none

Anders

Godfrey, Sonora HLTH:EX

From: Ye, Xibiao HLTH:EX
Sent: October 14, 2021 10:47 AM
To: Ngo, Henry HLTH:EX; Erickson, Anders HLTH:EX; 'rudra.shrestha@gov.bc.ca'; Sivanand, Poornima HLTH:EX; 'rudra.shrestha@gov.bc.ca'
Cc: Okamoto, Reiko HLTH:EX; Okamoto, Reiko HLTH:EX
Subject: RE: strategic planning for climate change related works
Attachments: Extreme hot weather work proposed by BCCDC with support from CAS.docx; Extreme Heat Population Health Impact Assessment Proposed by OPHO.docx; Data inventory for climate change and population health.docx

Materials for this meeting. Please fill in the data inventory table if you are able to. Thanks.

Best regards,

Xibiao Ye, PhD
Provincial Epidemiologist and Director
Population Health Surveillance & Epidemiology
Office of the Provincial Health Officer
BC Ministry of Health
4th Floor, 1515 Blanshard Street
Victoria, BC V8W 3C8
Office: 1 (250) 952-2026
Mobile: s.17
Fax: 1 (250) 952-1713

-----Original Appointment-----

From: Ye, Xibiao HLTH:EX
Sent: October 14, 2021 10:28 AM
To: Ye, Xibiao HLTH:EX; Ngo, Henry HLTH:EX; Erickson, Anders HLTH:EX; rudra.shrestha@gov.bc.ca; Sivanand, Poornima HLTH:EX; rudra.shrestha@gov.bc.ca
Cc: Okamoto, Reiko HLTH:EX; Okamoto, Reiko HLTH:EX
Subject: strategic planning for climate change related works
When: October 21, 2021 10:00 AM-11:00 AM (UTC-08:00) Pacific Time (US & Canada).
Where: Microsoft Teams Meeting

Microsoft Teams meeting

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Canada, Victoria

Phone Conference ID: s.15; s.17

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Godfrey, Sonora HLTH:EX

From: Erickson, Anders HLTH:EX
Sent: October 6, 2021 10:23 AM
To: Ye, Xibiao HLTH:EX
Subject: RE: Short-term contract position

yes, looks promising!

Anders

From: Ye, Xibiao HLTH:EX <Xibiao.Ye@gov.bc.ca>
Sent: October 6, 2021 9:50 AM
To: Erickson, Anders HLTH:EX <Anders.Erickson@gov.bc.ca>
Subject: FW: Short-term contract position

Are you able to attend the call at 11:30am?

Best regards,

Xibiao Ye, PhD
Provincial Epidemiologist and Director
Population Health Surveillance & Epidemiology
Office of the Provincial Health Officer
BC Ministry of Health
4th Floor, 1515 Blanshard Street
Victoria, BC V8W 3C8
Office: 1 (250) 952-2026
Mobile: s.17
Fax: 1 (250) 952-1713

From: s.22
Sent: October 5, 2021 2:16 PM

To: Ye, Xibiao HLTH:EX <Xibiao.Ye@gov.bc.ca>

Subject: Short-term contract position

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Dear Prof. Xibiao,

Please find attached herewith my application for the short-term position as advertised by Mr. Henry Ngo. The application includes a cover letter and updated resume.

Kind regards,

s.22

Page 08 of 36 to/à Page 09 of 36

Withheld pursuant to/removed as

s.22

Godfrey, Sonora HLTH:EX

From: Ye, Xibiao HLTH:EX
Sent: October 15, 2021 10:09 AM
To: Erickson, Anders HLTH:EX
Subject: RE: heat analysis

Yes. You can see my calendar and availability and Kristin is managing my calendar.

