Utah Asthma Task Force Meeting June 4, 2019

In attendance: Michelle Hofmann, Nichole Shepard, Holly Uphold, Stephanie George, Alan Good, Darrin Sluga, Sharly Coombs, Lorill Solomon, Daniel Mendoza, Susan Fox, Julie Christie, Rebecca Dick, Betty Sue Hinkson.

On the phone: Wendy Bright, Dawn Bentley, Rebecca Ludlam, Danae Avery, Andrea Jensen, Kellie Baxter.

I. **Policy Corner – Stock Albuterol Update:** Nichole Shepard & BettySue Hinkson, State School Nurse Consultant
   a. House Bill 344 going into effect July 1, 2020, funding for UDOH efforts/planning starts July 1, 2019. Relying on the Asthma Task Force to roll out implementation.
   b. First meeting of the Stock Inhaler workgroup will meet July 17, 2019 at Noon, RM 125. If you need an invite email Nichole.
   c. Dr. Babitz and others from the Utah Department of Health want to be involved.
   d. Rules and policy will have to be evaluated for:
      i. Cleaning
      ii. Training on how to use the inhaler and the spacer
      iii. Storage
      iv. Refills
      v. Prescriptions
      vi. Donations → how to attain
      vii. Communication plans
   e. Want to add/remove rules but make sure there is no duplication
      i. There may be more policy work in February
   f. BettySue:
      i. Just finished the rule writing process on another project which will help inform HB 344 efforts
      ii. HB 344 isn't going to affect just school nurses
   g. Forms
      i. Students must have an Asthma Action Plan (AAP)
      ii. Reporting on school nurse survey
         1. Adding questions to capture:
            a. How was the medication administered?
            b. Was the child able to stay in school?
            c. How often is the medication being administered?
            d. What time of day is the medication being administered?
      iii. Include referral into home visiting program
      iv. Provide videos on how to use inhalers as part of the project
   h. Stock Inhaler work group can consider the proposed question from Lorill:
      i. Should we survey the schools and get the opinions from the principals, secretaries, and other administrators? It is important to get the information and input from those who are going to be affected.
   i. Answer/Comment: Daniel:
      i. Part day absences directly linked to exposure

ii. Compare to previous years as potential measure of success of initiative

j. Comment: Lorill: Utah used to track reasons for absences
   i. Not a requirement at this time
   ii. Could we start doing that at this time?
      1. Something to consider
      2. It would really help prove that the work the UAP is doing is effective

k. Comment: Andrea Jensen:
   i. Utah county school nurse is going to start collecting data
   ii. Tonya from (national asthma program) wants to know how many inhalers/spacers we need. For the first year there is no charge.
   iii. Charmaine – making a collection of trainings from other states and is going to send the information to AJ so that we will have a starting place.
   iv. Question: Michelle: what about subsequent years? It sounds like the inhalers are only going to be provided for one year?
   v. Answer: Andrea: The first year is the only one Tonya will provide inhalers etc. for. After that we will have to see, maybe through some legislation.

II. **Asthma-Related Research Update** Daniel Mendoza, PhD

a. Chose this article because it offers an overall picture of asthma information, this paints a good summary picture.

b. Highlights:
   i. Fig 4: different sizes of particles and which part of the lung they affect
      1. Points out that there are ultrafine particles <1mm in size go deep into the lungs and can pass into the bloodstream
      2. This is important information for pulmonary studies
      3. COPD – there is less concern for PM 2.5 because the lungs are so badly damaged already
   ii. Table 1: impacts of different gasses
      1. TRAP = traffic related air pollutants
         a. Catch-all term for fossil fuel combustion
         b. Means any pollutants that you encounter while traveling
            i. e.g., factory by your work
   iii. Table 2: Air Quality
      1. Daniel presented at the American Thoracic Society (ATS) about low levels of exposure correlating with missed school days
         a. Lag time of 1-5 days
         b. Even with low levels of exposure the outcome is missed school days
      2. ATS works with the American Lung Society
         a. Concerns current school guidance is not protecting kids
         b. There is a national committee being formed to look at bringing the current Recess Guidance (RG) down a level
            i. Currently: Green- and Yellow-Air days kids still go outside. Orange-Air days unsafe for sensitive groups. Red – air days no one goes out.

ii. Goal: Green – everyone out, Yellow – unsafe for sensitive groups, Orange and Red no one goes out.

