




# TB NURSE CASE MANAGEMENT

WHAT COULD POSSIBLY GO WRONG






# GOALS

- DESCRIBE THE DIFFERENCE BETWEEN TB INFECTION AND TB DISEASE
  - NAME TWO COMPONENTS OF NURSE CASE MANAGEMENT
  - NAME THREE COMMON ISSUES IN THE DELIVERY OF TB CARE
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# DISCLOSURE/DISCLAIMER


- I HAVE NOTHING TO DISCLOSE
  - I DO NOT WORK FOR THE DEPARTMENT OF PUBLIC HEALTH
  - WHAT IS PRESENTED HERE ARE SUGGESTIONS PLEASE FOLLOW THE PROTOCOLS FOR YOUR HEALTH DEPARTMENT AND THE DEPARTMENT OF PUBLIC HEALTH
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# TB 101

- TB SKIN TEST VS IGRA
- TB INFECTION VS TB DISEASE
- CULTURE
- WHERE TB CAN BE IN THE BODY
- TO LEARN MORE [CDC.GOV](http://CDC.GOV), SEARCH TUBERCULOSIS

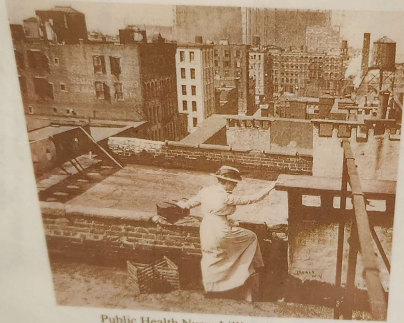


# TB CASE MANAGEMENT

- 105 CMR 365.00 STANDARDS FOR MANAGEMENT OF TUBERCULOSIS OUTSIDE HOSPITALS
    - 105 CMR 365.200 IS CASE MANAGEMENT
  - 105 CMR 300.00 IS REPORTABLE DISEASE, SURVEILLANCE AND ISOLATION AND QUARANTINE REGULATIONS
  - CHECK YOUR OFFICE YOU MAY HAVE AN OLD BOOK ON PUBLIC HEALTH NURSES TB MANUAL
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# Public Health Nurses TB Manual

Protecting, Preserving, Improving Health




Public Health Nurse Lillian Wald, c. 1893



Massachusetts Department of Public Health  
Division of Tuberculosis Prevention & Control




# THE CALL

- I RECEIVED A CALL FROM THE SCHOOL NURSE SUPERVISOR. DO YOU KNOW OF ANY KIDS THAT HAVE BEEN DIAGNOSED WITH TB? NURSE AT THE HIGH SCHOOL RECEIVED A CALL FROM A PARENT WHO STATED THEIR CHILD IS IN BOSTON CHILDREN'S HOSPITAL BEING TREATED FOR TB
  - WHAT ARE YOU AS THE PUBLIC HEALTH NURSE GOING TO DO WHEN YOU GET A QUESTION LIKE THIS?
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# THE INVESTIGATION

- I CHECKED MAVEN, THERE WERE NO IMMEDIATE TB CASES REPORTED
  - I CALLED THE STATE TB NURSE FOR MY AREA AND SHE CALLED CHILDREN'S FOR INFO
  - THE ANSWER WAS YES. THERE IS AN ANDOVER RESIDENT INPATIENT AT CHILDREN'S BEING TREATED AS A SUSPECT CASE OF TB
  
  - WHAT NOW?
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# THE INVESTIGATION

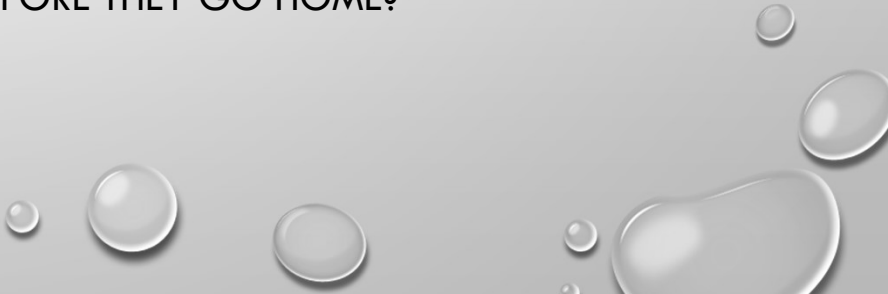
- CALLED THE SCHOOL NURSE LEADER BACK AND LET HER KNOW IT WAS TRUE AND ASKED HER TO START GATHERING CLASS INFORMATION, BUS INFO WITH LISTS OF NAMES, ALSO WHEN THE STUDENT WAS IN SCHOOL
  - CALLED IC AT CHILDREN'S AND OBTAINED INFO.
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# THE CASE