Best regards,

Xibiao Ye, PhD
Provincial Epidemiologist and Director
Population Health Surveillance & Epidemiology
Office of the Provincial Health Officer
BC Ministry of Health
4th Floor, 1515 Blanshard Street
Victoria, BC V8W 3C8
Office: 1 (250) 952-2026
Mobile: s.17
Fax: 1 (250) 952-1713

From: Erickson, Anders HLTH:EX <Anders.Erickson@gov.bc.ca>
Sent: October 15, 2021 10:05 AM
To: Ye, Xibiao HLTH:EX <Xibiao.Ye@gov.bc.ca>
Subject: RE: heat analysis

Hi Xibiao,
for clarification in the future, in situations like this – should I just book the time and send the meeting invite? I was waiting for your response to Sarah's proposed times.

Anders

From: Henderson, Sarah [BCCDC] <Sarah.Henderson@bccdc.ca>
Sent: October 15, 2021 9:55 AM
To: Erickson, Anders HLTH:EX <Anders.Erickson@gov.bc.ca>; Lee, Michael [BCCDC] <michael.lee@bccdc.ca>
Cc: Ye, Xibiao HLTH:EX <Xibiao.Ye@gov.bc.ca>
Subject: RE: heat analysis

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Doesn't work for me anymore, will need to be next week which is very tight so far.

Sarah B. Henderson, PhD

Scientific Director | Environmental Health Services | BCCDC
Associate Professor (Partner) | School of Population and Public Health | UBC
Office: 604.707.2449
Cell: s.15

#DifferentTogether
#InPlainSight

I often work outside of normal business hours because it suits me. There is no expectation that you will respond outside of your working hours.

From: Erickson, Anders HLTH:EX [<mailto:Anders.Erickson@gov.bc.ca>]
Sent: Friday, October 15, 2021 9:49 AM
To: Henderson, Sarah [BCCDC]; Lee, Michael [BCCDC]
Cc: xibiao.ye@gov.bc.ca [EXT]
Subject: RE: heat analysis

EXTERNAL SENDER. If you suspect this message is malicious, please forward to spam@phsa.ca and **do not** open attachments or click on links.

picking up this thread again, does 11 or 11:30 still work for a brief update or should we try to book a time next week?

Anders

From: Henderson, Sarah [BCCDC] <Sarah.Henderson@bccdc.ca>
Sent: October 12, 2021 5:17 PM
To: Lee, Michael [BCCDC] <michael.lee@bccdc.ca>; Erickson, Anders HLTH:EX <Anders.Erickson@gov.bc.ca>
Cc: Ye, Xibiao HLTH:EX <Xibiao.Ye@gov.bc.ca>
Subject: Re: heat analysis

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

I can do 4:30 tomorrow of 11-12 Friday morning

Cheers,

Sarah

Sarah B. Henderson, PhD

Scientific Director | Environmental Health Services | BCCDC
Associate Professor (Partner) | School of Population and Public Health | UBC
Office: 604.707.2449
Cell: s.15

#DifferentTogether
#InPlainSight

I often work outside of normal business hours because it suits me. There is no expectation that you will respond outside of your working hours.

From: Michael Lee <michael.lee@bccdc.ca>
Date: Tuesday, October 12, 2021 at 9:50 AM
To: "Erickson, Anders HLTH:EX" <Anders.Erickson@gov.bc.ca>, "Henderson, Sarah [BCCDC]" <Sarah.Henderson@bccdc.ca>
Cc: Xibiao Ye <xibiao.ye@gov.bc.ca>
Subject: RE: heat analysis

Hi Anders,

These times work for me – I'll defer to Sarah's schedule, if she is available.

Mike

From: Erickson, Anders HLTH:EX [<mailto:Anders.Erickson@gov.bc.ca>]
Sent: Tuesday, October 12, 2021 9:47 AM
To: Lee, Michael [BCCDC]; Henderson, Sarah [BCCDC]
Cc: xibiao.ye@gov.bc.ca [EXT]
Subject: RE: heat analysis

EXTERNAL SENDER. If you suspect this message is malicious, please forward to spam@phsa.ca and **do not** open attachments or click on links.