c. Conversations with Pittsburgh:
    i. Refining Recess Guidelines based on research done by the U of U
    ii. ½ of yellow (12 – 25 m/m^3) unsafe for sensitive groups you won't be able to go outside
    iii. Their concerns are similar with a lot of mini-valleys and they have a lot of factories burning dirty coal
        1. Dirty coal = sulfur content is higher

d. Climate change is going to increase pollutants related to increased needs for cooling =
    i. Coal burning increased
    ii. Increased levels of SO2
    iii. Increase in traffic on the whole

c. Question: Lorill: What are the long-term effects of exposure? Do we have data on this?
    1. Answer: Daniel:
        a. Biology on pages 2 & 3
        b. Chronic exposure has been shown to increase sensitization to allergens
        c. Difficult to do a long-term study, but it needs to be done

d. Comment: Michelle: Interesting that the article described the different types of science used to write the paper
    i. Limitations
        1. Case study, adults volunteered – doesn't show the effects on children
        2. Epidemiological studies – larger populations and go back in time further but, all the differing factors make it hard to draw conclusions
    ii. Large studies in California that are predicting what is going to happen in the next 20 years

e. Question: Lorill: What are the impacts of keeping kids in for yellow air days?
    i. Concern that there could be long stretches of time with kids not getting exercise
    ii. Balance → risks vs benefits of keeping kids indoors
    iii. Requires a lot of consideration

f. Question: What about the effects of the Indoor air quality?
    i. Depends on the age and location of the building
    ii. Ventilation

g. Comment: Red air day some circulation bringing all the bad air into the building if the HVAC isn't up to date
    i. Started last year
    ii. Wildfires lead to people and businesses checking their filtration systems

h. Presentation: Daniel: PM 2. 5 is made up of five different categories:
    i. Fires/wood smoke
    ii. Dust
    iii. Direct fossil fuel combustion

    iv. Indirect fossil fuel combustion
    v. Pathogens (virus, bacteria)

i. Two areas with similar PM2.5 levels may have drastically different outcomes related to composition of particles
j. Comment: Looking to the future, buildings are going to have to be designed differently
    i. Consider emotional/social impact of keeping kids and staff indoors
    ii. Are school personnel involved in the discussion?
        1. Especially PE teachers and directors?
k. Presentation: Daniel: Legislation has just been passed to fund putting sensors on the Blue Trax line
    i. U of U now has sensors on each of the Trax lines
    ii. Good to collect data on the makeup of PM2.5
l. Question: Upping recess guidance is going to really change the way schools are built. More kids inside for longer is going to increase the need for more indoor activity areas.
    i. Is there an advisory board to prepare for building new schools?
m. Answer: During the building of the Mountain View Corridor there was funding for schools to ensure filtration was adequate and for schools near corridor
    i. With our population growing as quickly as it is (doubled by 2050) we are going to need planning and consideration for these things
    ii. There was a group that was working maybe affiliated with UDOT is there interest in bringing them in?
        1. Yes
        2. Michelle will find out how to get them to come to a meeting
n. Answer: there were studies done earlier that some of the poor indoor air quality was due to the buildings not being adequately ventilated or the HVAC was failing. How we build our buildings is very important.
o. Comment: Darrin: make sure people are informed, there was a local news day time show where someone from the UDOH went on and said that the benefit of the exercise the kids get by going out for recess outweighs the risk of kids breathing in bad air
p. Answer: Daniel: also funded by Suicide Prevention, there was a study that during bad-air-days there is a 20% increase in the number of suicides
    i. Is this because bad-air-days happen in winter mostly?
    ii. During the summer of 2018, numerous bad-air-days during the summer and increased suicides
q. Comment: Division of Air Quality recommends not exercising outdoors during bad air days
r. Answer: with some symptom monitoring it is easier to decide if the risks outweigh the benefit or vice versa. It would be good for us to put more control in the hands of the families of those with asthma.
    i. Caution: there is distress associated with not going outside on bad air days for asthmatic children
s. Question: Darrin: What is the significance of the pathogens listed as a type of PM2.5
t. Answer: Daniel: Speciation of PM2.5 shows that PM2.5 that we breathe are very different across the county. Saltair is mostly the drying of the Salt flats but downtown it

is mostly TRAP. Algae bloom is desiccating and drying up and migrating, which is why we see algal blooms in lakes that had none before.

i. U of U has 30 sensors from Antelope Island to Utah County. 112 different components found. There is a better understanding of what is actually affecting what?

u. Question: what is the impact on humans?

v. Answer: Daniel: He is also studying cystic fibrosis – there are 25 genetic mutations and different genetic susceptibilities to air pollution

i. New study showing which pollutants are triggering hospital visits in whom

ii. The more information we get, the closer we get to understanding what triggers what and why

w. Comment: Andrea: There have been studies that show that going out/exercising on bad air days is the same as smoking x packs of cigarettes a day.

i. Risk isn't worth it for some families

ii. There is also an increased risk of heart attack and stroke

x. Comment: Wendy: people from our group should be advising school buildings

i. Indoor recess not such a horrible thing

ii. Indoor physical activity will need to be available

iii. HVAC needs to be improved

y. Answer: Nichole: There are some school members on the task force, we need to get them here. See how we can get involved in school design.