- 17 YO FEMALE ARRIVED IN THE US FROM CAMEROON IN JULY OF 2022 TO THE STATE OF VIRGINIA, THEN TRAVELLED TO TEXAS WHERE SHE WAS IN SCHOOL FOR A PERIOD OF TIME, MOVED TO MASSACHUSETTS IN DECEMBER 2022. FIRST TO PEABODY AND THEN TO ANDOVER IN JANUARY OF 2023.
- FIRST BECAME ILL IN JANUARY 3, SEEN AT A LOCAL HOSPITAL WHERE SHE WAS DIAGNOSED WITH PNEUMONIA AND PUT ON AMOXICILLIN, FELT BETTER FOR A WHILE BUT SYMPTOMS RETURNED AND SHE WENT TO THE SECOND HOSPITAL
- PRESENTED TO SECOND LOCAL HOSPITAL IN FEBRUARY WITH COUGH, NIGHT SWEATS, WEIGHT LOSS AND PLEURITIC PAIN. HAD CHEST X-RAY DONE WHICH SHOWED CAVITARY LESION IN RUL. SHE WAS TRANSFERRED TO CHILDREN'S HOSPITAL FOR TREATMENT OF SUSPECT TB.
- AT CHILDREN'S SHE HAD AN IGRA DONE WHICH WAS POSITIVE AND SHE HAD SPUTUM COLLECTED WHICH WAS SMEAR POSITIVE AND NAAT POSITIVE FOR MTB. SHE WAS STARTED ON RIPE AT WEIGHT APPROPRIATE DOSES.
- WHAT DO YOU WANT TO DO NOW?

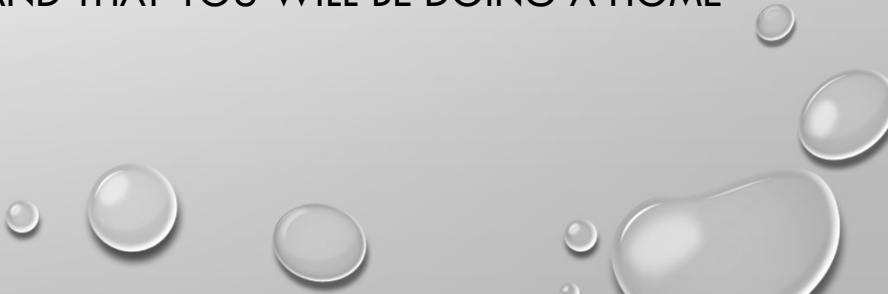


# STEP 1 IN CASE MANAGEMENT DISCHARGE PLANNING

- ONE OF THE FIRST THINGS I ASK ABOUT IS DISCHARGE. 105 CMR 365.600 COVERS DISCHARGE OF CASES INTO THE COMMUNITY.
  - AS THE CASE MANAGER YOU WANT TO BE PLANNING FOR DISCHARGE WHILE THEY ARE STILL IN THE HOSPITAL. ASK WHO THE DISCHARGE PLANNER IS, REMIND THEM ABOUT THE GROUND RULES FOR DISCHARGE. BE POLITE BUT FIRM
  - ANY THOUGHTS ABOUT WHAT NEEDS TO BE IN PLACE BEFORE THEY GO HOME?
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# DISCHARGE PLANNING

- ARE THEY TOLERATING MEDS
  - IS IT SAFE/APPROPRIATE FOR THEM TO GO HOME
  - DO THEY HAVE A FOLLOW UP APPOINTMENT SET
  - DO THEY HAVE ENOUGH MEDS IN HAND TO LAST TILL THEIR FOLLOW UP APPOINTMENT.
  - REQUEST COMMUNITY HEALTH WORKER ASSISTANCE FROM THE STATE
  - CALL THE FAMILY, INTRODUCE YOURSELF, YOUR ROLE AND THAT YOU WILL BE DOING A HOME VISIT
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## CASE CONTINUED

- CASE WAS TOLERATING MEDS WELL, LFT'S AFTER STARTING MEDS WERE NORMAL
  - NEEDED TO WORK WITH TEAM AT CHILDREN'S ABOUT GETTING MEDS TO LAST UNTIL APPOINTMENT
  - COLLABORATED WITH STATE NURSE TO GET AN APPOINTMENT FOR CASE AT NEARBY STATE FUNDED TB CLINIC
  - NEED TO BE FLEXIBLE BUT FIRM WITH THE
  - DISCHARGED HOME, WITH MEDS, FOLLOW UP APPOINTMENT AND PLAN FOR HOME VISIT
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# POTENTIAL PROBLEMS WITH DISCHARGE PLANNING

- PATIENT DISCHARGED WITH NO PLAN OR MEDS
  - HAVEN'T ASSESSED IF TOLERATING MEDS
  - NOT APPROPRIATE AND/OR SAFE FOR CASE TO GO HOME
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## STEP 2 IN CASE MANAGEMENT HOME VISIT/DOT