Hi Mike and Sarah,
would it be possible for a quick (30min) meeting this week with Xibiao and myself (and possibly a new colleague who will be working in this area)?
13th – 11:30 or 4-4:30pm
14th – 10-11, 3-3:30
15th – open except 2-3

Let me know if any of these times work for you, if not we can schedule something for next week.
cheers,
Anders

From: Lee, Michael [BCCDC] <michael.lee@bccdc.ca>
Sent: October 4, 2021 3:20 PM
To: Erickson, Anders HLTH:EX <Anders.Erickson@gov.bc.ca>; XT:Henderson, Sarah ENV:IN <Sarah.Henderson@bccdc.ca>
Subject: Re: heat analysis

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Anders,

If we do early next week I could have a few plots of the model to show you. Right now I am just finishing up the mortality - Tmax model based on historical summer temperatures.

Best,

Mike

From: Erickson, Anders HLTH:EX <Anders.Erickson@gov.bc.ca>

Sent: Monday, October 4, 2021 3:13 PM

To: Henderson, Sarah [BCCDC]; Lee, Michael [BCCDC]

Subject: heat analysis

EXTERNAL SENDER. If you suspect this message is malicious, please forward to spam@phsa.ca and **do not** open attachments or click on links.

Now that I have your attention by making a fool of myself re: heat dome dates, I was hoping to get an update on the heat mortality risk factor analysis. Now that I got a few things off my plate, I'm hoping to be able to focus on this a bit more and be of assistance if I can in any way and coordinate any efforts. We're still interested in calculating excess mortality, PAFs, and DALYs for heat (and cold).

Any time this week to have a quick tête-a-tête?

thanks,
Anders

Godfrey, Sonora HLTH:EX

From: Erickson, Anders HLTH:EX
Sent: October 4, 2021 2:54 PM
To: XT:Henderson, Sarah ENV:IN; Cameron, Mary HLTH:EX
Cc: Ye, Xibiao HLTH:EX; Cassidy, Adam HLTH:EX; Parker, Esther HLTH:EX; Galt, Jamie HLTH:EX; Przydatek, Maria E HLTH:EX
Subject: RE: Any UBCM heat-wave-related requests ?

exactly to my point.... thanks Sarah 😊

Sorry, for some reason I had the summer solstice date range in my head and a simple Google search would of corrected that.

Anders

From: Henderson, Sarah [BCCDC] <Sarah.Henderson@bccdc.ca>
Sent: October 4, 2021 2:15 PM
To: Erickson, Anders HLTH:EX <Anders.Erickson@gov.bc.ca>; Cameron, Mary HLTH:EX <Mary.Cameron@gov.bc.ca>
Cc: Ye, Xibiao HLTH:EX <Xibiao.Ye@gov.bc.ca>; Cassidy, Adam HLTH:EX <Adam.Cassady@gov.bc.ca>; Parker, Esther HLTH:EX <Esther.Parker@gov.bc.ca>; Galt, Jamie HLTH:EX <Jamie.Galt@gov.bc.ca>; Przydatek, Maria E HLTH:EX <Maria.Przydatek@gov.bc.ca>
Subject: RE: Any UBCM heat-wave-related requests ?

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi folks –

Not entirely sure what is needed from me here, but the heat dome was not June 17-22! The period in question is more like June 25 (the day the heat started to build) to July 1, though there were obviously lagged effects in the mortality data so I would assume the same to be true for morbidity data. We see impacts in acute care deaths for up to three weeks following.

Thanks,

Sarah

Page 16 of 36

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Copyright

Sarah B. Henderson, PhD

Scientific Director | Environmental Health Services | BCCDC
Associate Professor (Partner) | School of Population and Public Health | UBC
Office: 604.707.2449
Cell: s.15

#DifferentTogether
#InPlainSight

I often work outside of normal business hours because it suits me. There is no expectation that you will respond outside of your working hours.

From: Erickson, Anders HLTH:EX [<mailto:Anders.Erickson@gov.bc.ca>]
Sent: Monday, October 04, 2021 12:31 PM
To: Cameron, Mary HLTH:EX
Cc: xibiao.ye@gov.bc.ca [EXT]; Cassidy, Adam HLTH:EX; Esther.Parker@gov.bc.ca [EXT]; Galt, Jamie [EXT]; Przydatek, Maria E HLTH:EX; Henderson, Sarah [BCCDC]
Subject: RE: Any UBCM heat-wave-related requests ?