i. School board members? Nichole/Michelle will reach out to them.

z. Presentation: Nichole: School Recess Guidance

i. Updated in 2016

ii. No community complaints since then

iii. In line with EPA recommendations

iv. Ozone → sports activities, summer time recommendations should be considered

v. Question: Nichole: is it time to revisit our RG?

vi. Answer: Michelle: Let's gather information and when Daniel has more research to show we can decide if the time is right to revisit the RG

III. **State Strategic Plan Discussion**

a. Review of Mission and Vision of the Utah Department of Health

i. Asthma program fits in nicely

ii. Last 15 years we have been reducing the burden of asthma

b. We are completing year 5 of a 5 year grant

i. Submitted application for new grant on May 29

ii. Should hear back by Sept 1, 2019

iii. NOFO aligned really well with the work we have been doing

1. Expand Reach, Quality, and Effectiveness of asthma control

c. A1 develop a strategic plan within the next 18 months

i. Hosting a summit to develop mission, vision, and outcomes

ii. Small committee meetings:

1. Finalize goals

2. Subject matter experts
3. UPA representatives
4. Document progress
5. Evaluate outcomes

d. A2 Strategic partnerships
    i. Bring back project specialized work groups
        1. Asthma home visiting programs
        2. Tobacco
        3. Asthma reimbursement and coverage
        4. Policy work
        5. School restructuring (future work group?)

e. EXHALE
    i. E – education → asthma self-management (AS-ME)
        1. Expert access
        2. Having a cadre of diverse, skilled, instructors to deliver AS-ME and tailor curricula
    ii. X – xtinguishing smoking and exposure to second hand smoke
        1. Referral to cessation programs
        2. Improve community awareness of:
            a. Way2Quit.org
            b. Healthcare provider portal
                i. Referral from healthcare providers and home visiting programs
            c. Approaching e-cigarettes in strategic plan with new grant.
            d. E – cig: tobaccotalk.org
                i. How tobacco has changed; how it looks, harmful pollutants
            e. Comment: Andrea: asthma home visit program refer families to quit line, teach about dangers of vaping and smoking, 2nd and 3rd hand smoke. Once they are in the home it is important to not break the trust of those they are visiting.
            f. Comment: Susan Fox: present materially factually ask families if they want to make goals to quit smoking
            g. Comment: Michelle: when she worked in the hospital there were many referrals. People are more willing to listen when their child(ren) are in hospital.
    iii. H – home visits, trigger reduction
        1. Expand HV program
            a. 6:18 initiative
                i. 6 chronic conditions
                ii. 18 home visits
            b. Expanded at UDOH. Fits into Medicaid plans.
                i. Builds bridges in UDOH
                ii. Awarded Medicaid funding expanding

iv. A – achievements of guidelines
    1. Strengthen systems
    2. Access and adherence to medications and devices
    3. UPIQ – important partners. Work they are doing:
        a. Created modified flip charts to do staff and patient training
        b. Standardize control tests
        c. Are there action plans in place?
    4. Question: Michelle: Is there a way and would UPIQ be willing to leverage resources from UPIQ with the inhaler rollout? It sounds like this would be a great fit.
        a. Legislation requires patient have an action plan and this is something that UPIQ is working on.
        b. QUESTION: do we know how many kids have action plans on file?
            i. Answer: Holly: from the asthma follow up survey (after BRFSS) parent reported data shows that ~ 40 – 50% of kids have an action plan on file at the school.
            ii. General consensus that this number seemed high and may be skewed a bit.
    5. Answer: UPIQ would be interested.

v. L – Linkages and coordination of care across health care settings.
    1. Cadre of professionals and organizations that are involved in asthma care
    2. Asthma and allergy network is a good partner along with the UCCCN and many partners on the ATF

vi. E- environmental policy
    1. Asthma triggers indoor, outdoor and occupational sources
    2. School Recess Guidance → Tobacco, Utah Clean Diesel Program, Utah Weatherization, Green and Health Homes

f. For more information visit www.livingwell.utah.gov
g. Stay tuned for updates, if you are interested in joining a group, or need more information send Nichole Shepard and email nshepard@utah.gov.

IV. Comment: Andrea: would environmental policy be a workgroup? If it is, Andrea would be interested in joining and she would love to be a part (related to perfumes, essential oils).

V. Comment: Holly: previously surveillance and evaluation were written into the grant/strategic plan as its own section. Please be thinking about how you feel it should be written into the evaluation moving forward. Do we want an S&E section in every separate goal or do we want to keep it as its own section encompassing the rest of the plan.