- ARRANGED A JOINT HOME VISIT WITH THE COMMUNITY HEALTH WORKER
  - MET AT THE HOUSE, BROUGHT PILL BOX, MET WITH CASE AND DAD
  
  - WHAT DO YOU WANT TO ACCOMPLISH WITH THIS FIRST VISIT?
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# INITIAL HOME VISIT/DOT

- EXPLAIN WHAT DOT IS AND WHY IT IS DONE
  - START TO CREATE A RELATIONSHIP WITH PATIENT/FAMILY
  - ESTABLISH EXPECTATIONS AT THE FIRST VISIT
  - ANSWER ANY QUESTIONS
  - OBSERVE THE ENVIRONMENT
  - SET UP PILL BOX
  - GO OVER SIDE EFFECTS OF MEDICATIONS, WHEN THEY SHOULD BE TAKEN, WHAT TO DO IF THERE IS A PROBLEM
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# HOW IS THE CASE DOING

- DOT IS BEING DONE IN PERSON 4 DAYS A WEEK BY US AND ONE DAY A WEEK BY THE COMMUNITY HEALTH WORKER
  - PURPOSE OF DOT IS NOT JUST TO MAKE SURE THE PATIENT IS TAKING THE MEDICATION BUT ALSO TO ASSESS FOR PROBLEMS.
  - CASE COMPLAINED OF NAUSEA, WORKED WITH THE PATIENT ON SOME STRATEGIES., NAUSEA CONTINUED WORKED WITH CLINIC PATIENT SPLIT MEDICATIONS
  - NAUSEA RESOLVED
  - TOWARD END OF TREATMENT WAS ABLE TO DROP HOME VISITS DOWN TO TWICE A WEEK
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# POTENTIAL PROBLEMS WITH DOT

- LANGUAGE BARRIER
  - PATIENT DOES NOT BELIEVE THEY HAVE TB
  - THE LIVING ARRANGEMENTS WERE NOT WHAT YOU WERE TOLD
  - PATIENT IS NOT WHERE THEY ARE SUPPOSED TO BE FOR HOME VISIT/DISAPPEAR
  - NOT TOLERATING MEDS, NAUSEOUS OR A RASH
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## TIP

- MAKE THE FIRST VISIT WITH ANOTHER PERSON
  - LET SOMEONE KNOW WHERE YOU ARE AND HOW LONG YOU WILL BE GONE
  - PROVIDE DOT IN PERSON AS MUCH AS POSSIBLE, EASIER TO START MORE RESTRICTIVE AND REDUCE
  - GO TO THE CLINIC APPOINTMENT WITH YOUR PATIENT
  - REASSURE THE CASE AND/OR FAMILY. TB CAN BE TREATED, I KNOW IT IS OVERWHELMING RIGHT NOW BUT IT WILL GET BETTER
  - OBTAIN MULTIPLE PHONE NUMBERS AND EMAIL ADDRESSES FROM FAMILY MEMBERS TO BE ABLE TO CONTACT PEOPLE
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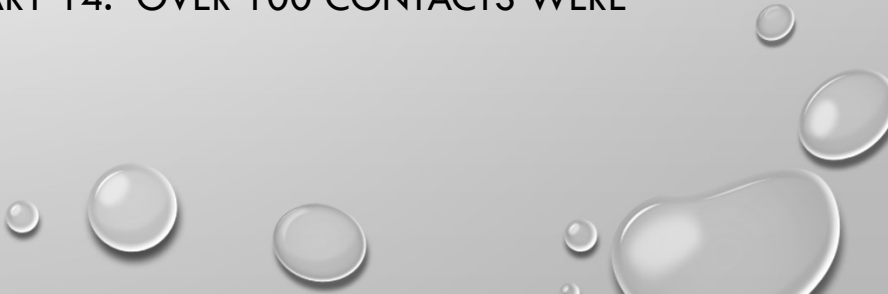


## STEP THREE IN CASE MANAGEMENT CONTACT TRACING

- AT THE INITIAL HOME VISIT YOU ARE GATHERING INFORMATION ABOUT WHO LIVES IN THE HOUSE, SET UP TESTING FOR FAMILY MEMBERS
  - YOU ARE ASKING THE CASE WHERE THEY HAVE BEEN, DO THEY BELONG TO ANY GROUPS, CONFIRM WHEN SYMPTOMS STARTED
  - GET THE NAMES AND DOB'S OF HOUSEHOLD CONTACTS, WORK WITH THE STATE TO GET IGRA'S DONE
  - GO OVER CONFIDENTIALITY BUT BE HONEST, RECOMMEND THEY NOT POST ON SOCIAL MEDIA
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# CONTACT INVESTIGATION