EXTERNAL SENDER. If you suspect this message is malicious, please forward to spam@phsa.ca and **do not** open attachments or click on links.

thanks, no problem:) - and good call – we definitely want to coordinate any study time frames being considered between the various analyses (e.g. heat dome dates, lag days*, and reference/control dates).

My expertise is limited on the strengths and limitations of the potential data sources. Other than NACRS (and MSP?), are there other data sources that should be considered?

* hot off the press, [a systematic review on lagged associations in climate–health studies](#)

thanks,
Anders

From: Cameron, Mary HLTH:EX <Mary.Cameron@gov.bc.ca>
Sent: October 4, 2021 11:28 AM
To: Erickson, Anders HLTH:EX <Anders.Erickson@gov.bc.ca>
Cc: Ye, Xibiao HLTH:EX <Xibiao.Ye@gov.bc.ca>; Cassidy, Adam HLTH:EX <Adam.Cassady@gov.bc.ca>; Parker, Esther HLTH:EX <Esther.Parker@gov.bc.ca>; Galt,

Jamie HLTH:EX <Jamie.Galt@gov.bc.ca>; Przydatek, Maria E HLTH:EX <Maria.Przydatek@gov.bc.ca>; XT:Henderson, Sarah ENV:IN <Sarah.Henderson@bccdc.ca>
Subject: RE: Any UBCM heat-wave-related requests ?

Hi Anders,

Thanks so much for your expertise and leadership on this!

I'm copying Jamie and Maria on this as well as Sarah Henderson to get their thoughts and ensure we are lining up with other discussions on heat impacts and response.

Sarah, Jamie and Maria – we met with HLTH's data shop (Health Sector Information, Analysis and Reporting Division) last week to seek their assistance in conducting an analysis of the non-fatal health outcomes and health care utilization from this summer's heat dome.

Xibiao/Anders, I understand HSIAR is experiencing some capacity limitations. Do you think additional support/funding (above and beyond the heat funding to OPHO and EMU) will be needed to complete this analysis?

Thanks!

Mary

From: Erickson, Anders HLTH:EX <Anders.Erickson@gov.bc.ca>

Sent: October 4, 2021 10:54 AM

To: Cameron, Mary HLTH:EX <Mary.Cameron@gov.bc.ca>

Cc: Ye, Xibiao HLTH:EX <Xibiao.Ye@gov.bc.ca>; Cassidy, Adam HLTH:EX <Adam.Cassidy@gov.bc.ca>; Parker, Esther HLTH:EX <Esther.Parker@gov.bc.ca>

Subject: RE: Any UBCM heat-wave-related requests ?

Hi Mary,

here are some notes and actions from the meeting with the Sarah and the HSIAR analysis folks. Please add/edit.

The main ones are:

1. in the next 2 weeks I will compile a list of non-fatal conditions and ICD-10 codes to query NACRS data. Will discuss with Xibiao if MSP will be a fruitful data source.
2. Establish the study time frame dates for the analysis (e.g. heat dome + lag, and reference time frame(s))
3. Use the reference code **#1448** in all subsequent correspondences with HSIAR regarding this request.

best,

Anders

Scoping meeting - Affects of heatwave on health outcomes and health care utilization

Reference #1448 in all subsequent correspondences with HSIAR

Attended by:

HSIAR: Sarah Grantham, Paul Lam, Qiuya Xu

OPHO: Xibiao Ye, Anders Erickson

PPH: Mary Cameron

1. Please describe the research question you are trying to answer, how the information will be used, and the target audience(s). Understanding what question you are trying to answer helps our analytics team ensure they are providing the most useful data to you;
 - a. how the recent heatwave affected health outcomes and health care utilization (from Mary Cameron below) → obviously need to flesh this out more.
 - b. non-fatal outcomes
 - c. Heat wave was ~ June 17 - 22

d.

June, 2021							^	▼
Su	Mo	Tu	We	Th	Fr	Sa		
30	31	1	2	3	4	5		
6	7	8	9	10	11	12		
13	14	15	16	17	18	19		
20	21	22	23	24	25	26		
27	28	29	30	1	2	3		
4	5	6	7	8	9	10		

- e. Data sources:
 - ER visits --> NACRS (30 sites) lag= 1-2 months;
 - DAD --> 6 month lag --> not usable
 - MSP (only ICD9 codes), data lag?
- f. ACTION: Anders to compile list of ICD10 (and ICD9?) codes for health events of interest (see below)
- g. Time frame + lag times --> June 17 - 22 --> what is the lag needed
 - Need reference time period (same dates in 2020? 1-2 week period before and after?)
 - Compare to other heat wave (2009)?
- a. Method: ARIMA model
- b. Who will run the model?
 - HSIAR is short staffed and can't consider until November?

1. What level of aggregation are you looking for? (Provincial-level, HA, HSDA, LHA, CHSA, or patient-level?)
 - patient-level
2. What date range to apply? (The duration of the heat wave? The same dates for all of B.C. or different date ranges for each region?)
 - duration of heat wave, plus lag of 5-10 days?
 - same dates for all NACRS sites?
3. What comparison timeframe to use? (Period of the same length before and after? The same date range in a previous year? All?)
 - period of the same length before and after
 - there were subsequent 'hot days' for some time after as well as a less extreme heat wave
 - same date range in previous years
 - Previous known heat wave from 2009?
5. What type of health utilization? (ED visits? Inpatient admissions? UPCC visits? GP visits? 811 calls?)
 - ED visits → this paper gives a good list of ICD-9 codes (see below)
6. What health outcomes are being sought, specifically? (Deaths? Heat stroke?)
 - Heat stroke (codes for this?)
 - Mental health discharges
7. Date by which you require the data (explaining any hard deadlines);
 - a. end of year/February
 - b. Initiation by Nov.
 - c. Output: chart and results output

Initial literature scan of non-fatal conditions related to heat waves:

fluid and electrolyte imbalance (primary ICD-9 code 276),
 all renal diseases (primary ICD-9 codes 580–593),
 nephritis and nephrotic syndrome (primary ICD-9 codes 580–589),
 acute renal failure (primary ICD-9 code 584),
 all circulatory system diseases (primary or secondary ICD-9 codes 390–459),
 hypertension (primary or secondary ICD-9 codes 401–405),
 ischemic heart disease (primary or secondary ICD-9 codes 410–414),
 dysrhythmia (primary or secondary ICD-9 code 427),
 congestive heart failure (primary or secondary ICD-9 code 428),
 ischemic stroke (primary or secondary ICD-9 codes 433–437),
 all respiratory system diseases (primary ICD-9 codes 460–519),
 pneumonia (primary ICD-9 codes 480–486),
 chronic obstructive pulmonary disease (primary or secondary ICD-9 codes 491, 492, and 496), asthma/wheeze (primary ICD-9 codes 493 or 786.07);

diabetes (primary ICD-9 codes 249 and 250),
and intestinal infections (primary ICD-9 codes 001–009).
We also considered all internal causes (ICD-9 codes 001–799)

From <<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5730512/>>

The causes for admission:

Organic (ICD-9: 1–799),
circulatory (ICD-9: 390–459)
respiratory (ICD-9: 460–519).

From <<https://academic.oup.com/eurpub/article/18/3/317/519205?login=true>>

From: Cameron, Mary HLTH:EX <Mary.Cameron@gov.bc.ca>

Sent: September 28, 2021 11:45 AM

To: Meunier, Madeleine L HLTH:EX <Madeleine.Meunier@gov.bc.ca>

Cc: Ye, Xibiao HLTH:EX <Xibiao.Ye@gov.bc.ca>; Erickson, Anders HLTH:EX <Anders.Erickson@gov.bc.ca>; Cassady, Adam HLTH:EX <Adam.Cassady@gov.bc.ca>;
Parker, Esther HLTH:EX <Esther.Parker@gov.bc.ca>

Subject: RE: Any UBCM heat-wave-related requests ?