- MOM AND DAD HAD ALREADY HAD IGRA'S DONE AND CHEST X-RAY'S. MOM AND DAD WERE NEGATIVE. DAD SHOWED HIS INFO MOM DID NOT DESPITE SEVERAL REQUEST.
  - 3 SIBLINGS HAD TST DONE, ALL WERE POSITIVE, REFERRED TO CLINIC AND WERE PUT ON TREATMENT
  - MOM HAD REPEAT TESTING DONE AT 8 WEEKS AND WAS POSITIVE REFERRED TO CLINIC WAS PUT ON TREATMENT
  - CASE WAS IN SCHOOL FROM JANUARY 23 UNTIL FEBRUARY 14. OVER 100 CONTACTS WERE IDENTIFIED AT SCHOOL
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# SCHOOL BASED CONTACT INVESTIGATION

- STATE TAKES THE LEAD BUT WORKS WITH LOCAL HEALTH, CONSIDERED HIGH PROFILE
  - MULTIPLE LEARNING, LISTENING SESSIONS WITH PARENTS OF STUDENTS
  - PHONES RING OFF THE HOOK
  - REQUIRES LOGISTICS AND COORDINATION
  - MASSIVE UNDERTAKING
  - CASE IS AWARE OF WHAT IS GOING ON
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# SCHOOL TESTING EVENT

- LOCATION PICKED
  - PERMISSION SLIPS OBTAINED
  - QUEST LAB CAME, SCHOOL NURSE LEADER, HEALTH DEPARTMENT STAFF, STATE EPI STAFF
  - SOME SPECIAL REQUESTS
  - BE PREPARED FOR FAINTING, HAVE JUICE AND SNACKS
  - REVIEW HOW THINGS WENT AFTER, MAKE CHANGES BECAUSE YOU ARE GOING TO DO IT AGAIN
  - NO PICTURE TAKING ALLOWED.
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## RESULTS OF SCHOOL TESTING

- FIRST ROUND: ONE POSITIVE. UPON INVESTIGATION WAS PREVIOUSLY POSITIVE AND TREATED IN NJ
  - SECOND ROUND: ONE POSITIVE, STATE DPH DOES NOT BELIEVE IT WAS CONVERSION STUDENT WAS BORN IN IRAN AND HAD BCG, WAS REFERRED TO TB CLINIC AND STARTED TREATMENT
  - MANY STUDENTS WERE NOT TESTED, MULTIPLE ATTEMPT MADE TO REACH
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# POTENTIAL PROBLEMS IN CONTACT TESTING

- CONTACTS DON'T GET TESTED
  - CONFIDENTIALITY OF THE CASE
  - DON'T GET SLIPS BACK
  - FAINTING AT BLOOD DRAW
  - CONTACT ABSENT
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# CONTINUATION OF TREATMENT

- CASE WAS OUT OF SCHOOL FOR AN EXTENDED PERIOD OF TIME DUE TO BEING SMEAR POSITIVE. HAD TO WORK WITH THE SCHOOL ABOUT LESSONS, TUTORING
  - CONFIDENTIALITY IS IMPORTANT AND SHARING THAT WITH THE FAMILY
  - AS THERAPY CONTINUED WAS ABLE TO DO SOME VISITS BY VIDEO
  - CASE FELT BETTER, GAINED WEIGHT, COUGH STOPPED
  - COMPLETED TREATMENT IN SIX MONTHS IS NOW GRADUATED AND ATTENDING COLLEGE
  - CONTACT WHO WERE POSITIVE HAVE ALL COMPLETED PREVENTATIVE TREATMENT
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## KEY TAKE AWAY

- DISCHARGE PLANNING IS CRITICAL
  - HOME VISIT STARTS TO ESTABLISH THE RELATIONSHIP
  - DOT IS CRUCIAL, NOT JUST ADHERENCE BUT TO ASSESS THE PATIENT FOR PROBLEMS
  - REACH OUT TO THE STATE TB NURSES
  - REACH OUT TO OTHER PUBLIC HEALTH NURSES
  - EVERY TIME YOU CARE FOR A TB PATIENT IT GETS EASIER
  - ATTEND APPOINTMENTS IF YOU CAN
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# RESOURCES

- [WWW.MASS.GOV/DPH](http://WWW.MASS.GOV/DPH)
  - [WWW.CDC.GOV](http://WWW.CDC.GOV)
  - GREAT TB CASE MANAGEMENT CLASS FROM HEARTLAND REGIONAL TB CENTER.  
[WWW.HEARTLANDNTBC.ORG](http://WWW.HEARTLANDNTBC.ORG)
  - GLOBAL TB INSTITUTE. [HTTPS://GLOBALTB.NJMS.RUTGERS.EDU](https://GLOBALTB.NJMS.RUTGERS.EDU)
  - SIGN UP FOR TB LIST SERVE
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## MY CONTACT

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## THANK YOU