Hi Madeleine,

We spoke with the OPHO about possible analyses that HSIAR might be able to help us with. I will look to the OPHO in terms of the specific variables and recommended methods, but we agreed that an exploratory time series analysis of the June/July 2021 heat dome event (measured vs. expected rates) would help to inform lessons learned and planning for heat response in the health system. Do I have that right, Xibiao?

Pls let me know how I can support advancing this 😊

Thank you!

Mary

From: Cameron, Mary HLTH:EX

Sent: September 21, 2021 8:02 AM

To: Meunier, Madeleine L HLTH:EX <Madeleine.Meunier@gov.bc.ca>

Cc: Ye, Xibiao HLTH:EX <Xibiao.Ye@gov.bc.ca>; Erickson, Anders HLTH:EX <Anders.Erickson@gov.bc.ca>; Cassady, Adam HLTH:EX <Adam.Cassady@gov.bc.ca>;
Parker, Esther HLTH:EX <Esther.Parker@gov.bc.ca>

Subject: RE: Any UBCM heat-wave-related requests ?

Good morning Madeleine,

Thank you for your email. We would be very grateful to have your support on this request. I have copied my OPHO colleagues, Xibiao Ye and Anders Erickson, who are more familiar than I am with the Ministry's data holdings and capabilities. Xibiao and Anders, would you like to the first crack at Madeleine's questions.

At this time, we are primarily interested in understanding the health and health system impacts of the recent heat dome event in June/July 2021. Do you have data available that is that recent? Alternatively, we would also be open to looking at the 2009 heatwave.

Thank you!

Mary Cameron (she/her)
Director, Integration and Engagement
Health Protection Branch
Population and Public Health Division
BC Ministry of Health
mary.cameron@gov.bc.ca
Office: (250)952-2494
Cell: s.17

I acknowledge, with gratitude and respect, that I live, work and play on the territory of the Lək'wəṇən peoples, and the home of the Métis Chartered Community of Greater Victoria.

This email communication is intended solely for the person or entity to which it is addressed and may contain confidential and privileged information. Any review, dissemination or other use without the express written consent of the sender is prohibited. If you are not the intended recipient, please notify me at the telephone number above or by return email and delete this communication and any copies immediately. Thank you.

From: Meunier, Madeleine L HLTH:EX <Madeleine.Meunier@gov.bc.ca>
Sent: September 17, 2021 11:29 AM
To: Cameron, Mary HLTH:EX <Mary.Cameron@gov.bc.ca>
Subject: FW: Any UBCM heat-wave-related requests ?

Hello Mary,

I am an HSIAR Business Consultant that works with Sam Magnus's team to help narrow down the scope of client inquiries/ requests. I am hoping you can provide me with some additional information in order to review your inquiry appropriately.

1. Please describe the research question you are trying to answer, how the information will be used, and the target audience(s). Understanding what question you are trying to answer helps our analytics team ensure they are providing the most useful data to you;
2. What level of aggregation are you looking for? (Provincial-level, HA, HSDA, LHA, CHSA, or patient-level?)
3. What date range to apply? (The duration of the heat wave? The same dates for all of B.C. or different date ranges for each region?)
4. What comparison timeframe to use? (Period of the same length before and after? The same date range in a previous year? All?)
5. What type of health utilization? (ED visits? Inpatient admissions? UPCC visits? GP visits? 811 calls?)
6. What health outcomes are being sought, specifically? (Deaths? Heat stroke?)
7. Date by which you require the data (explaining any hard deadlines);

If you have any questions please feel free to connect with me.

Thank you and kind regards,

Madeleine

MADELEINE MEUNIER | A/ Business Consultant
Business Services and Transformation | Health Sector Information, Analysis and Reporting Division
Ministry of Health | Direct: 778.974.4959 | madeleine.meunier@gov.bc.ca

TEAMWORK | CURIOSITY | PASSION | SERVICE | COURAGE | ACCOUNTABILITY



Click the logo for access
to our front counter services.

I acknowledge with gratitude the Lekwungen-speaking peoples on whose traditional territory I live, work and play. I acknowledge with respect the Songhees, Esquimalt and WSÁNEĆ peoples whose historical relationships with the land continue to this day.

From: Cameron, Mary HLTH:EX <Mary.Cameron@gov.bc.ca>

Sent: September 15, 2021 10:19 PM

To: HLTH MOHAnalytics HLTH:EX <MOHAnalytics@gov.bc.ca>

Cc: Magnus, Samantha A HLTH:EX <Samantha.Magnus@gov.bc.ca>; Galt, Jamie HLTH:EX <Jamie.Galt@gov.bc.ca>; Przydatek, Maria E HLTH:EX

<Maria.Przydatek@gov.bc.ca>; Meunier, Madeleine L HLTH:EX <Madeleine.Meunier@gov.bc.ca>

Subject: Re: Any UBCM heat-wave-related requests ?

Thank you for your response, Alison. I would be very interested in inquiring about HSIAR's assistance in analyses of how the recent heatwave affected health outcomes and health care utilization. Would it be best to discuss this with you directly?

Thank you!
Mary

On Sep 15, 2021, at 2:04 PM, HLTH MOHAnalytics HLTH:EX <MOHAnalytics@gov.bc.ca> wrote:

Hi Sam,

I apologize for the delay on this, but I have now confirmed that MOH Analytics is not aware of any heat-wave related analysis done recently.

Kind regards,

Alison

From: Magnus, Samantha A HLTH:EX <Samantha.Magnus@gov.bc.ca>

Sent: September 9, 2021 2:16 PM

To: Przydatek, Maria E HLTH:EX <Maria.Przydatek@gov.bc.ca>; Cameron, Mary HLTH:EX <Mary.Cameron@gov.bc.ca>; HLTH MOHAnalytics HLTH:EX <MOHAnalytics@gov.bc.ca>; Meunier, Madeleine L HLTH:EX <Madeleine.Meunier@gov.bc.ca>

Cc: Galt, Jamie HLTH:EX <Jamie.Galt@gov.bc.ca>

Subject: RE: Any UBCM heat-wave-related requests ?

Hi Maria,

Likely HSIAR teams don't have any related stats handy but @HLTH MOHAnalytics HLTH:EX would know if any heat-wave-related analysis was done recently. @Meunier, Madeleine L HLTH:EX confirmed that those particular factsheets didn't have HSIAR involvement.

If there are any analytics questions that HSIAR can answer they can go through the intake process.

Best,
Sam

Samantha Magnus Director, Methodologies & Cross-Sector Analysis

Performance, Partnerships & Methodologies Branch
Health Sector Information, Analysis and Reporting Division | Ministry of Health

| she/her | phone: 250-952-3656 | cell: s.17 | email: samantha.magnus@gov.bc.ca

From: Przydatek, Maria E HLTH:EX <Maria.Przydatek@gov.bc.ca>

Sent: September 9, 2021 1:20 PM

To: Magnus, Samantha A HLTH:EX <Samantha.Magnus@gov.bc.ca>; Cameron, Mary HLTH:EX <Mary.Cameron@gov.bc.ca>; HLTH MOHAnalytics HLTH:EX <MOHAnalytics@gov.bc.ca>

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Hello Sam,

Welcome back! Not sure if the eapps below will come to your team as standard approval practice since we didn't have analytics/data points?

That said, if HSIAR does have some heat-related data that could be provided to the Minister for either the Leg Factsheet and/or the UBCM panel, that would be wonderful.

For awareness, we have been asked to provide the documents in to our ADMO by tomorrow 14.00. I am not sure how flexible that timeline is at this time.

As Mary mentioned, the EMU has been designated point on Ministry heat correspondence/issues notes, and it would be great to connect with you if there is heat-related data within HSIAR that we can incorporate moving forward with any further inquiries. We have been working to integrate the pockets of heat knowledge from various Ministry program areas as this multi-faceted heat file develops.

Please feel welcome to give me a call today (off tomorrow) if you would like to discuss. I am also happy to schedule a quick call next week if that is preferred.

Cheers,

Maria

From: Magnus, Samantha A HLTH:EX <Samantha.Magnus@gov.bc.ca>
Sent: September 9, 2021 12:52 PM
To: Cameron, Mary HLTH:EX <Mary.Cameron@gov.bc.ca>; HLTH MOHAnalytics HLTH:EX <MOHAnalytics@gov.bc.ca>
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Subject: RE: Any UBCM heat-wave-related requests ?

Thanks, this is helpful context.

Best,

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PS: Hi Jamie and Maria!

From: Cameron, Mary HLTH:EX <Mary.Cameron@gov.bc.ca>
Sent: September 9, 2021 12:51 PM
To: Magnus, Samantha A HLTH:EX <Samantha.Magnus@gov.bc.ca>; HLTH MOHAnalytics HLTH:EX <MOHAnalytics@gov.bc.ca>
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Subject: RE: Any UBCM heat-wave-related requests ?

Thanks Samantha,

If it helps, there are currently two eApps related to this including:

eApp #42316 (factsheet-Heat Outbreak)

eApp #43273 (MO info for UBCM panel on heatwave)

Jamie and Maria at the Emergency Management Unit are the leads for these, with me on second to support as needed.

Mary

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If so, could you please point me to the request in the Request Management System?

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Godfrey, Sonora HLTH:EX

From: Erickson, Anders HLTH:EX
Sent: October 4, 2021 1:17 PM
To: Ye, Xibiao HLTH:EX
Subject: Oct.4 1:1 weekly updates

October 04, 2021 - Weekly Progress Plan for Anders Erickson

Progress, Plans and Problem Report – Date range: Sept. 27 to Oct.08, 2021

Progress (Sept. 27 - Oct.01) *Sept.30 is stat

1. StatCan SES data:

- ☒ ★ Wrangle 2006 LIM-AT data --> Sept.27/28th

2. Annual interpolation:

★ Run the Tongfen code above and then run the linear interpolation on the output hybrid-DA data.

- ☒ run Tongfen for the years 2001 to 2006 --> linear interpolate
- ☒ run Tongfen for the years 2006 to 2016 --> linear interpolate
- ☒ combine the runs, 2001-2005 and 2006 to 2016
- ☐ create quintiles (material, social and total) from the annual INSPQ data at DA-level,
- Data Viz: for QA and exploratory analysis --> multi-week task
 - ☐ plot linear trends (2001-2016) for CHSA by LHAs for Material and Social deprivation separately.
 - Visual inspect changes over time
 - Maps: show SES disparities across province, at CHSA
 - Show changes in SES quintile differences over time, e.g. flag +/- 2 quintile changes b/w years

3. Alcohol PAF

- ☐ ★ Flag GBD garbage codes that are NOT currently excluded in data extraction
- ☐ ★ Flag GBD codes that are currently included that should maybe not be
- ☐ Need to look into how to update GBD RR files in InterMAHP from 2017 to 2019
 - what form does the input file look like to use in InterMAHP?

- ☐ create overview of workflow to easily understand the required inputs, transformations, and output files

- Misc.

- ☐ Review Alzh+PM paper --> Oct.6th team meeting
 - High-level summary (methods, biological mechanisms, results)
- ☒ CPAS Meeting
- ☒★ Send notes from PPH-HSIAR heat analysis meeting
- ☐★ Draft HAGIS email --> send to Alyssa
- ☐★ Finish notes from PM Plan meeting --> send to participants

Plans (Oct.04 - 07)

1. StatCan SES data:

- ☐ Run Tongfen on 2006 to 2016 data
- ☐ Create quintiles

2. INSPQ SES data:

- ☐ Assess missing data for census cycles --> check if population == 0
- ☐ Join 2016 DAUID
- ☐ Create quintiles (material, social and total) from the annual DA-level data
- ☐ Censor FN reserve data?
- ☐ Produce data dictionary and provide draft of technical documentation
- ☐ QA quick maps to visually assess data by city/region (e.g. Victoria, Vancouver, PG, etc.)

3. Alcohol PAF

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Problems

1. none

Anders

Page 36 of 36

Withheld pursuant to/removed as

s.22